



Plan



Planned Line in :

- (1994)
- 1. Ilala Line (132kV)
- 2. Tandale Line (33kV)
- 3. Chang'ombe Line (33kV)

- (1996)
- 1. FZ-III Line (132kV)
- 2. Kunduchi Line (33kV)



Plann

- 1.
- 2.
- 3.
- 4.
- 5.



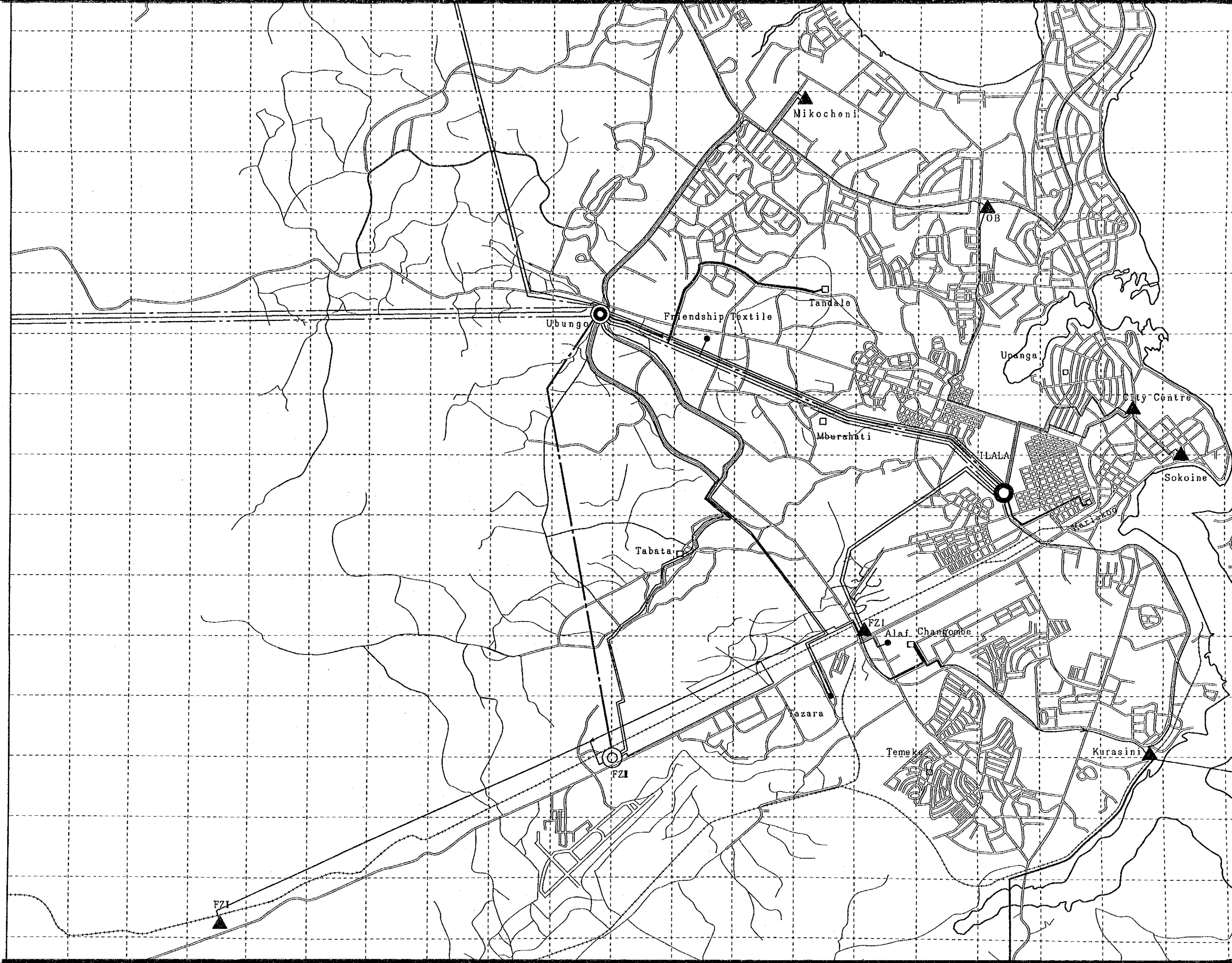
Planned Line in :

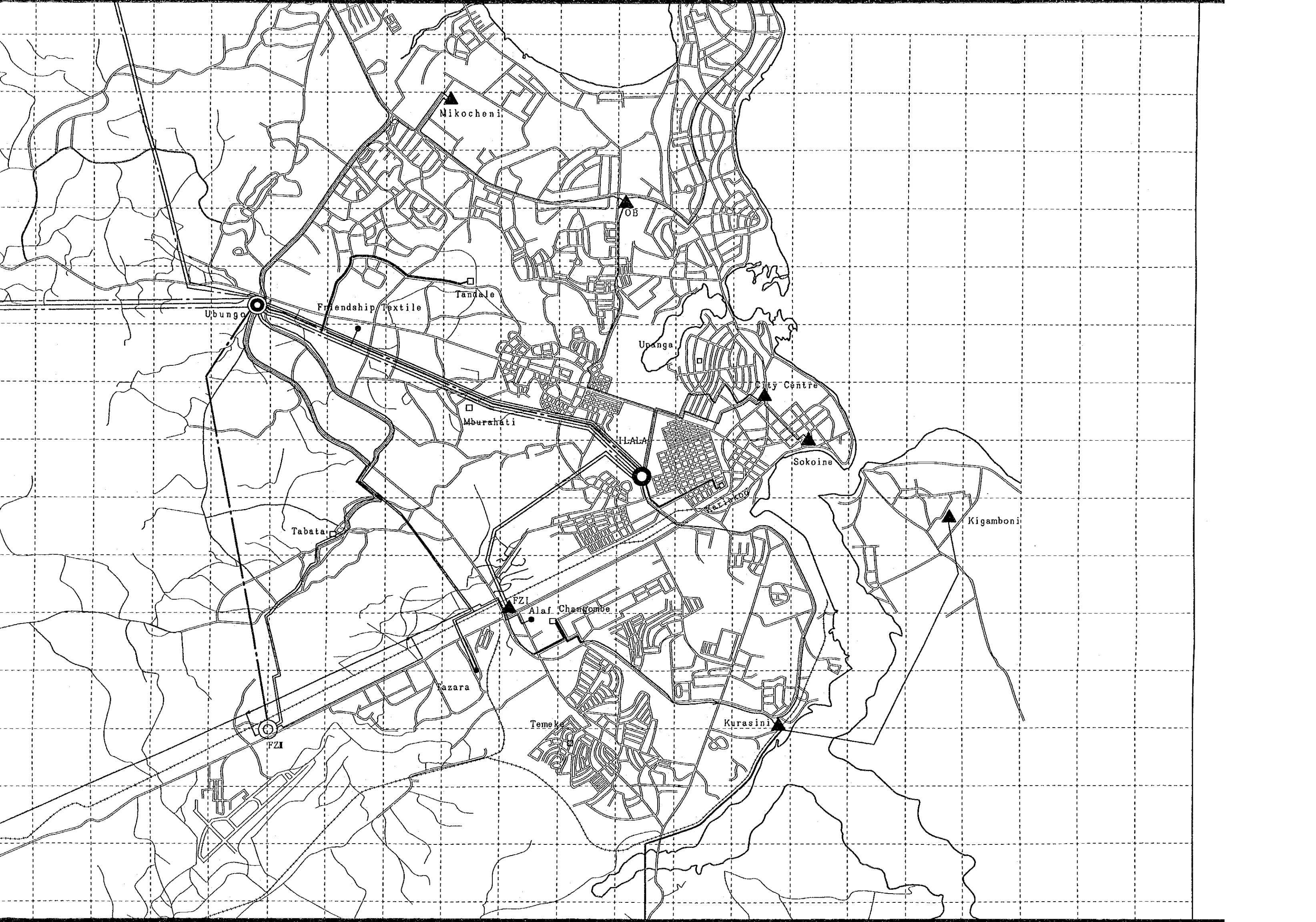
(1994)

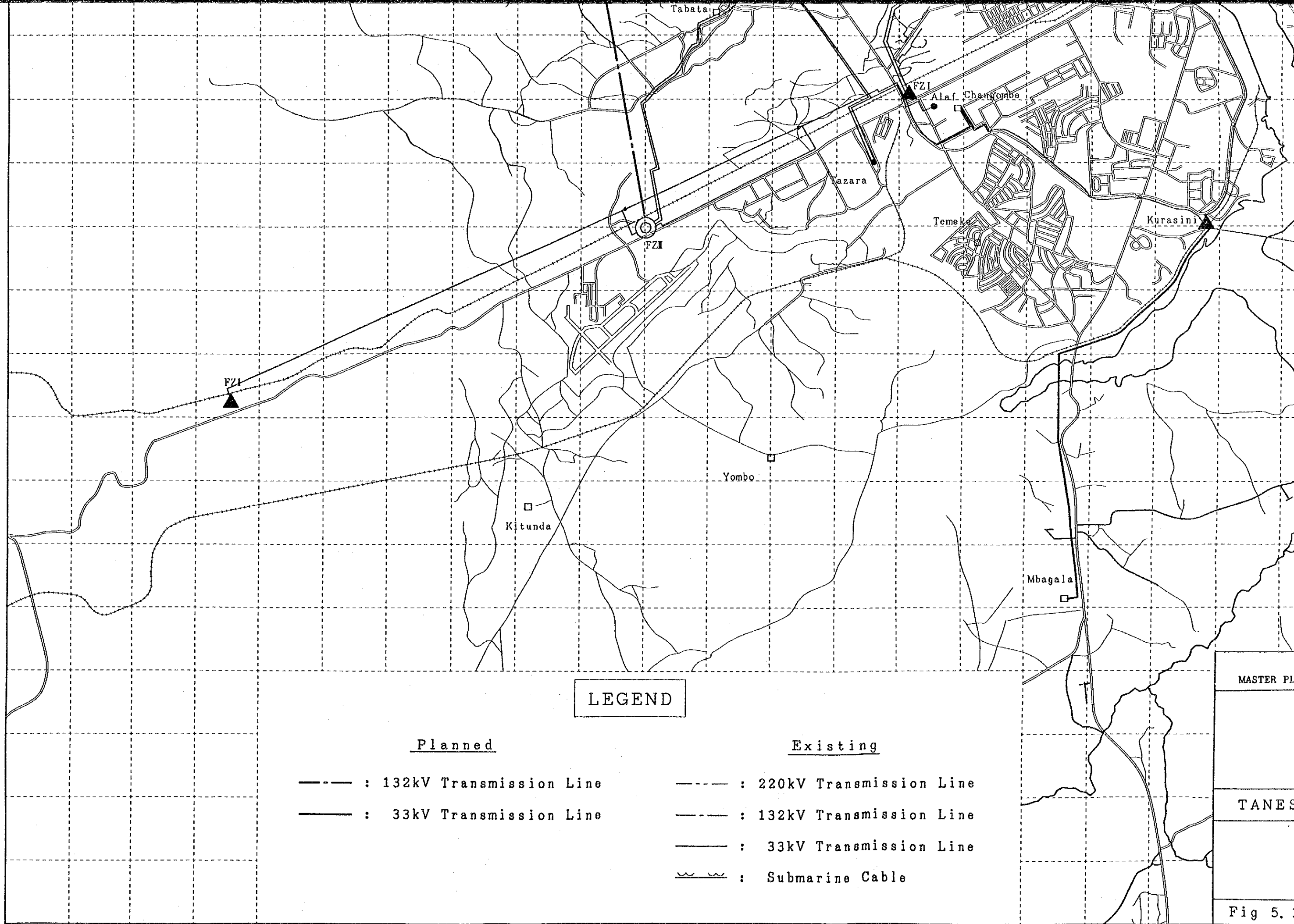
1. Ilala Line (132kV)
2. Tandale Line (33kV)
3. Chang'ombe Line (33kV)

(1996)

1. FZ-III Line (132kV)
2. Kunduchi Line (33kV)
3. Kariakoo Line (33kV)
4. Mbagala Line (33kV)
5. Tabata Line (33kV)







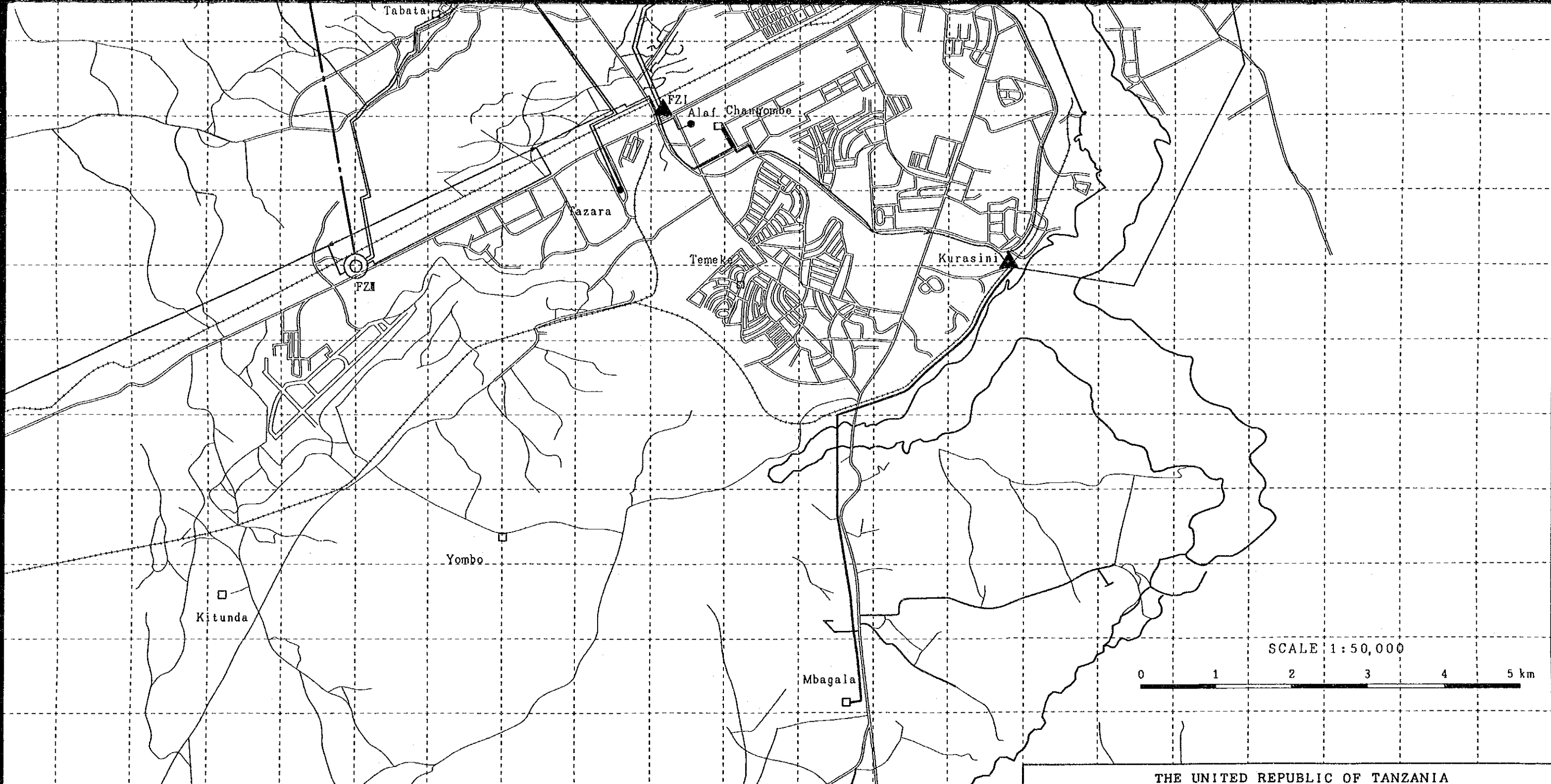
LEGEND

Planned

- : 132kV Transmission Line
- : 33kV Transmission Line

Existing

- : 220kV Transmission Line
- : 132kV Transmission Line
- : 33kV Transmission Line
- ~ : Submarine Cable



LEGEND

Planned

- - - - : 132kV Transmission Line
- - - - : 33kV Transmission Line

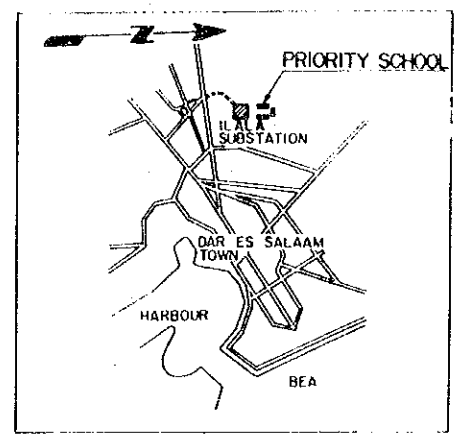
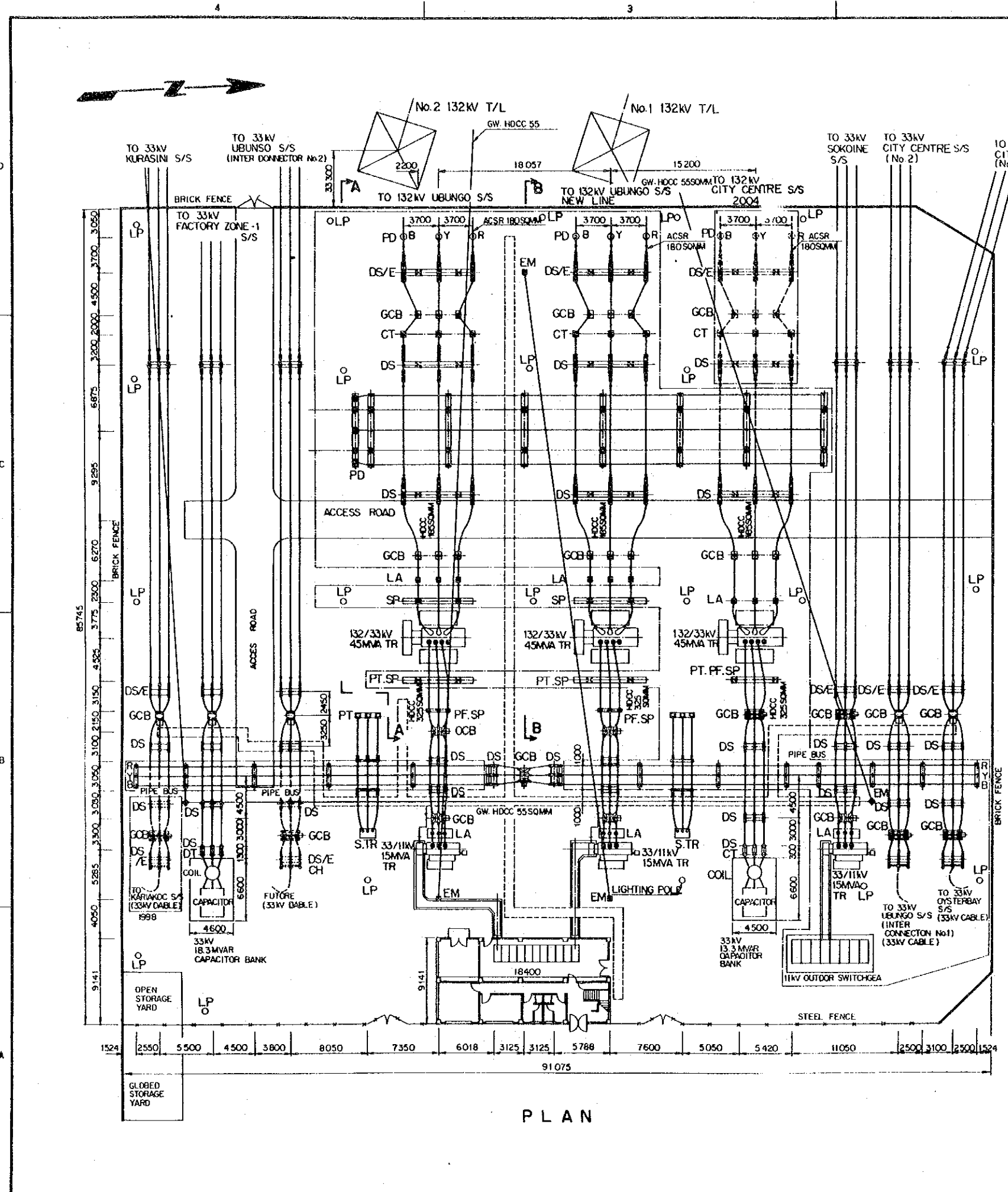
Existing

- - - - : 220kV Transmission Line
- - - - : 132kV Transmission Line
- - - - : 33kV Transmission Line
- ~~~~~ : Submarine Cable

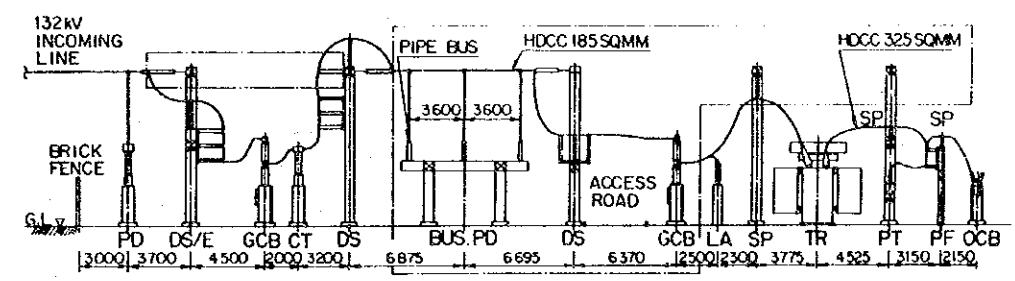
THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

TRANSMISSION LINE ROUTE
 IN SHORT-TERM PLAN

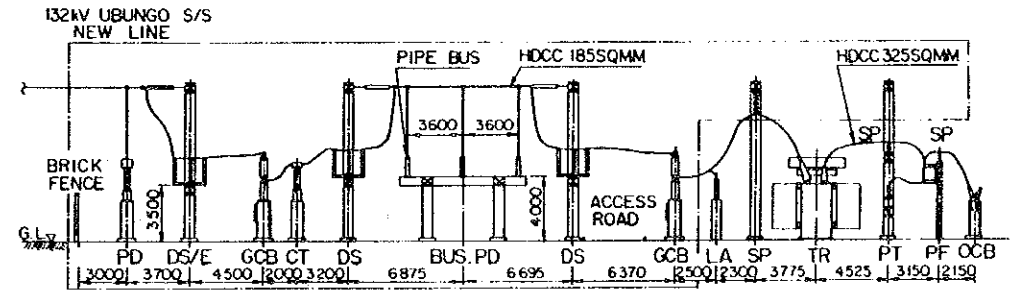
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR. :	SUBMITTED :
TR. :	RECOMMENDED :
CK. :	APPROVED :



LOCATION MAP (NONE SCALE)



SECTION A-A



SECTION B-B

- LEGEND**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER
 - EM : EARTH MAST
 - PD : POTENTIAL DEVICE
 - DS : DISCONNECTING SWITCH
 - CT : CURRENT TRANSFORMER
 - PT : POTENTIAL TRANSFORMER

- NOTE**
1. [] : EXPANSION AND REHABILITATION AREA
 2. [] : FUTURE EXPANSION AREA

Fig. 5.4-8-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAE SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF ILALA SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

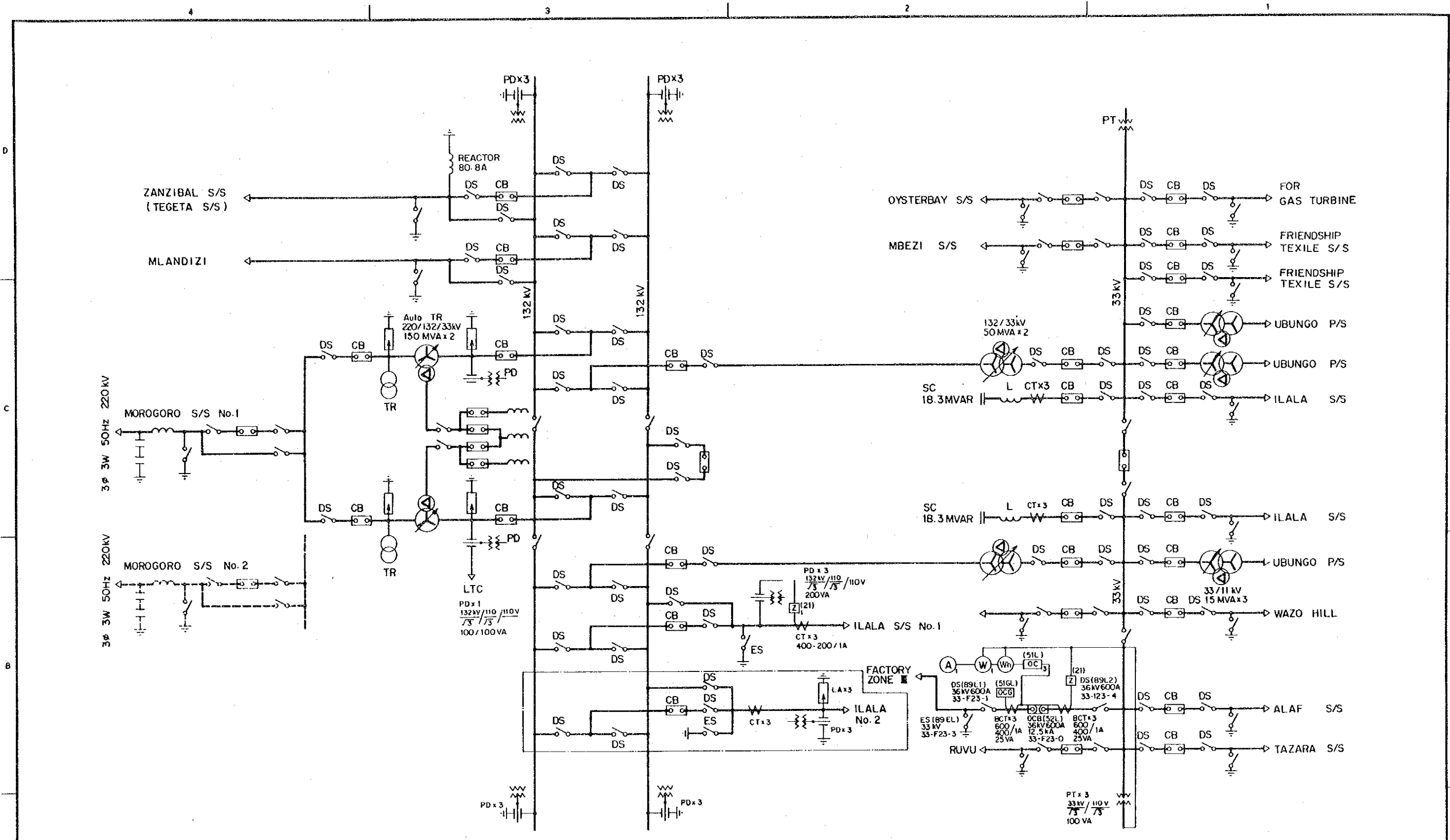


Fig. 5.4 - 9 - 1

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF UBUNGO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

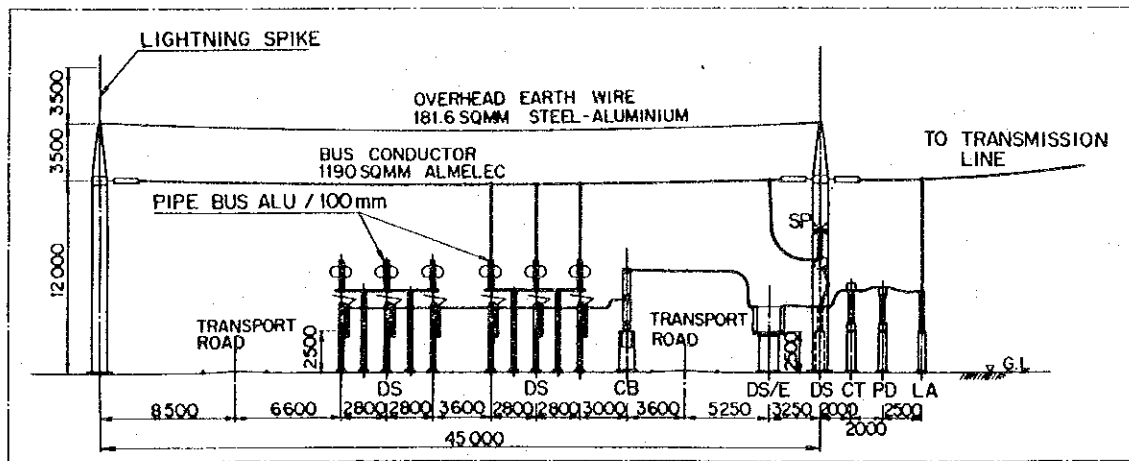
LOCATION	DATE	DESCRIPTION	BY
REVISION			

LEGEND

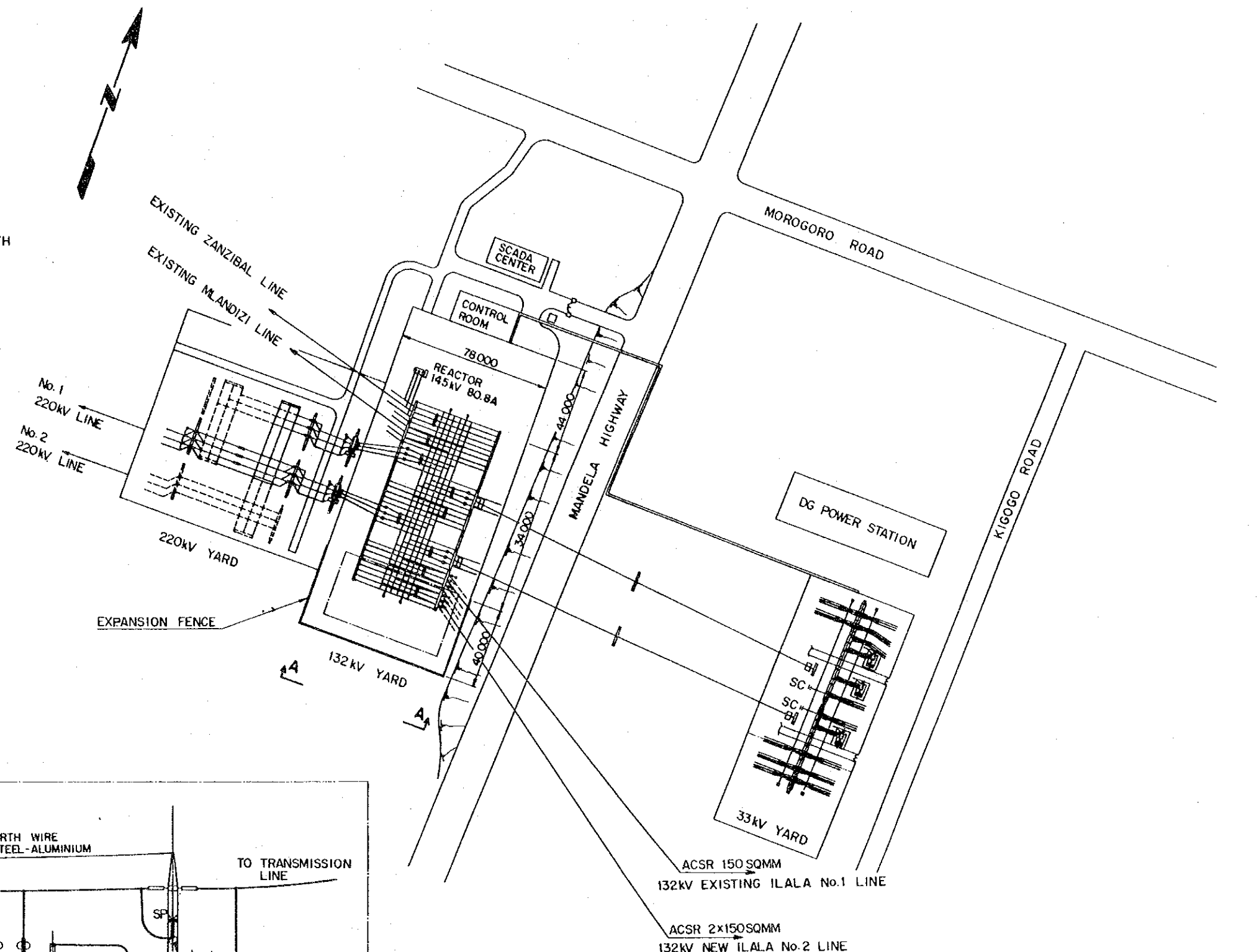
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- PD : POTENTIAL DEVICE
- DS : DISCONNECTING SWITCH
- CT : CURRENT TRANSFORMER

NOTE

- 132KV FEEDER EXPANSION AREA



SECTION A-A

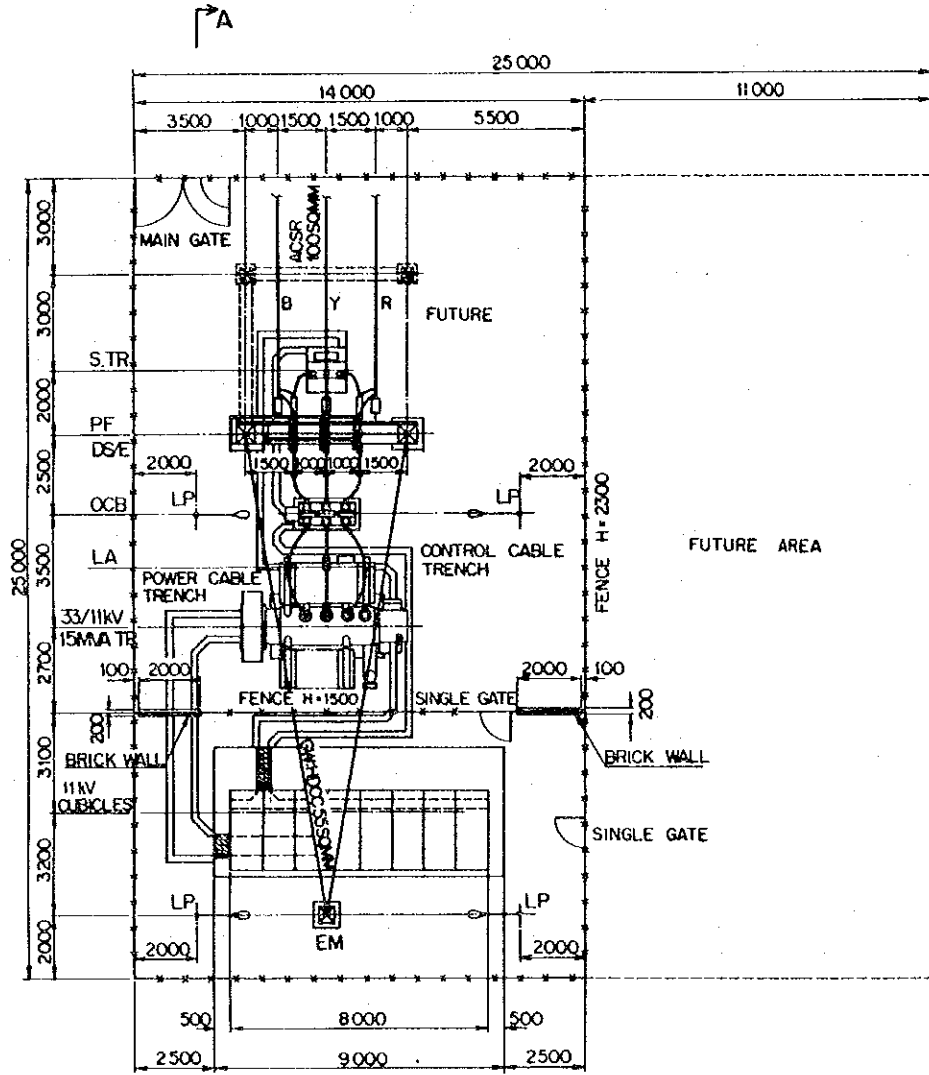


PLAN

Fig. 5.4 - 9 - 2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF UBUNGO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

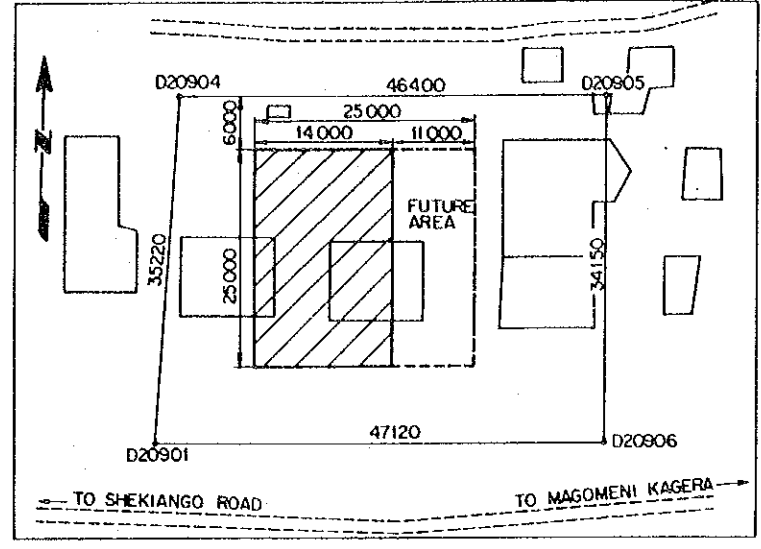
LOCATION	DATE	DESCRIPTION	BY
REVISION			



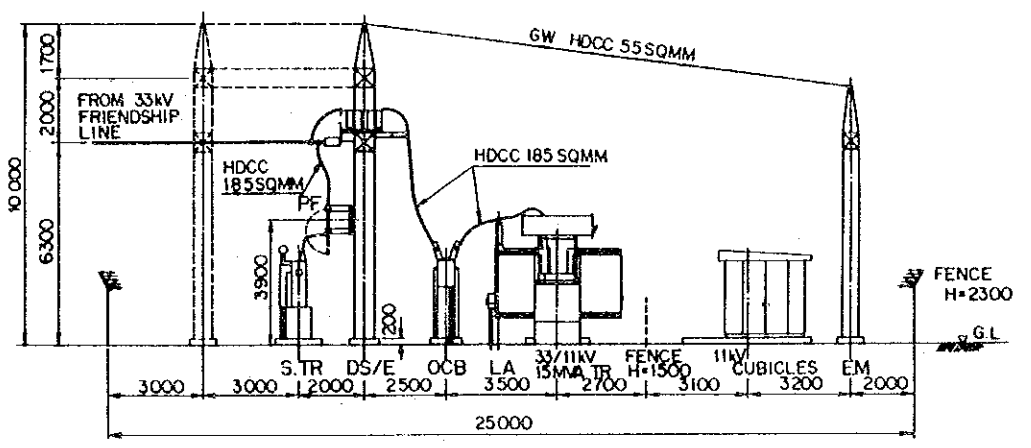
PLAN

LEGEND
 DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 CB : CIRCUIT BREAKER
 LA : LIGHTNING ARRESTER
 TR : 15MVA MAIN TRANSFORMER
 LP : LIGHTING POLE
 PF : POWER FUSE
 S.TR : STATION TRANSFORMER
 EM : EARTH MAST

NOTE
 - - - - FUTURE EXPANSION



LOCATION MAP (NONE SCALE)



SECTION A - A

Fig. 5. 4 - 10-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF TANDALE SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY

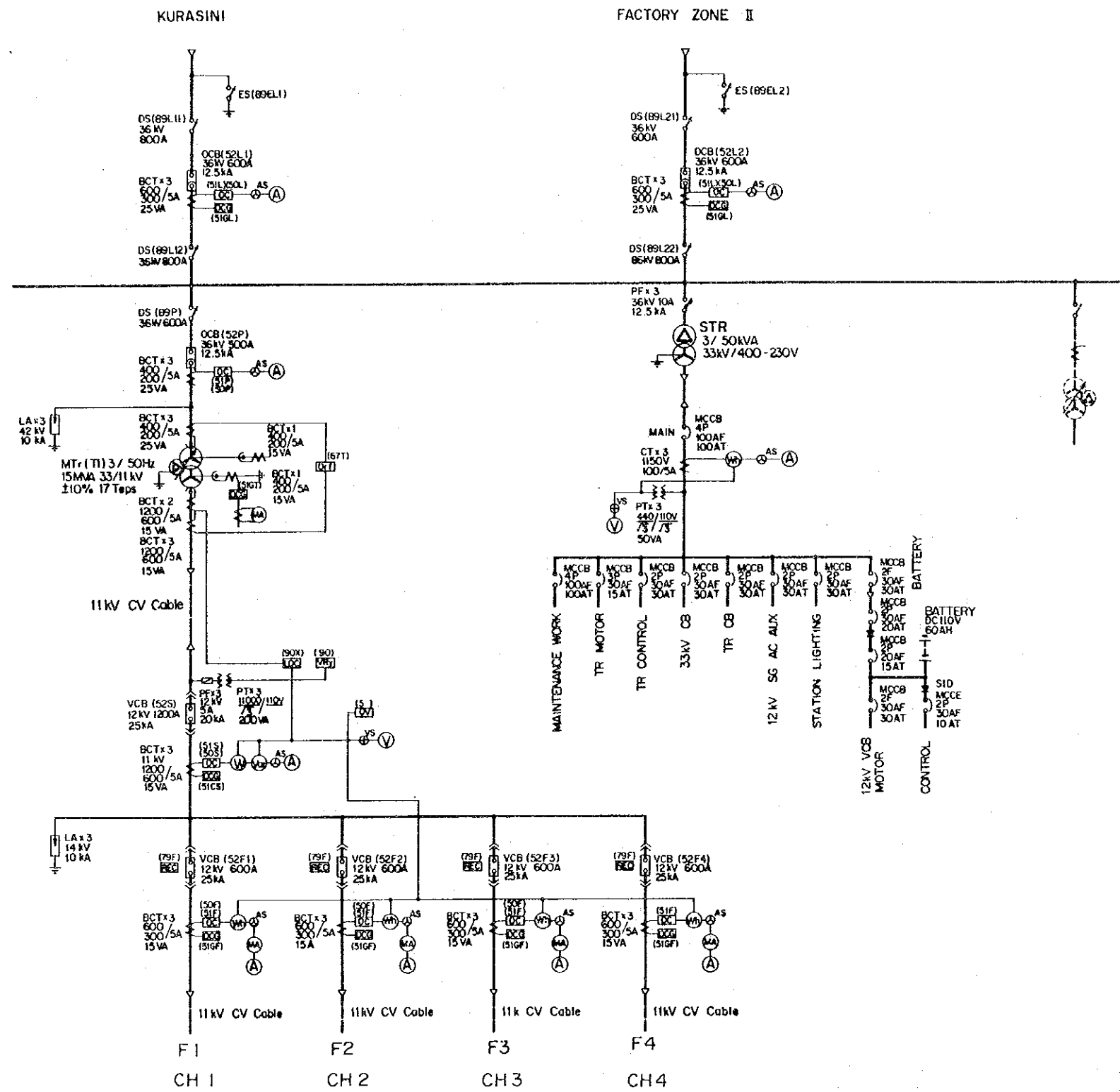
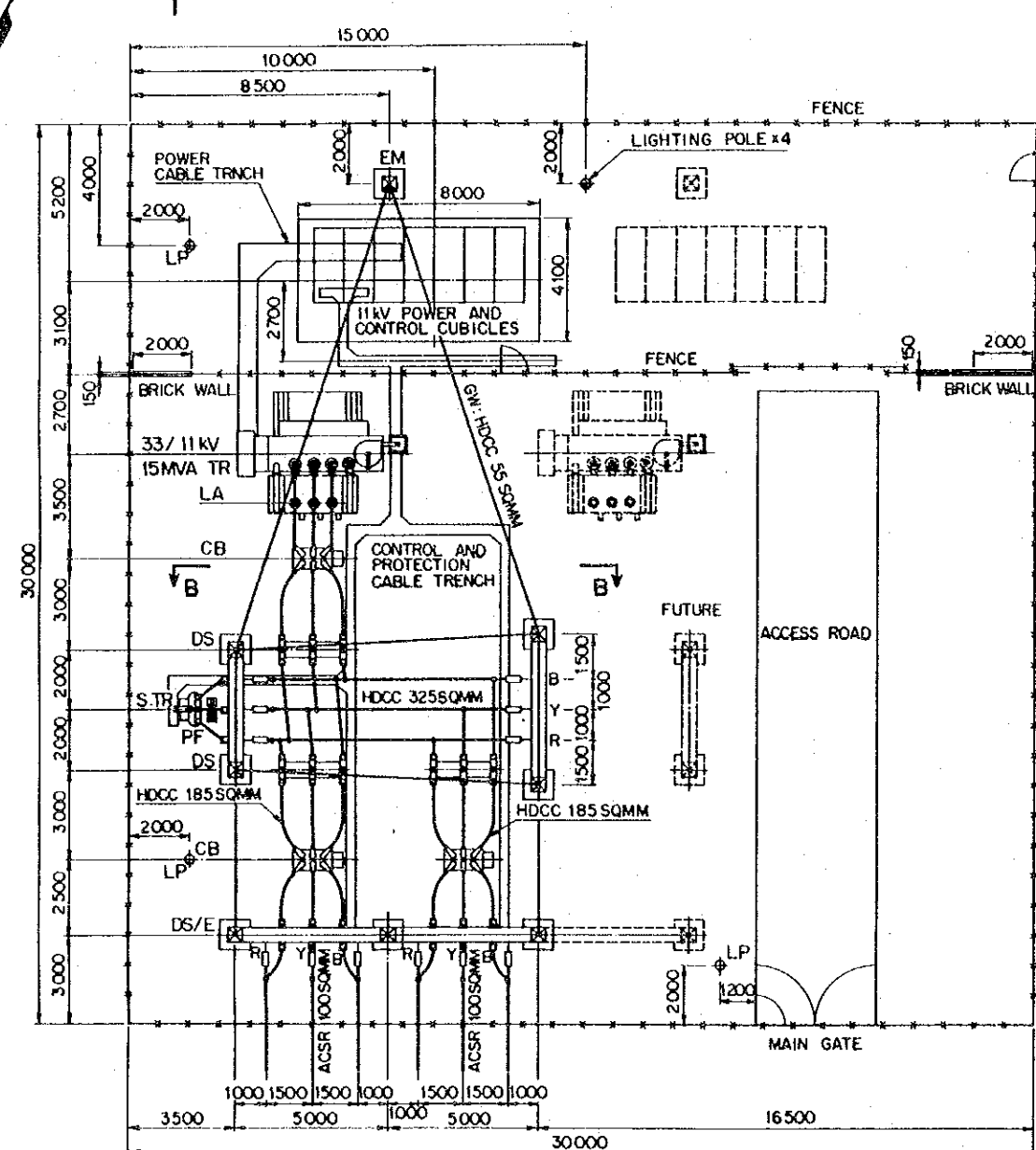


Fig.5.4 - 11 - 1

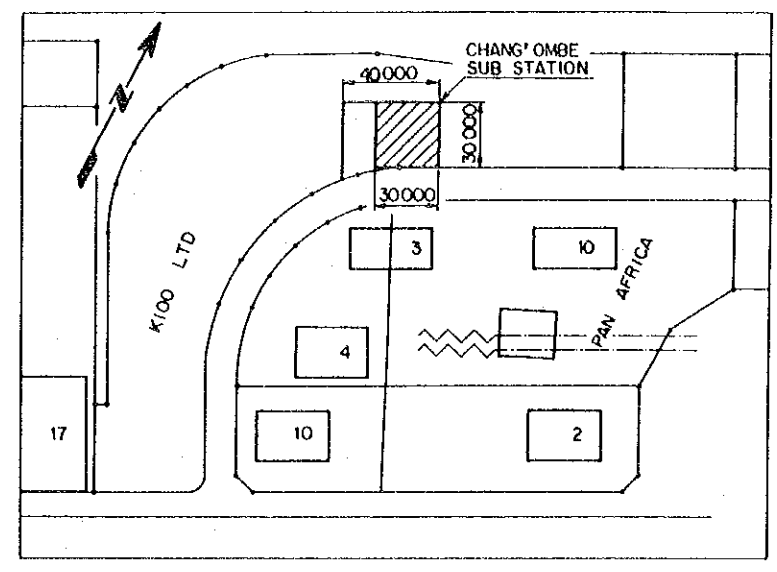
THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION			
SINGLE LINE DIAGRAM OF CHANG'OMBE SUBSTATION			
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN		
DR.:	SUBMITTED:		
TR.:	RECOMMENDED:		
CK.:	APPROVED:		
LOCATION	DATE	DESCRIPTION	BY
REVISION			



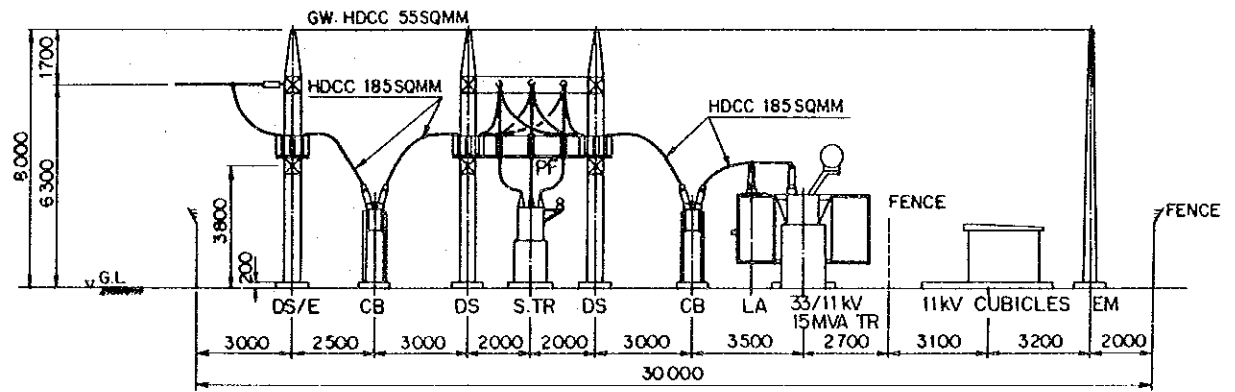
FROM 33kV KURASINI SUBSTATION
 FROM 33kV FACTORY ZONE-1 SUBSTATION

PLAN

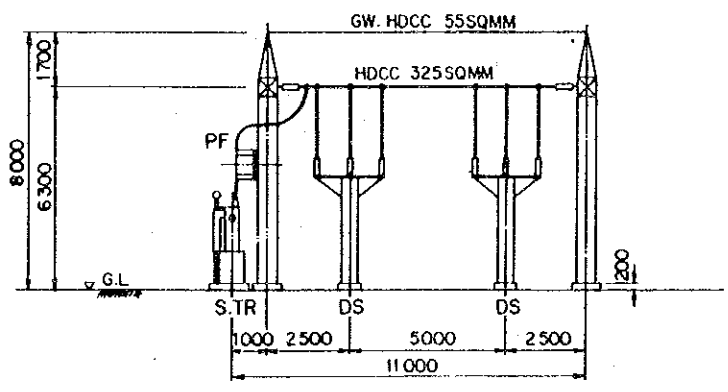
- LEGEND**
- DE/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - DS : DISCONNECTING SWITCH
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 15MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER
 - EM : EARTH MAST
- NOTE**
- FUTURE EXPANSION



LOCATION MAP (NONE SCALE)



SECTION A - A

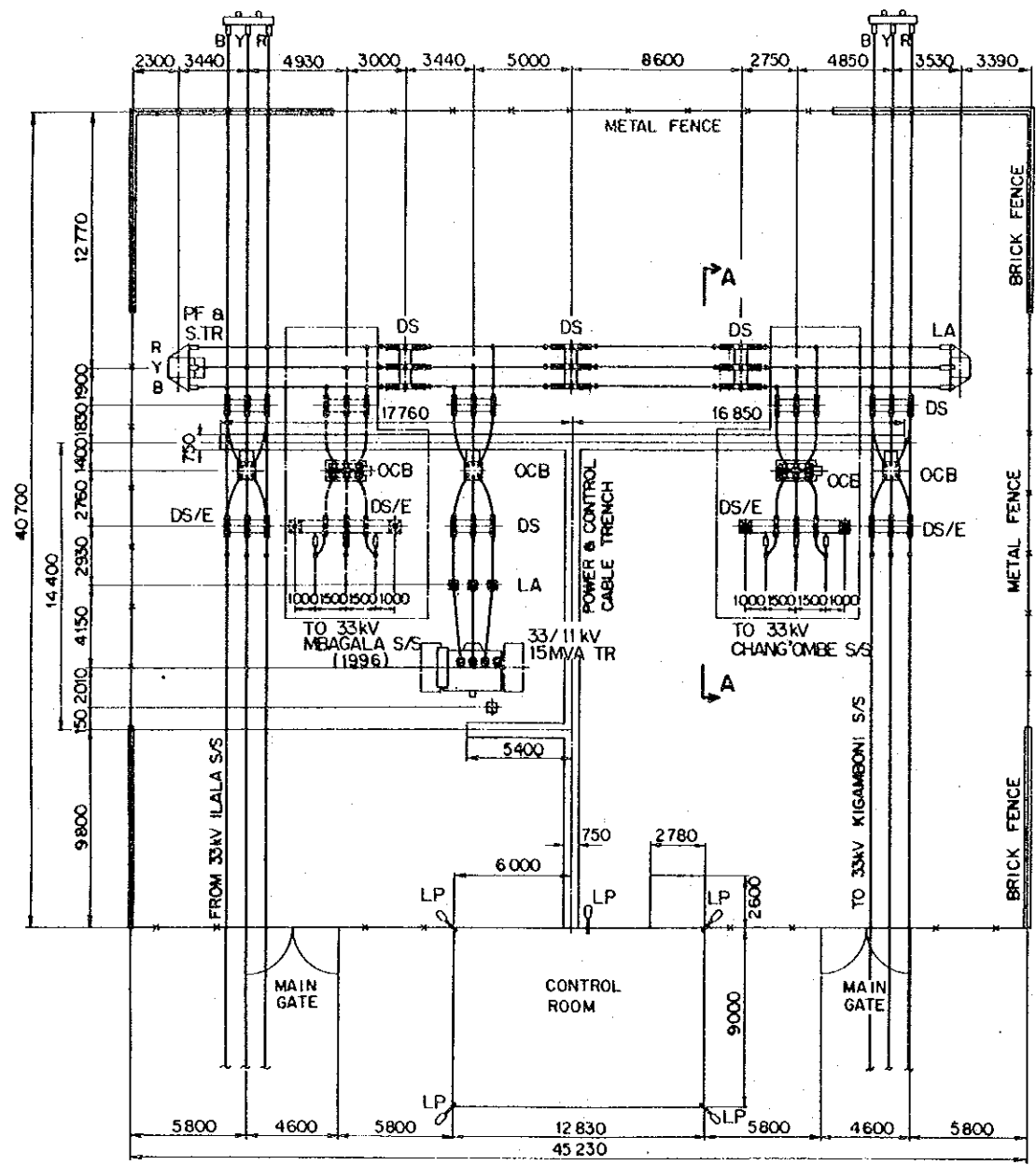


SECTION B - B

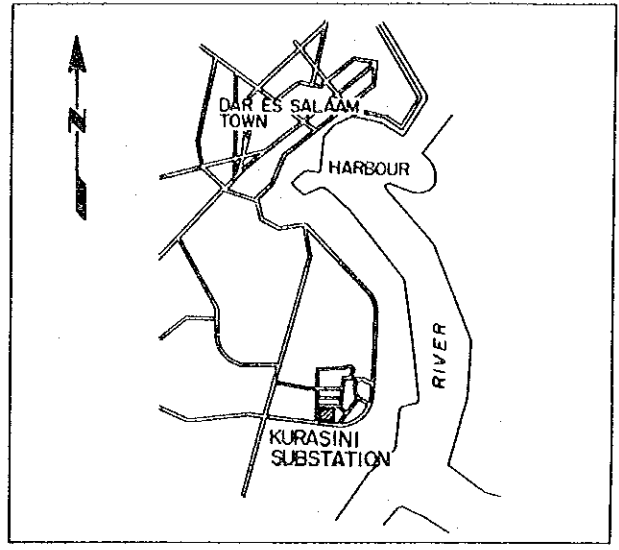
Fig.5.4 -11-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF CHANG'OMBE SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

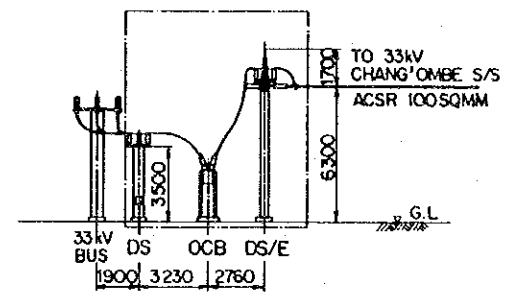


PLAN



LOCATION MAP (NONE SCALE)

- LEGEND**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - DS : DISCONNECTING SWITCH
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 15MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S. TR : STATION TRANSFORMER



SECTION A - A

- NOTE**
- 1. [Symbol] : EXPANSION FEEDER
 - 2. [Symbol] : FUTURE FEEDER

Fig. 5.4 - 12-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF KURASINI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

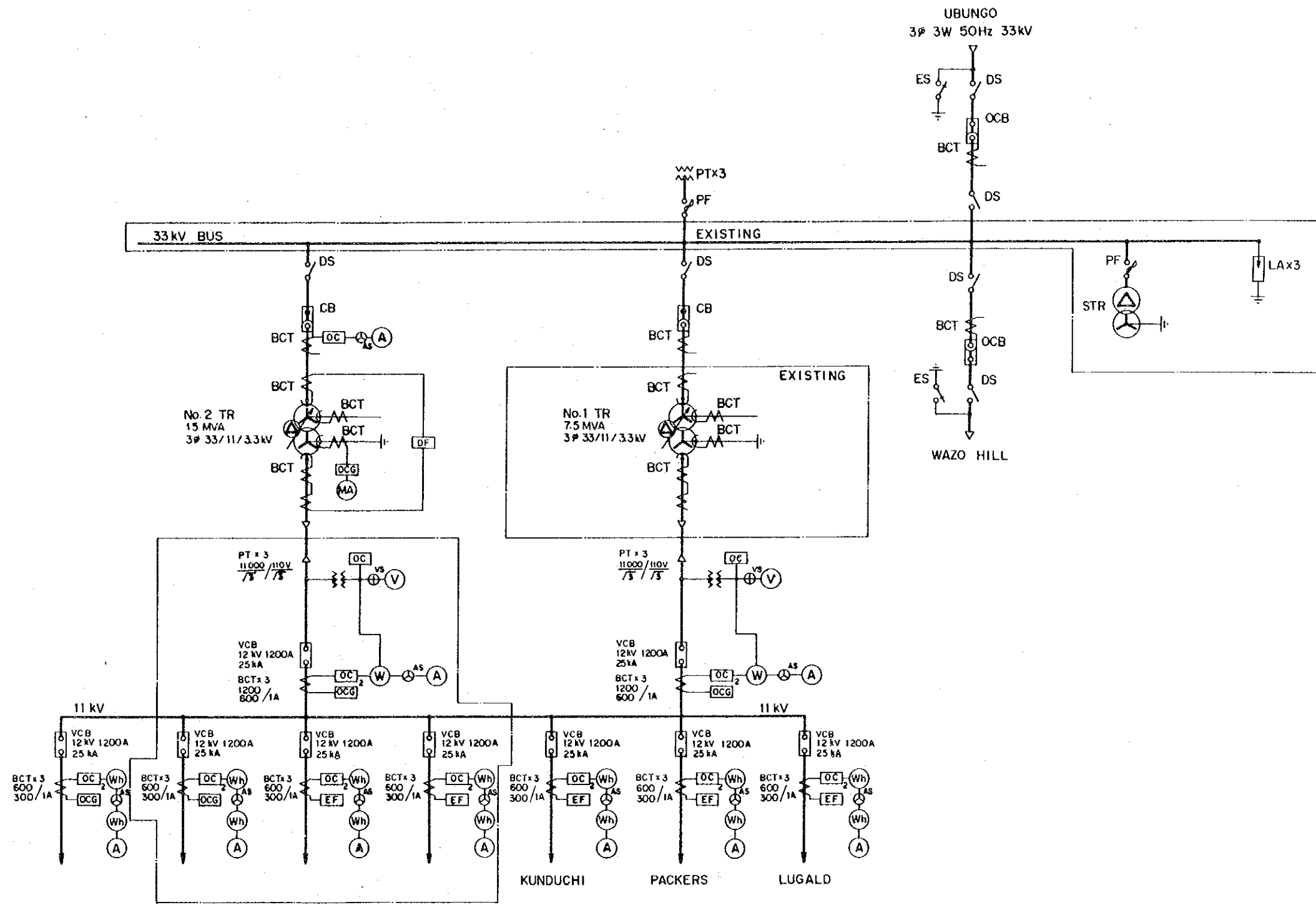
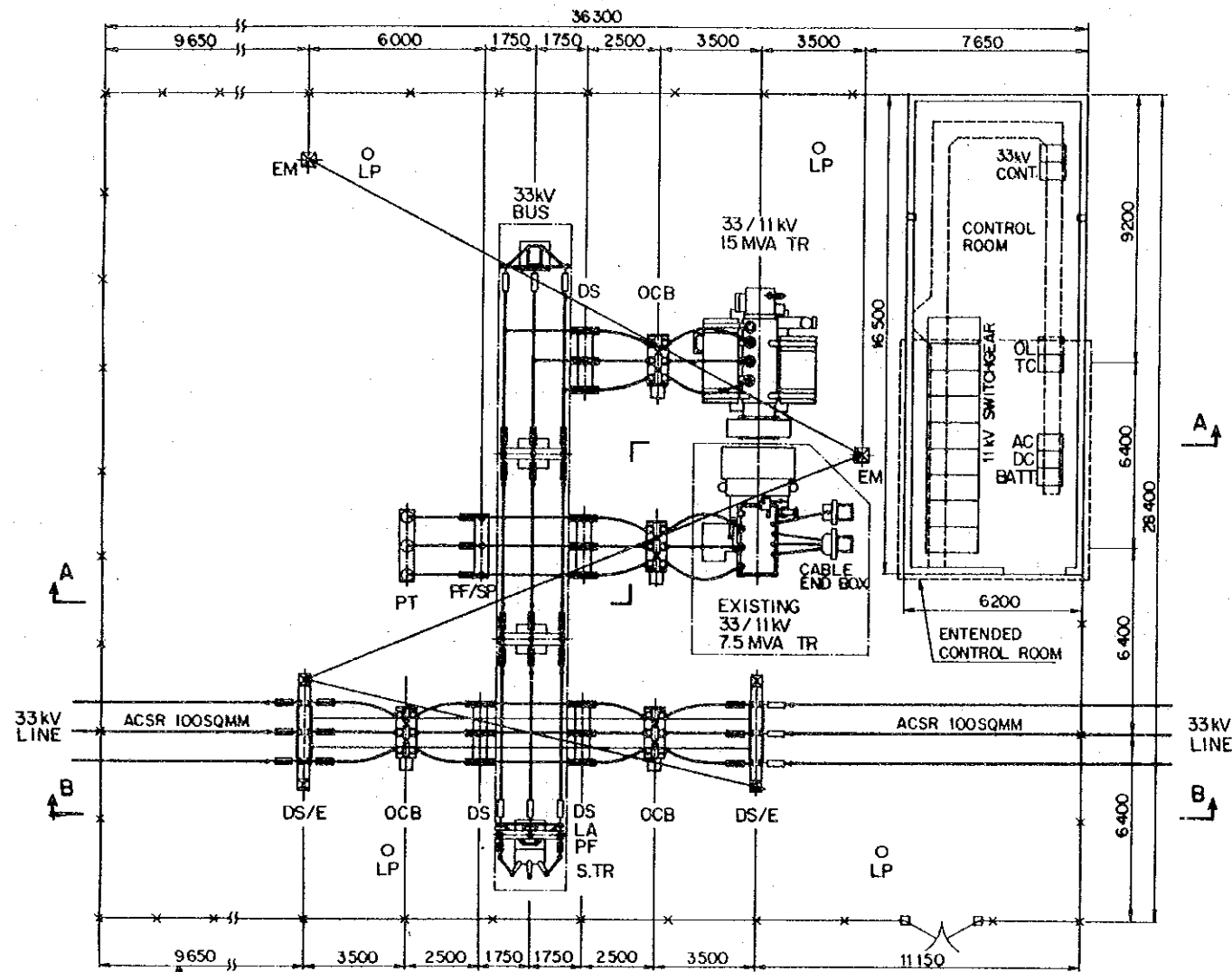


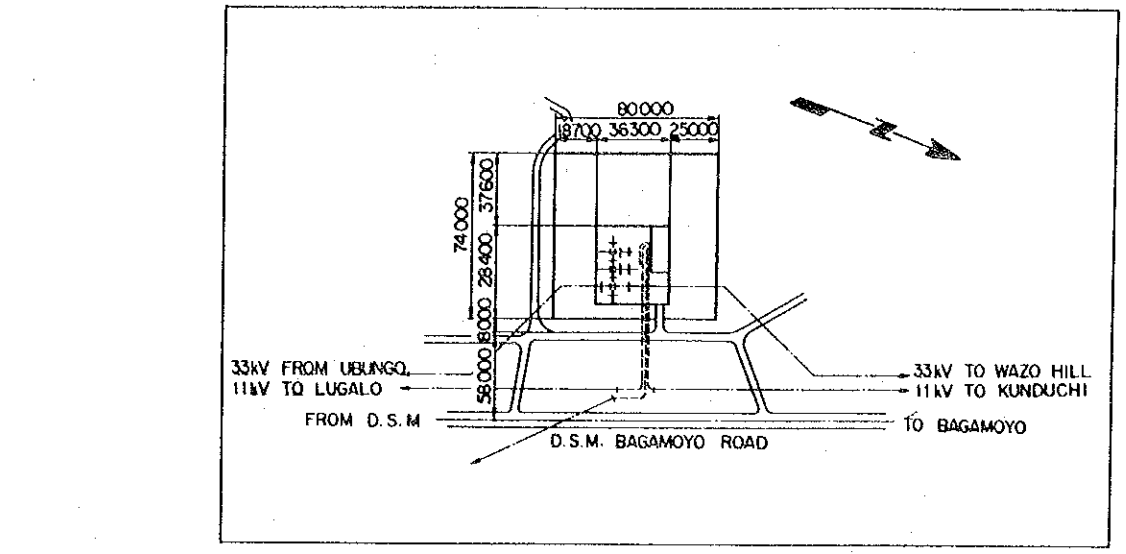
Fig. 5.4-13-1

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF MBEZI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR:	SAWITTED:
TR:	RECOMMENDED:
CK:	APPROVED:
REVISION	

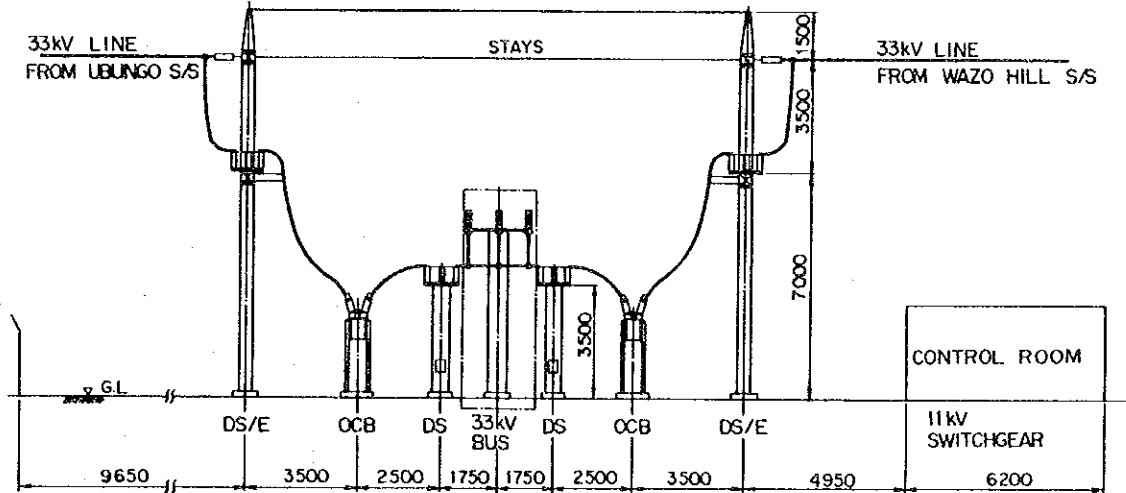
LOCATION	DATE	DESCRIPTION	BY



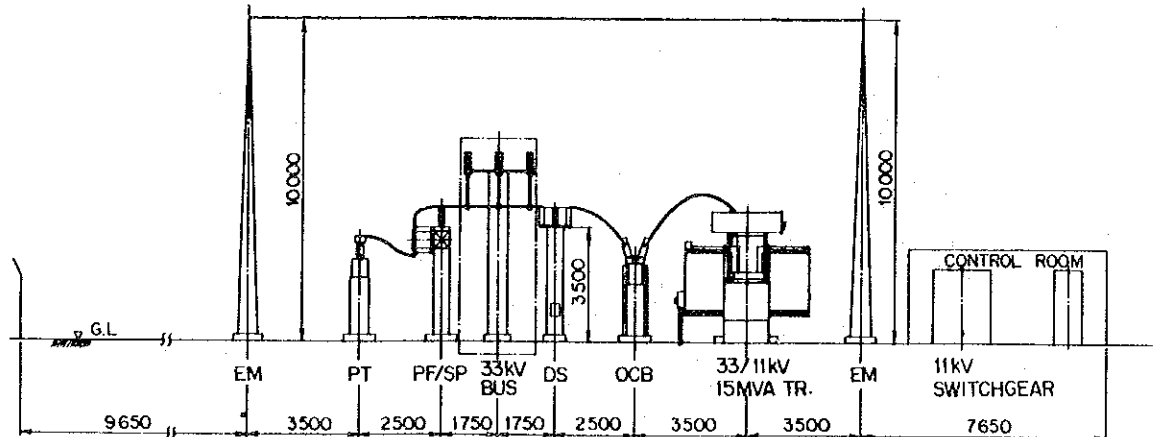
PLAN



LOCATION MAP (NONE SCALE)



SECTION B - B



SECTION A - A

- LEGEND**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - OCB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER
 - EM : EARTH MAST
 - DS : DISCONNECTING SWITCH

NOTE

- : EXISTING STRUCTURE & 7.5 MVA TRANSFORMER
- * EXISTING 33/11kVA, 7.5MVA TRANSFORMER SHOULD BE SHIFTED UNDER REHABILITATION WORK FOR INSTALLATION OF NEW PRIMARY CIRCUIT BREAKER.

Fig.5.4 - 13-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF MBEZI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:
- - -	

LOCATION	DATE	DESCRIPTION	BY
REVISION			

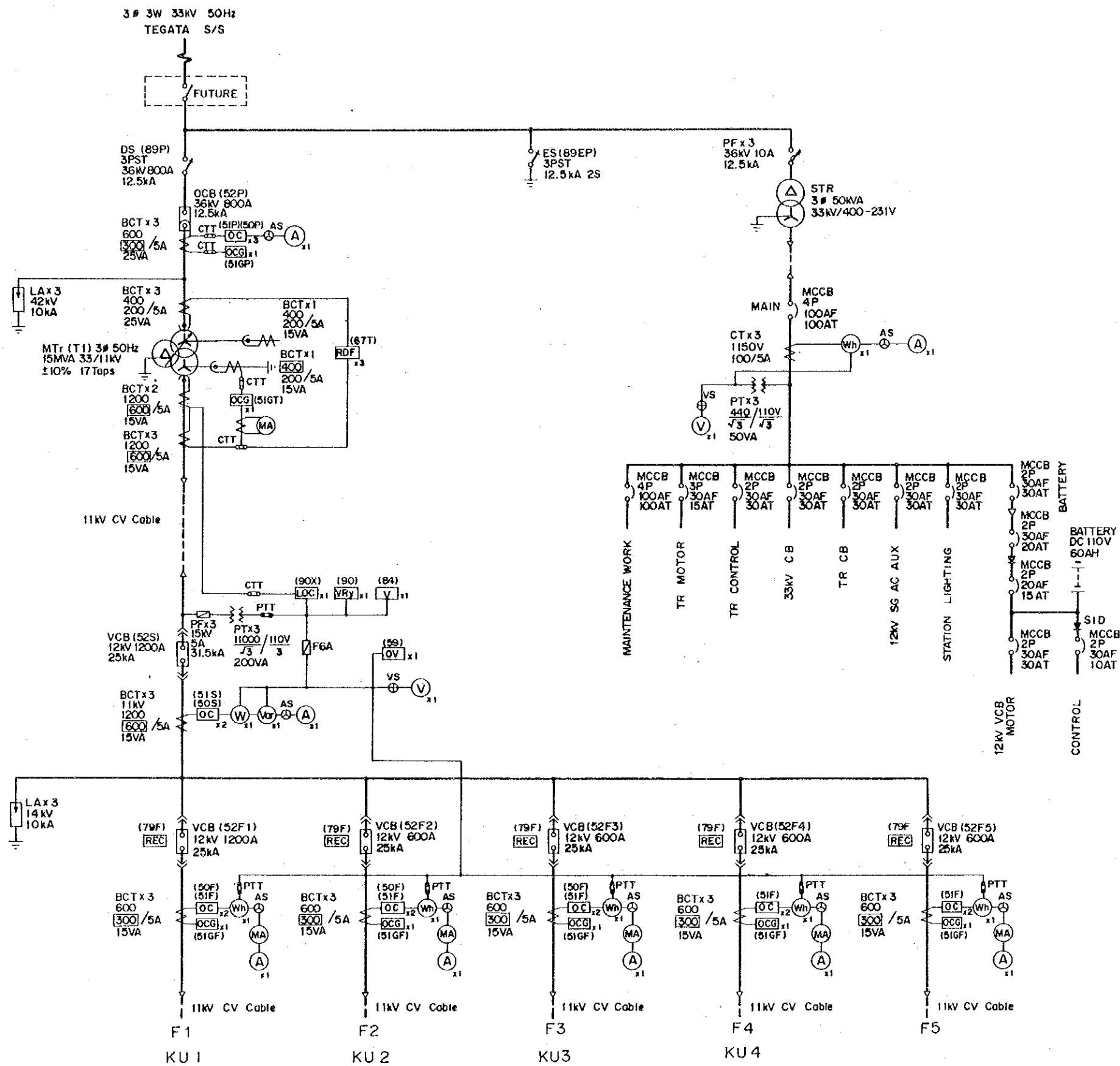
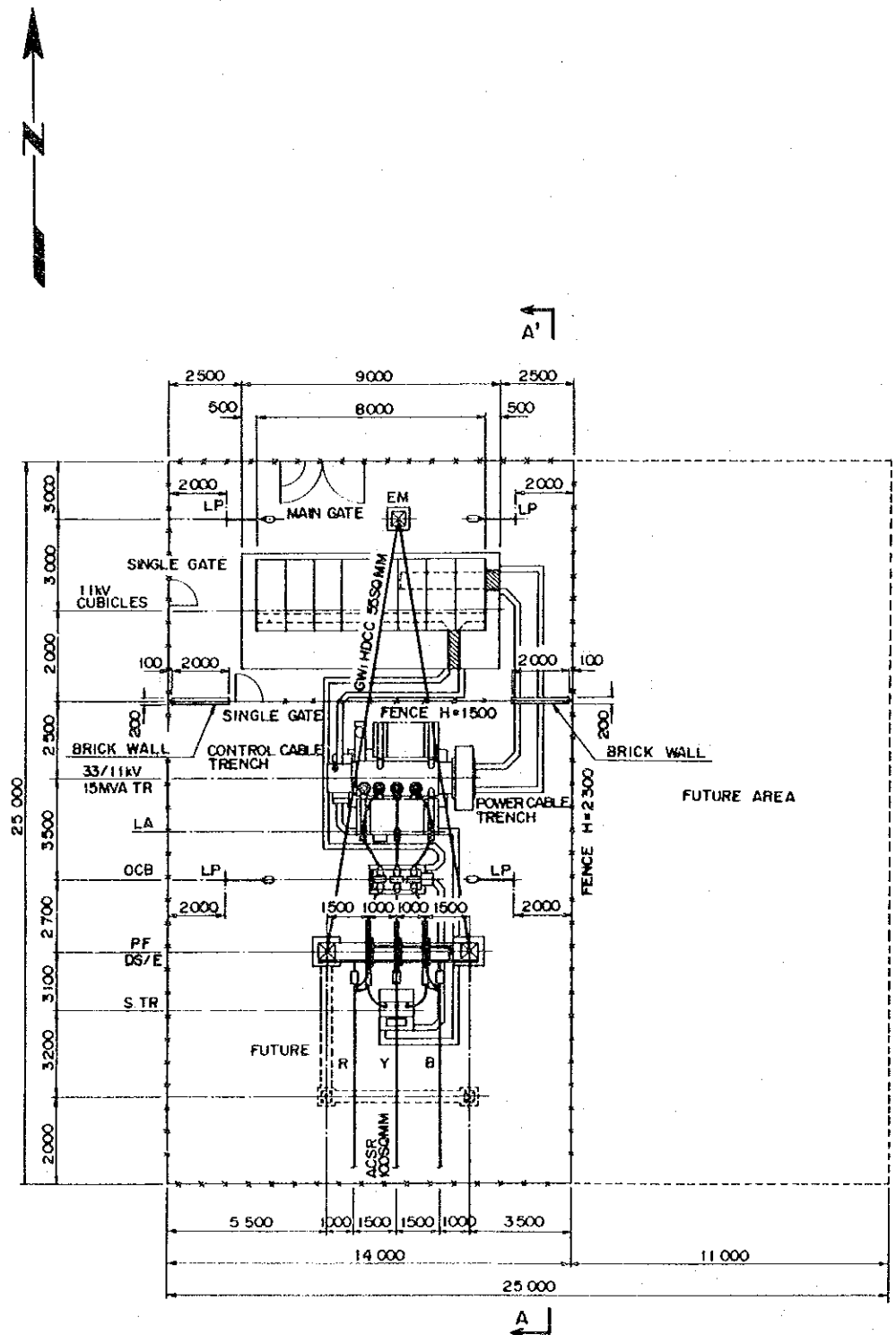


Fig.5.4 - 14-1

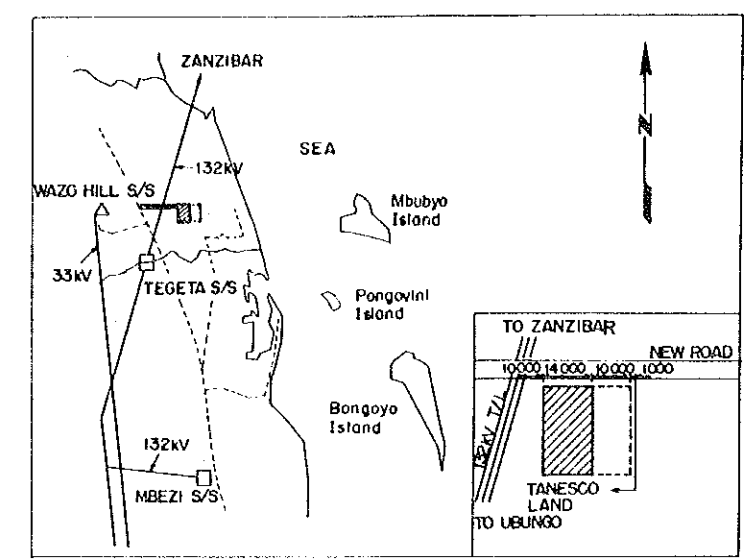
THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION			
SINGLE LINE DIAGRAM OF KUNDUCHI SUBSTATION			
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN		
DR.:	SUBMITTED:		
TR.:	RECOMMENDED:		
CK.:	APPROVED:		
LOCATION	DATE	DESCRIPTION	BY
REVISION			



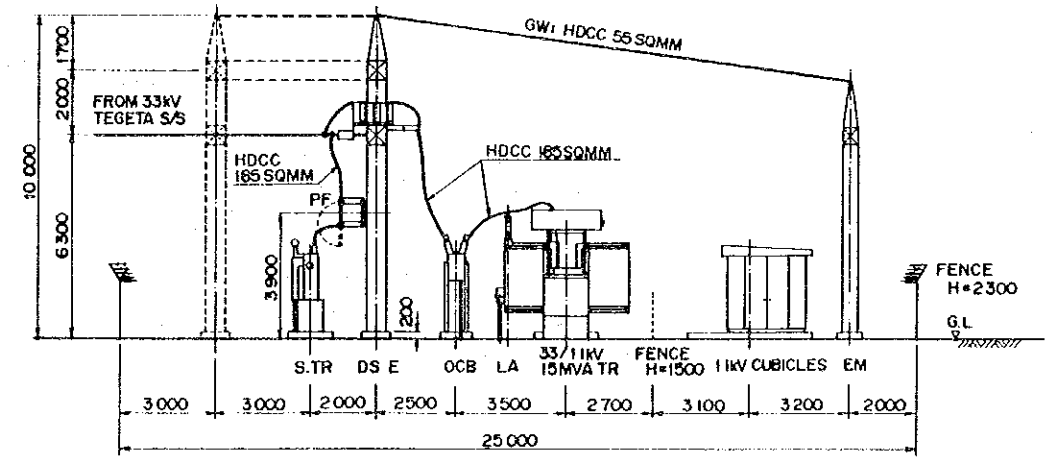
P L A N

- LEGEND :**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 15MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S. TR : STATION TRANSFORMER
 - EM : EARTH MAST

NOTE :
 1. ----- FUTURE EXPANSION



LOCATION MAP
(NONE SCALE)



SECTION A - A'

Fig. 5.4-14-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF KUNDUCHI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

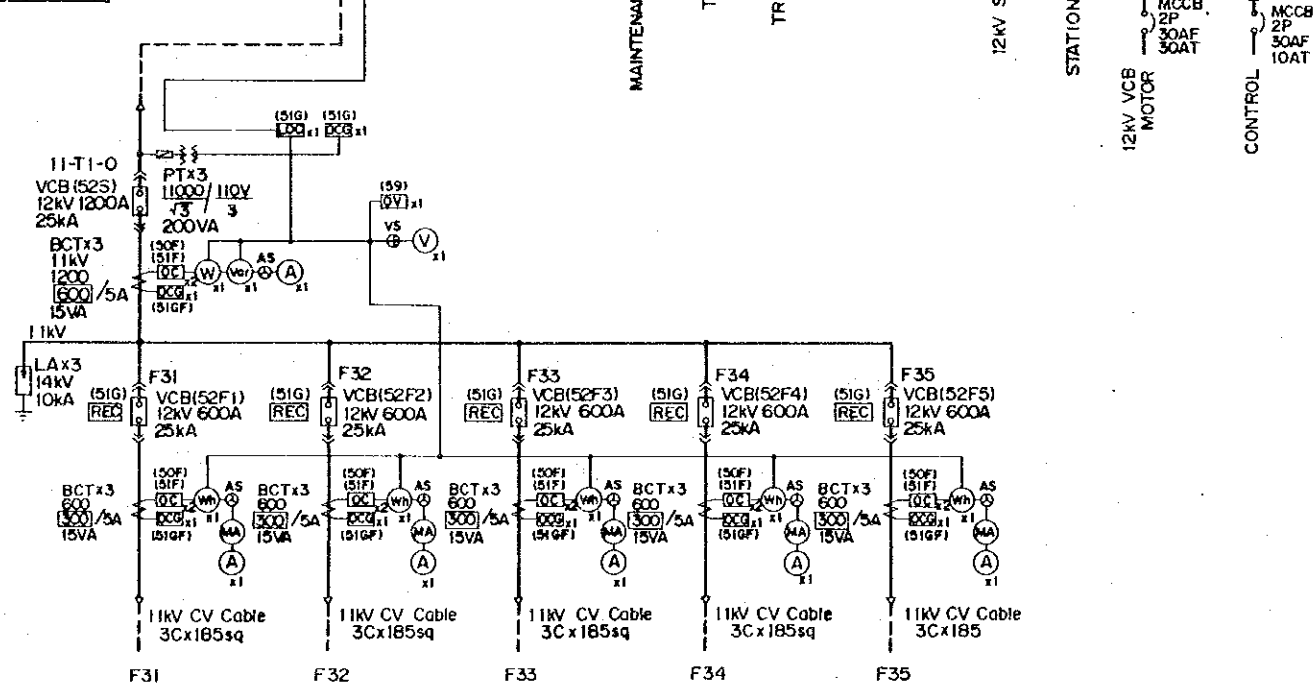
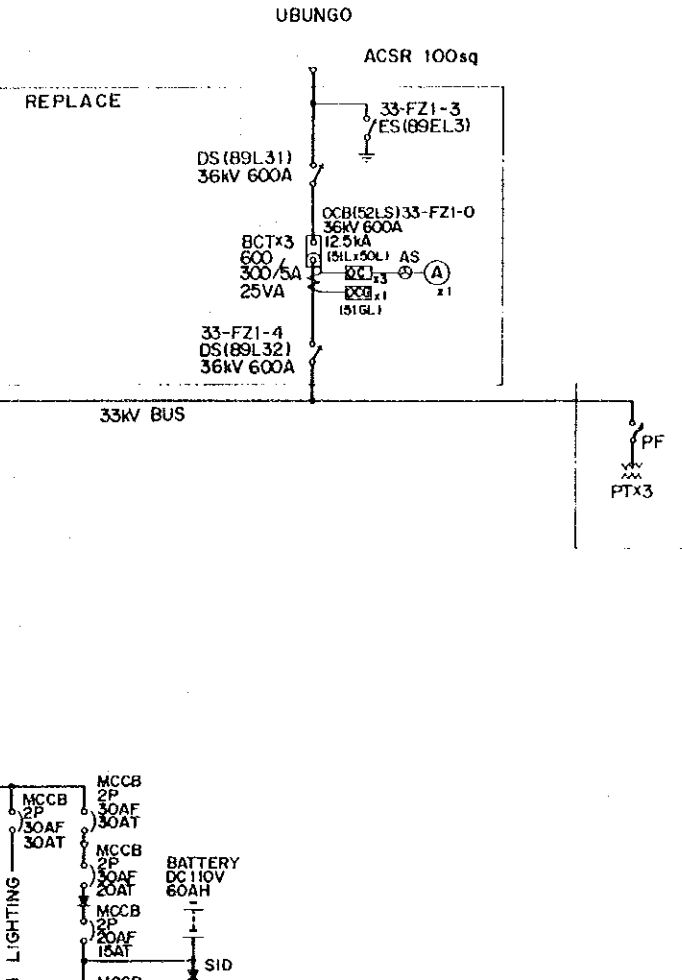
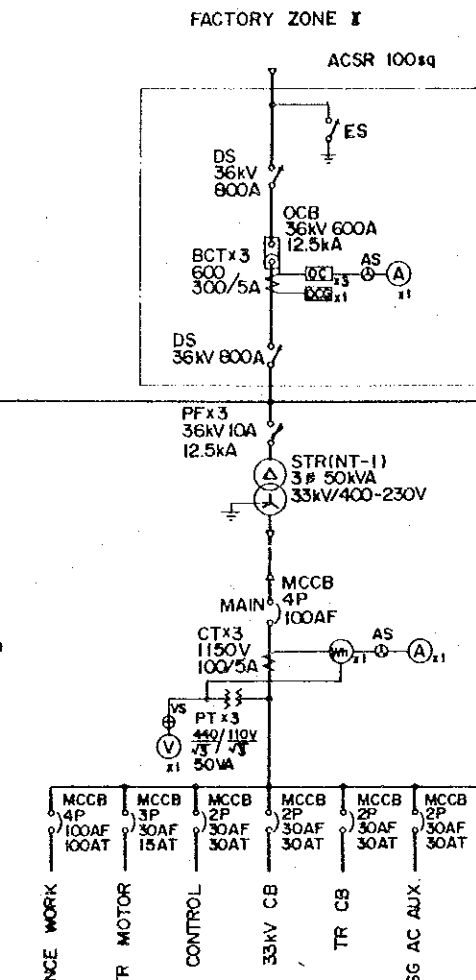
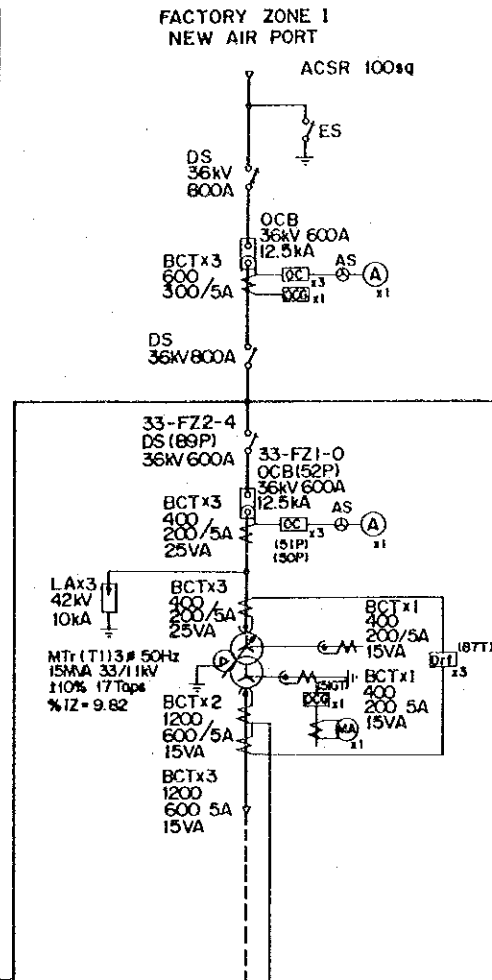
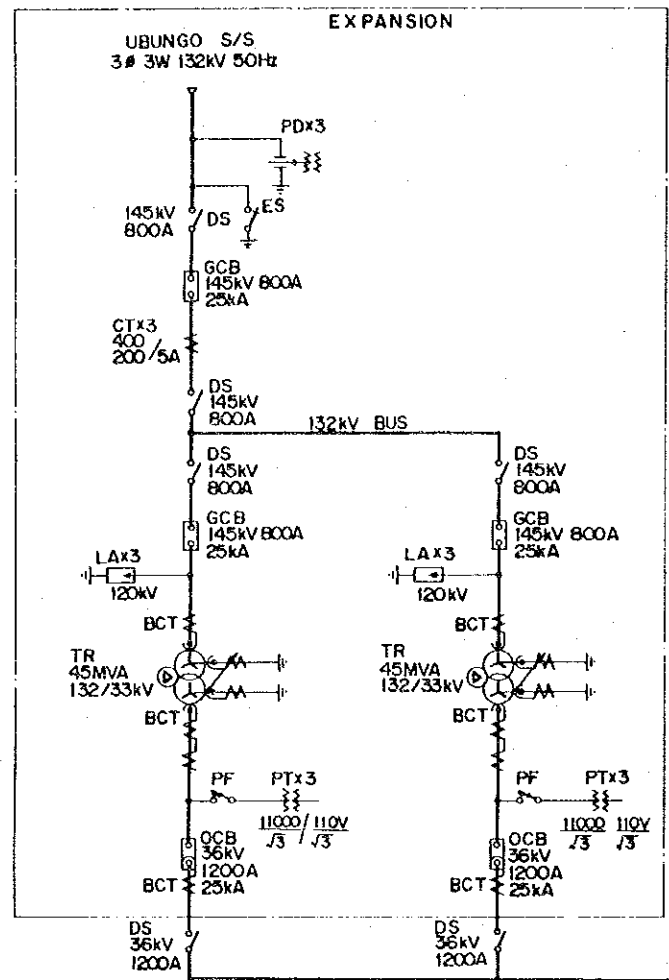
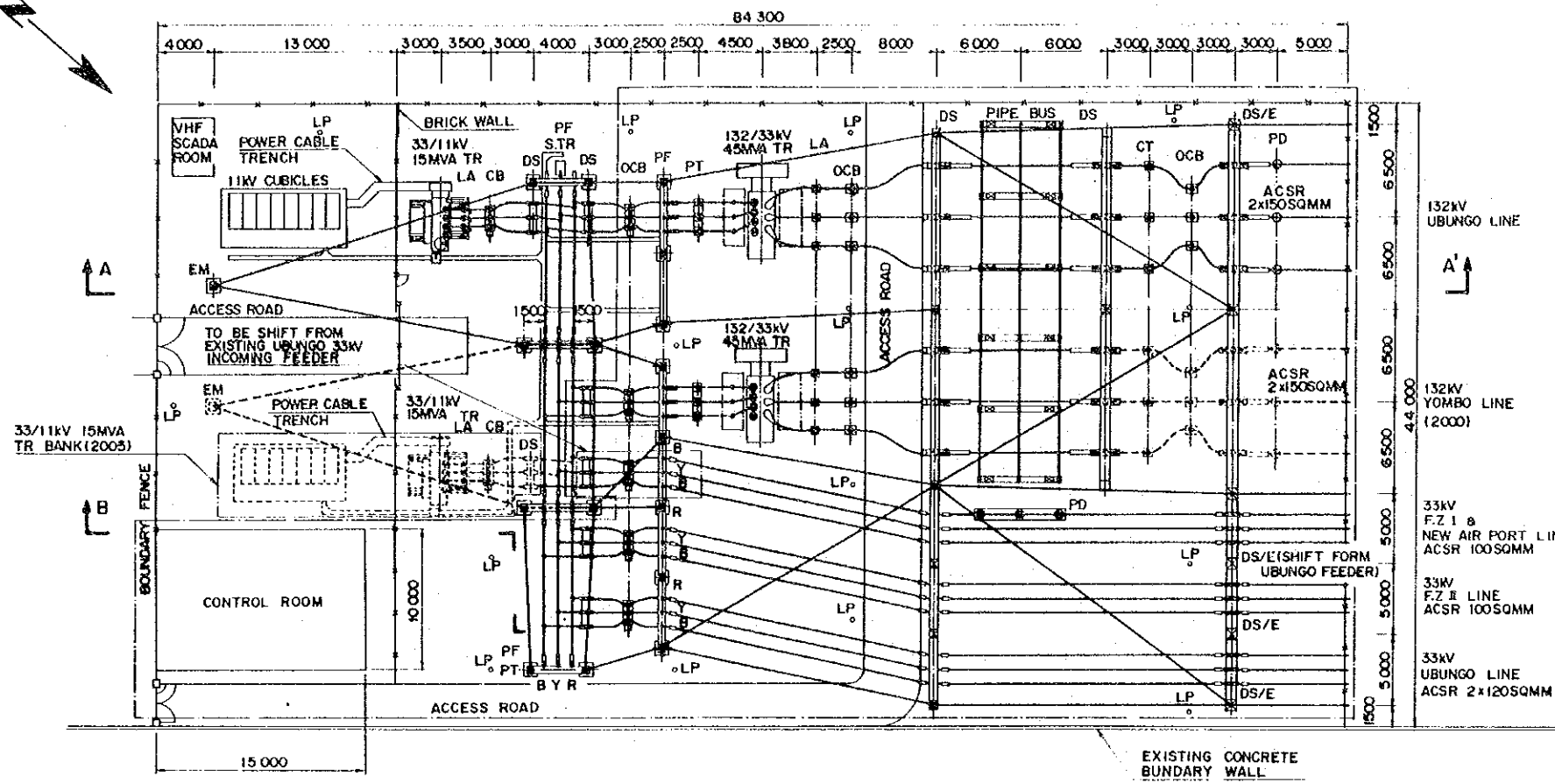
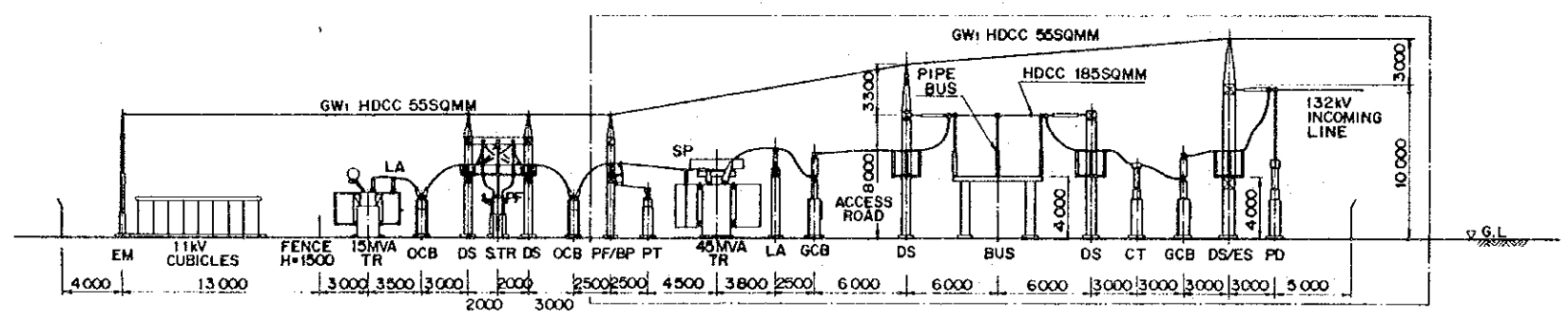


Fig. 5.4-15-1
 THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION
**SINGLE LINE DIAGRAM OF
 FACTORY ZONE II SUBSTATION**
 TANESCO ELECTRIC POWER DEVELOPMENT CO., LTD.
 TOKYO, JAPAN
 DR.: SUBMITTED:
 TR.: RECOMMENDED:
 CK.: APPROVED:

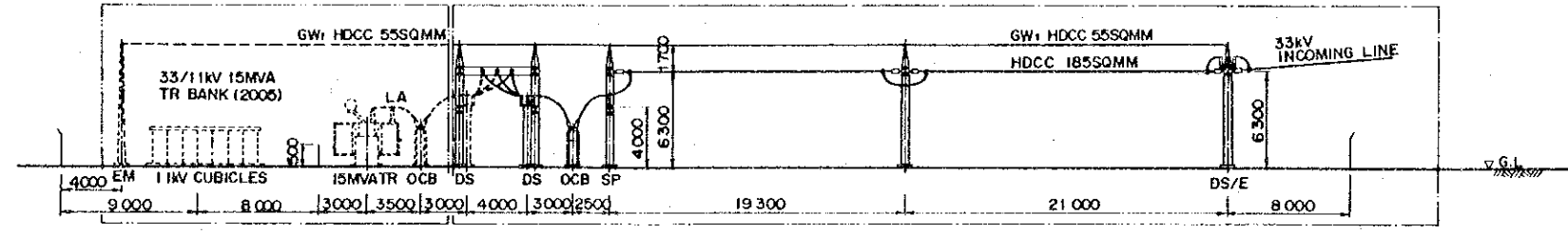
LOCATION	DATE	DESCRIPTION	BY
REVISION			



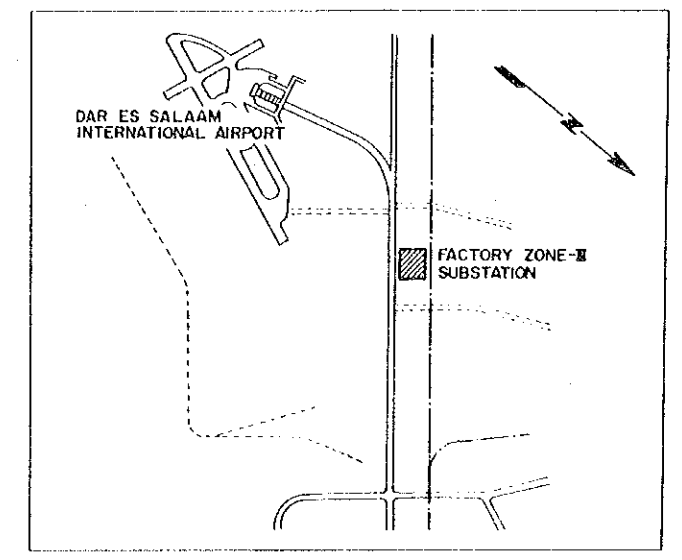
P L A N



SECTION A-A'



SECTION B-B'



LOCATION MAP
(NONE SCALE)

LEGEND :

- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S.T.R : STATION TRANSFORMER
- EM : EARTH MAST
- PD : POTENTIAL DEVICE
- DS : DISCONNECTING SWITCH
- CT : CURRENT TRANSFORMER
- PT : POTENTIAL TRANSFORMER

NOTE :

1. [] : EXPANSION AND REHABILITATION AREA
2. - - - - : FUTURE EXPANSION

Fig.5.4 -15-2

THE UNITED REPUBLIC OF TANZANIA
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

LAYOUT OF FACTORY ZONE III SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

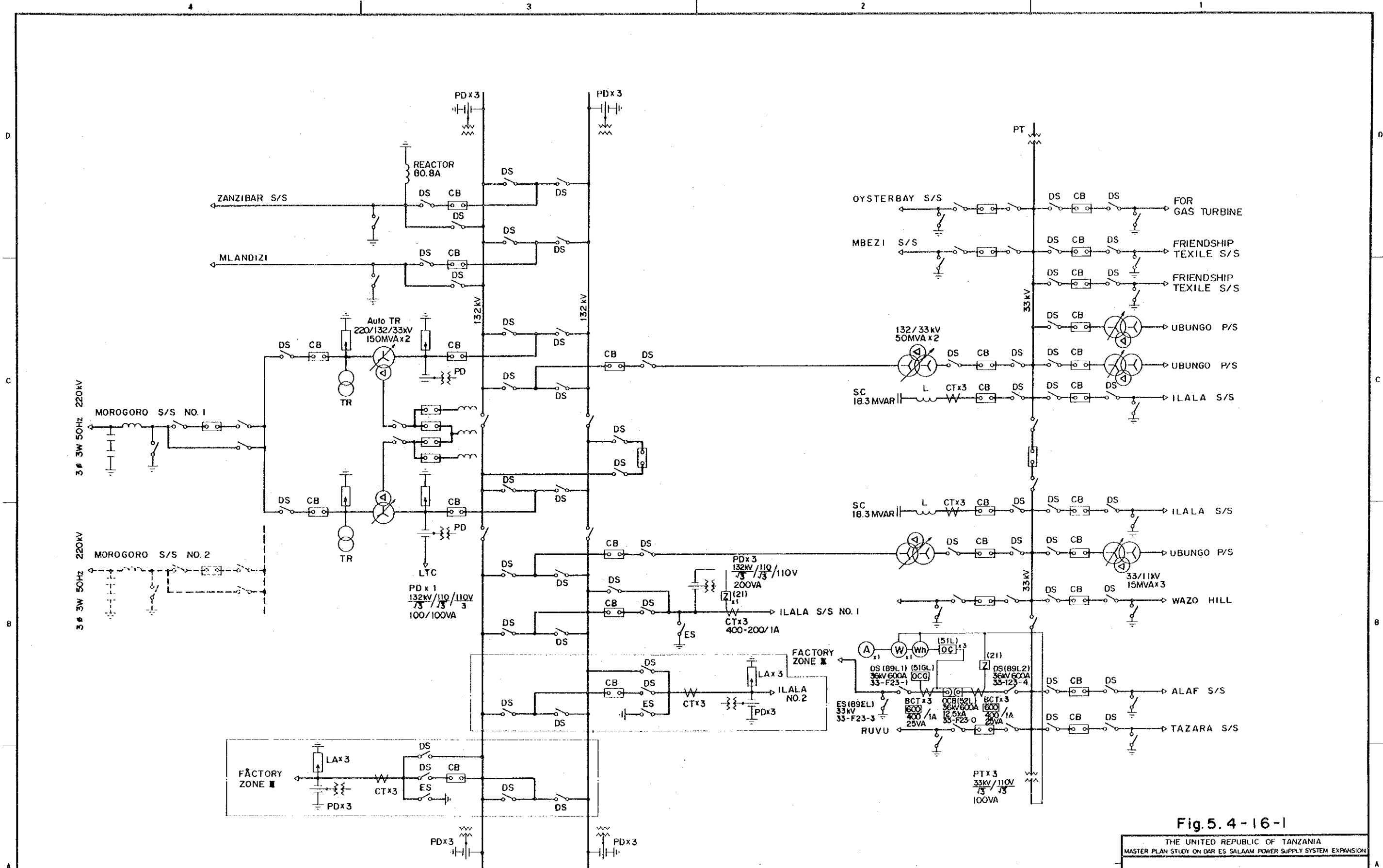


Fig. 5.4-16-1


THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF UBUNGO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CE.:	APPROVED:

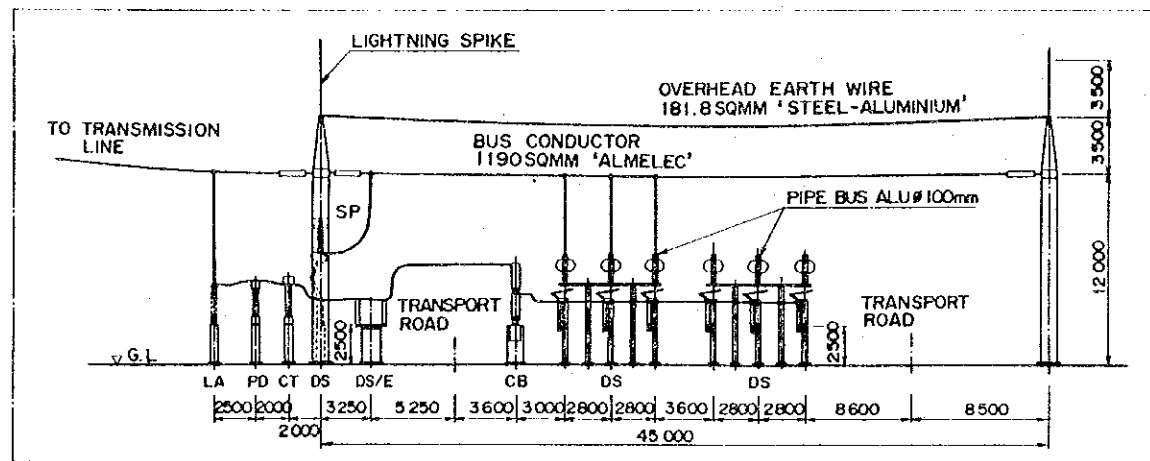
LOCATION	DATE	DESCRIPTION	BY
REVISION			

LEGEND :

- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- PD : POTENTIAL DEVICE
- DS : DISCONNECTING SWITCH
- CT : CURRENT TRANSFORMER

NOTE :

1.  132kV FEEDER EXPANSION AREA



SECTION A-A'

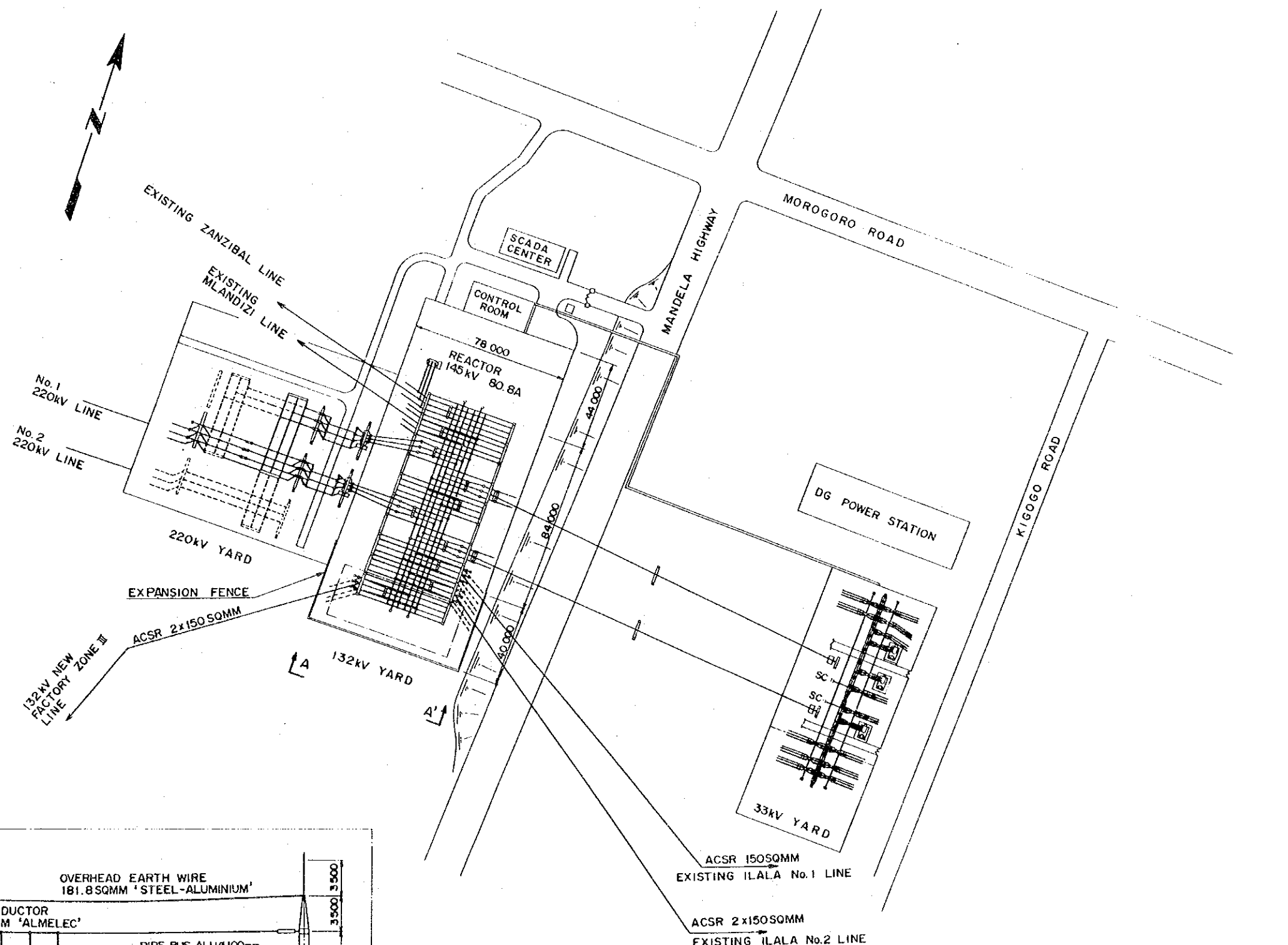


Fig.5.4-16-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF UBUNGO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR:	SUBMITTED:
TR:	RECOMMENDED:
CK:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

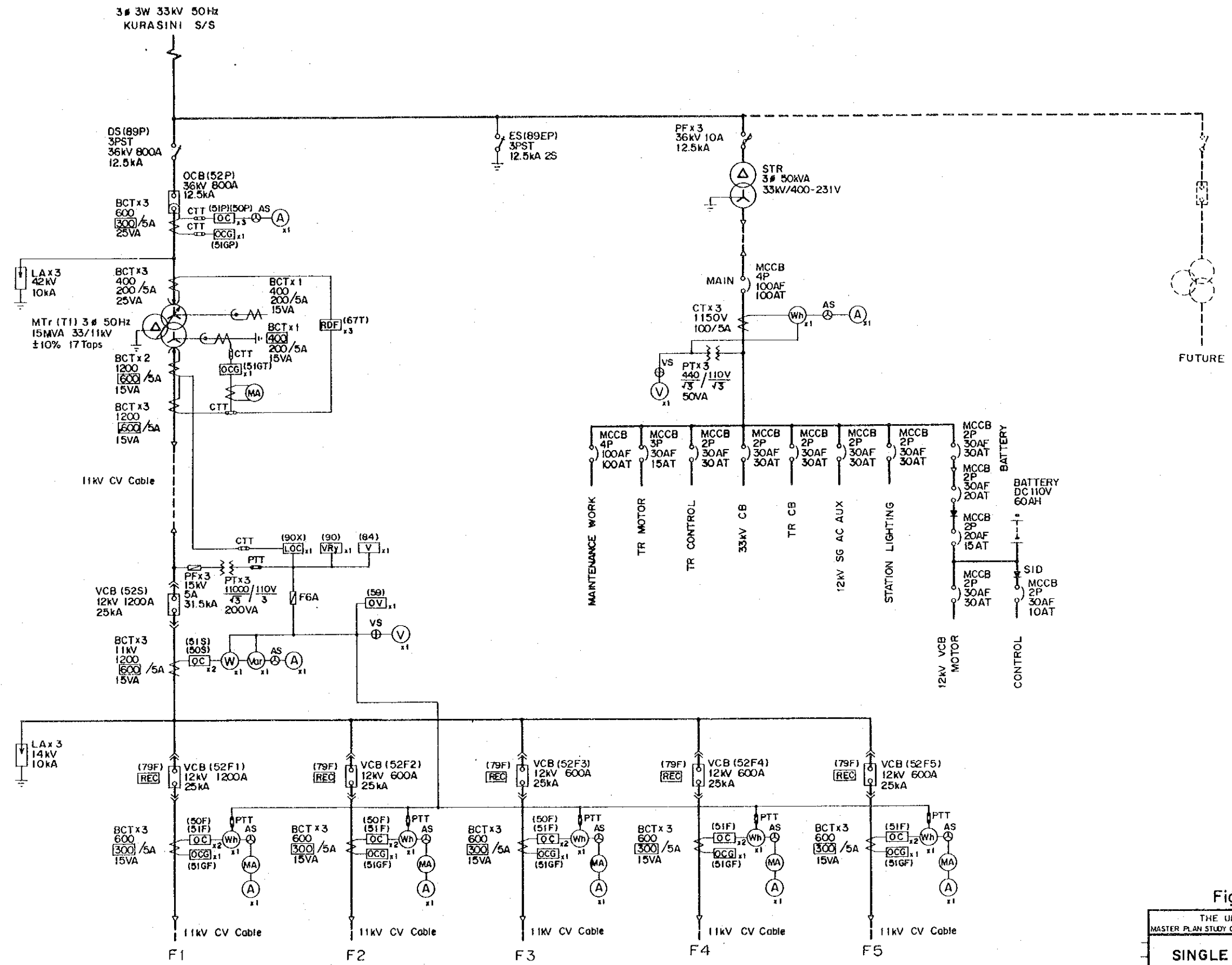
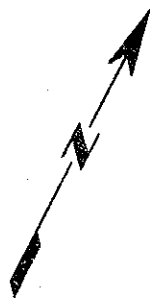


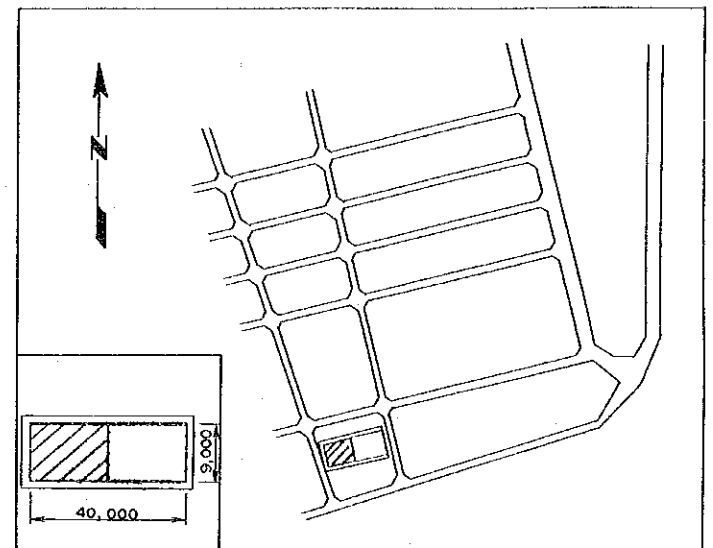
Fig. 5.4-17-1

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION			
SINGLE LINE DIAGRAM OF KARIAKOO SUBSTATION			
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN		
DR.:	SUBMITTED:		
TR.:	RECOMMENDED:		
CK.:	APPROVED:		
LOCATION	DATE	DESCRIPTION	BY
REVISION			

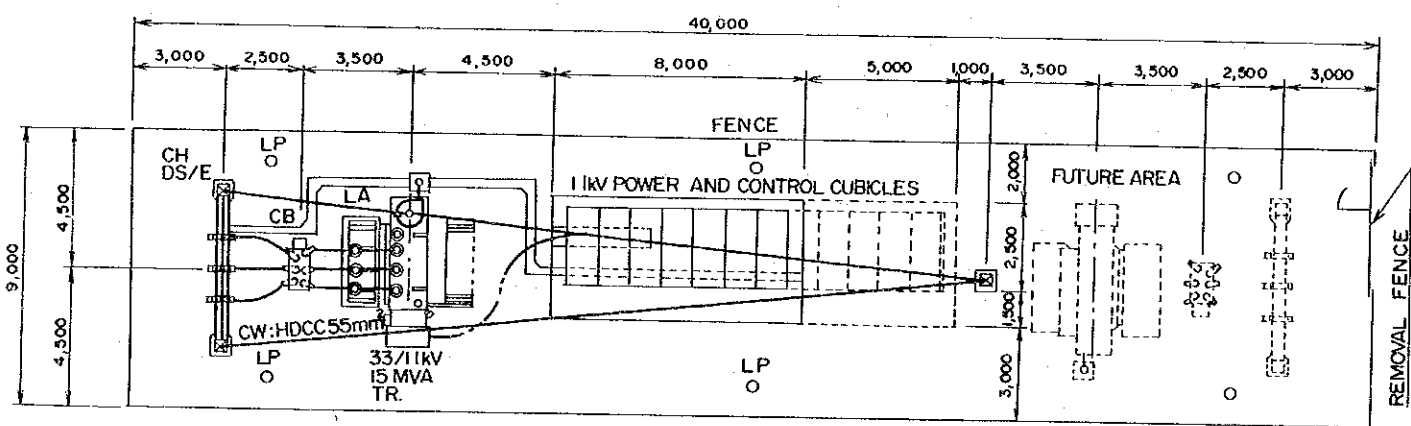


- LEGEND :**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 15MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER
 - EM : EARTH MAST

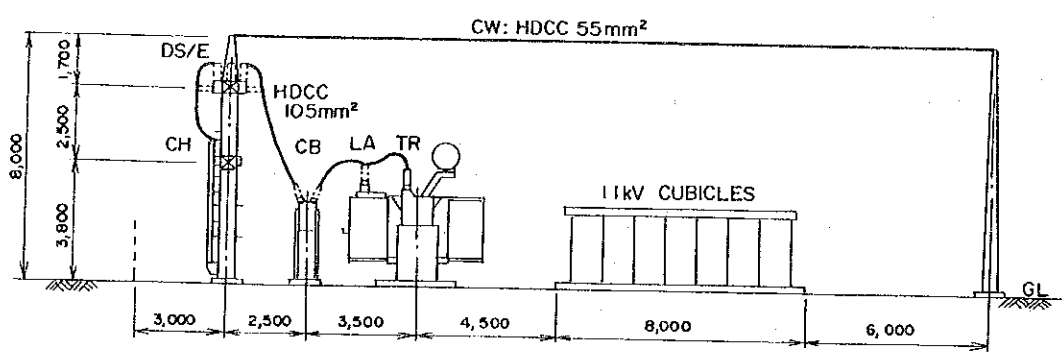
NOTE :
I. ---- FUTURE EXPANSION



LOCATION MAP
(NONE SCALE)



PLAN



SECTION

Fig. 5.4 - 17-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF KARIAKOO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.K.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

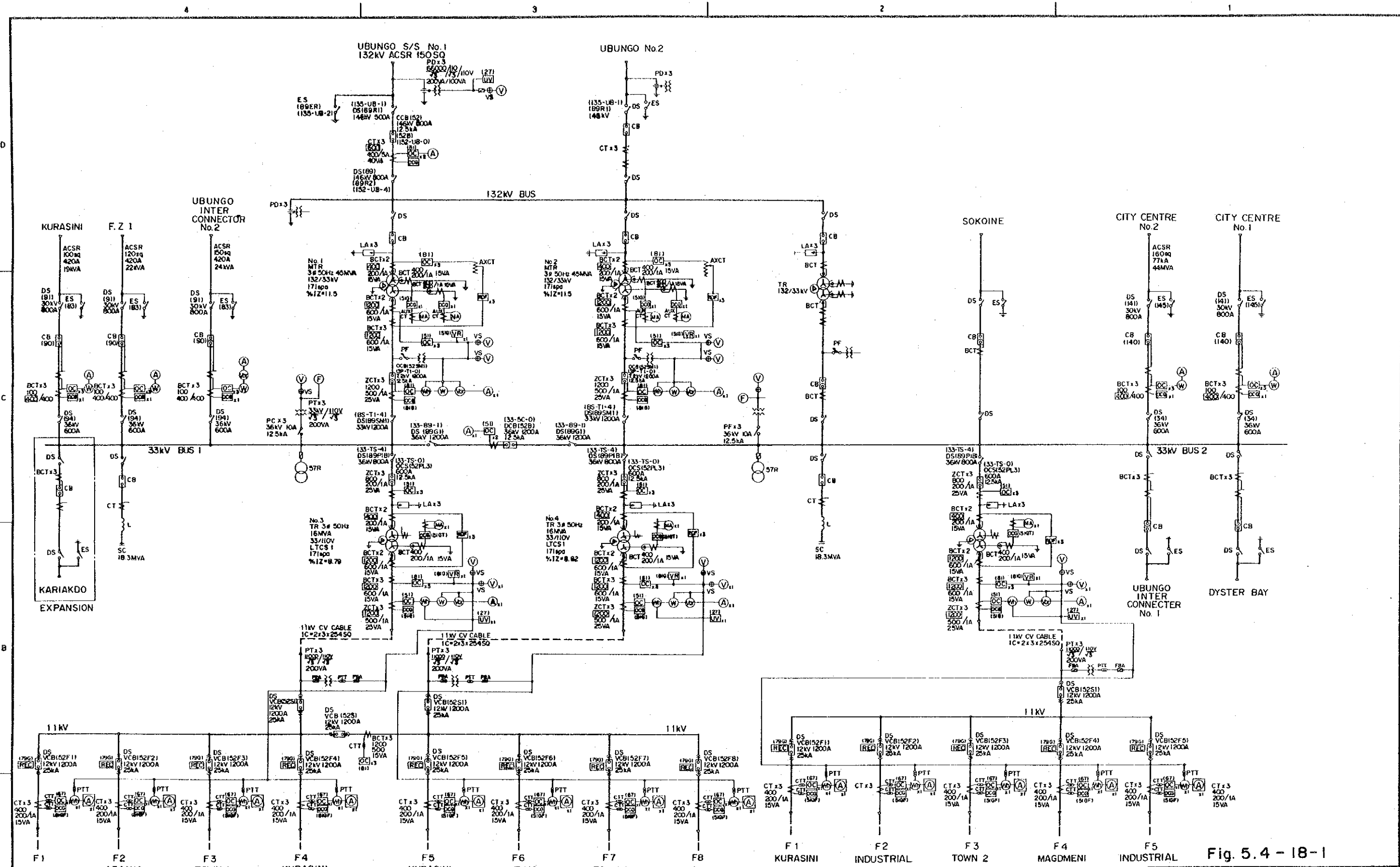


Fig. 5.4 - 18-1

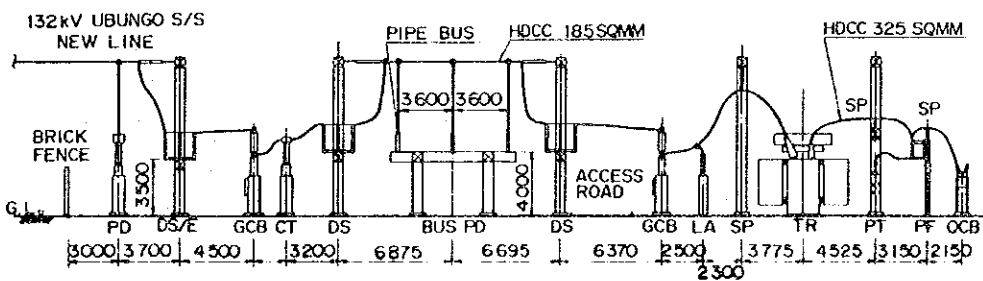
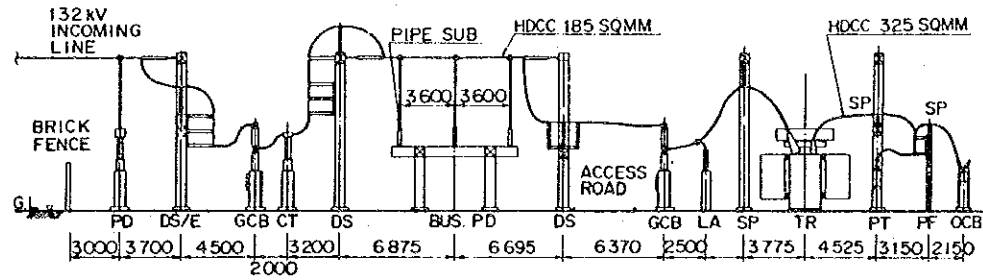
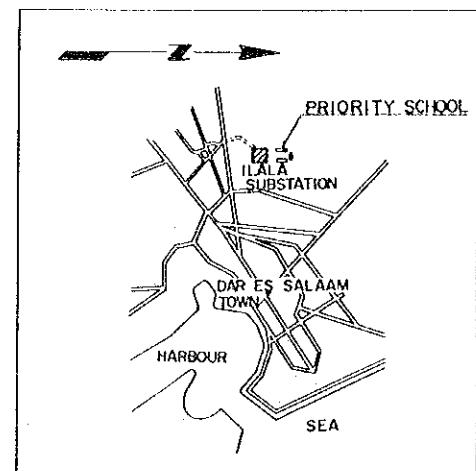
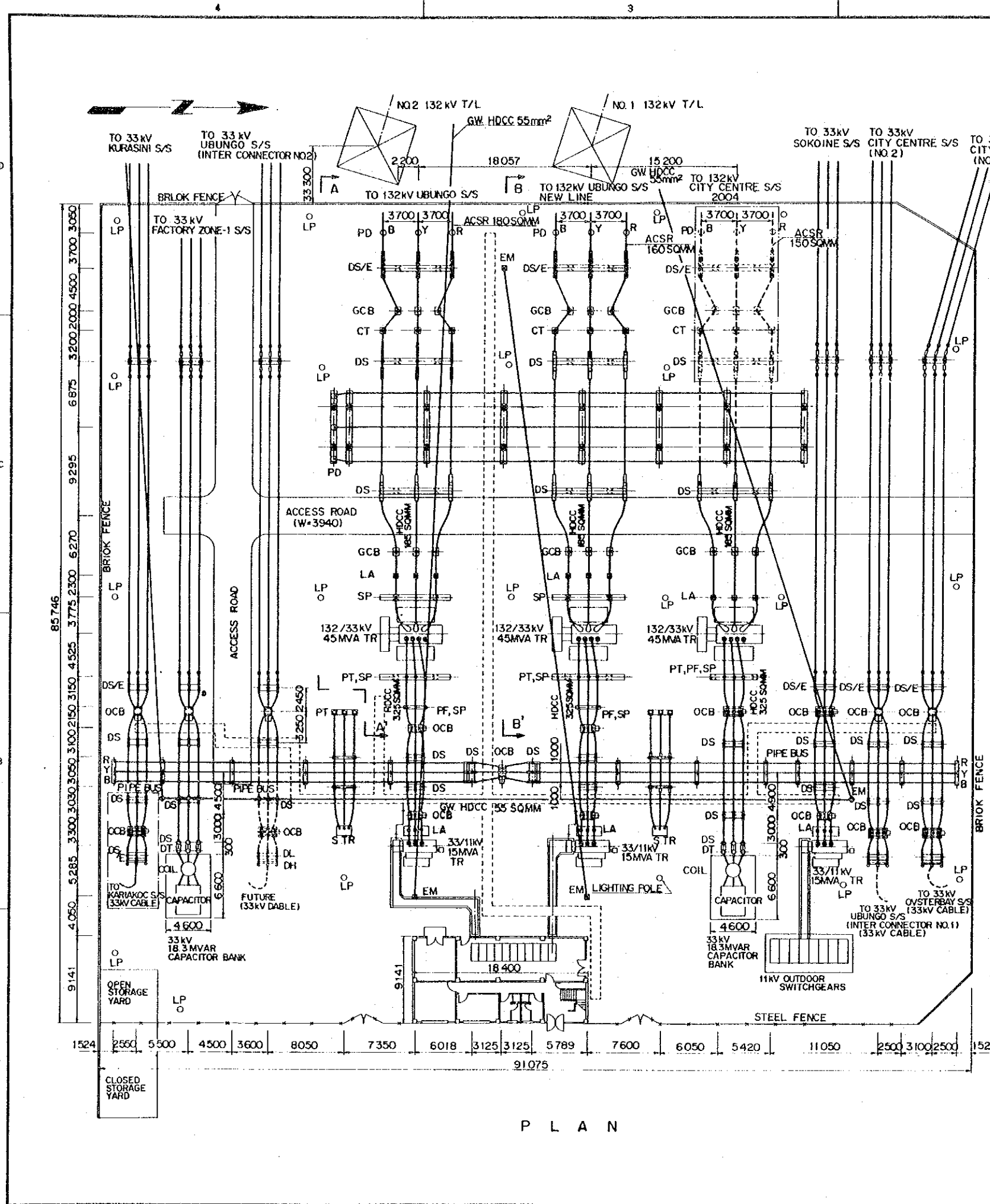
THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

**SINGLE LINE DIAGRAM OF
 ILALA SUBSTATION**

TANESCO | ELECTRIC POWER DEVELOPMENT CO. LTD.
 TOKYO, JAPAN

DR.: SUBMITTED;
 TR.: RECOMMENDED;
 CK.: APPROVED;

LOCATION	DATE	DESCRIPTION	BY
REVISION			



- LEGEND :**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S. TR : STATION TRANSFORMER
 - EM : EARTH MAST
 - PD : POTENTIAL DEVICE
 - DS : DISCONNECTING SWITCH
 - CT : CURRENT TRANSFORMER
 - PT : POTENTIAL TRANSFORMER

- NOTE :**
1. [Dashed Box] : EXPANSION AREA
 2. [Dotted Box] : FUTURE EXPANSION AREA

LOCATION	DATE	DESCRIPTION	BY
REVISION			

Fig.5.4-18-2

THE UNITED REPUBLIC OF TANZANIA
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

LAYOUT OF ILALA SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED;
TR.:	RECOMMENDED;
CK.:	APPROVED;

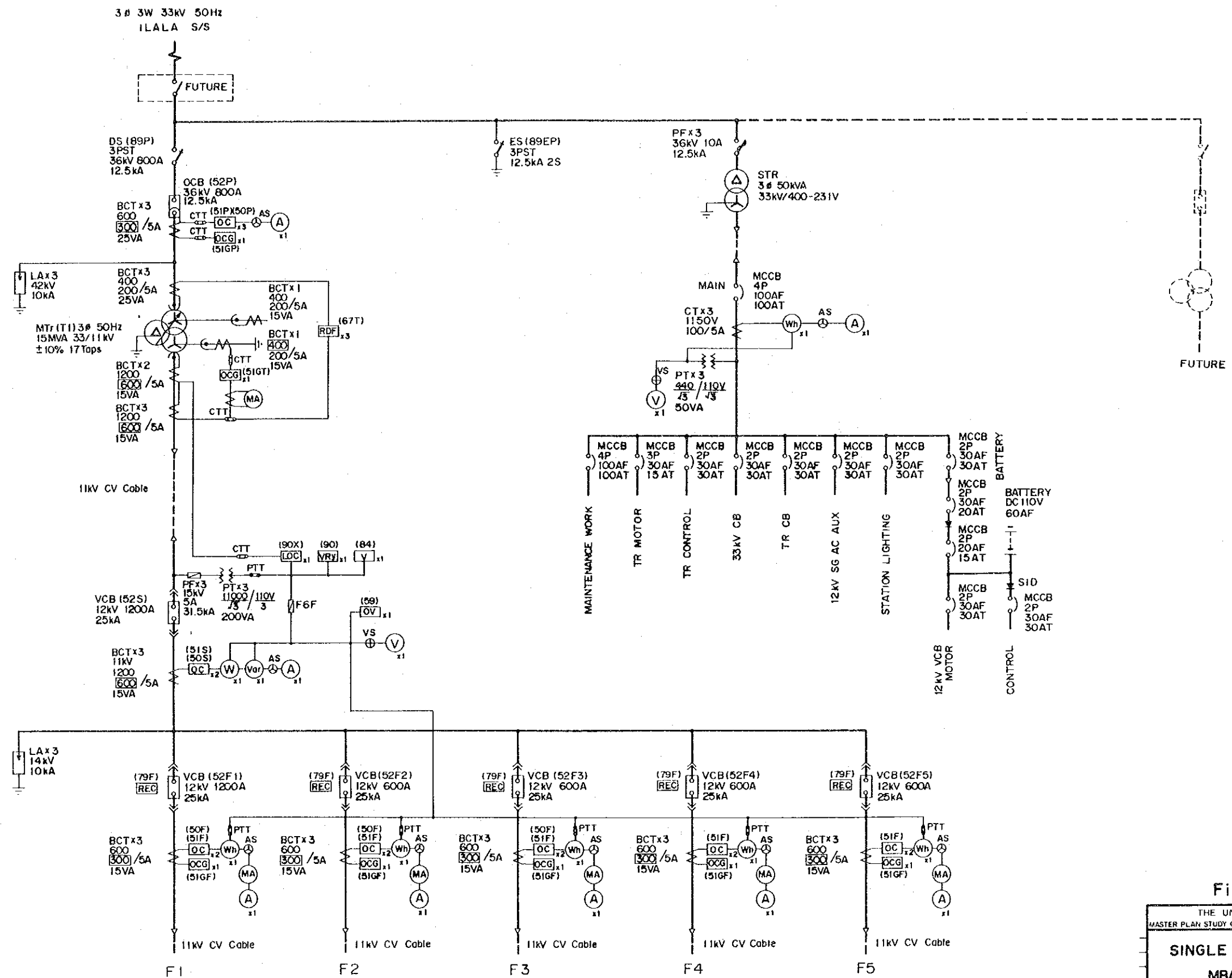
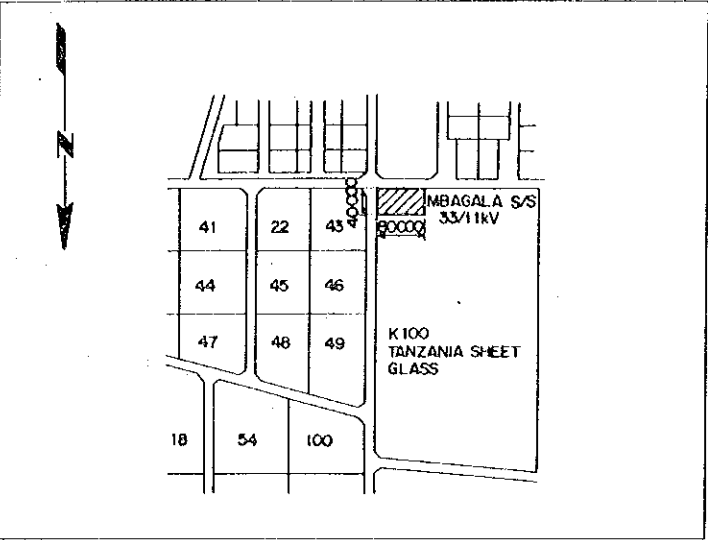
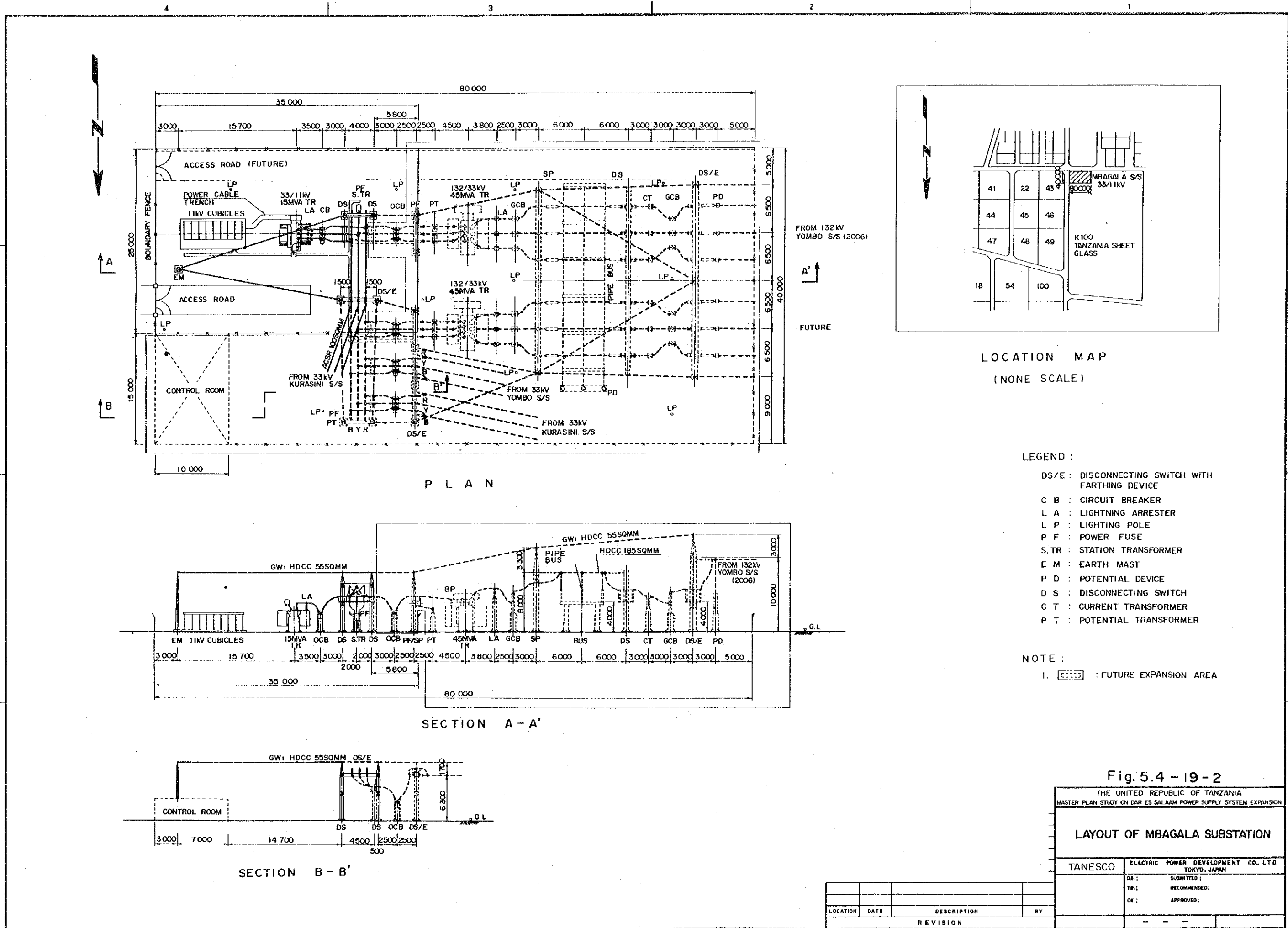


Fig. 5.4-19-1

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF MBAGALA SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:
LOCATION	DATE
REVISION	



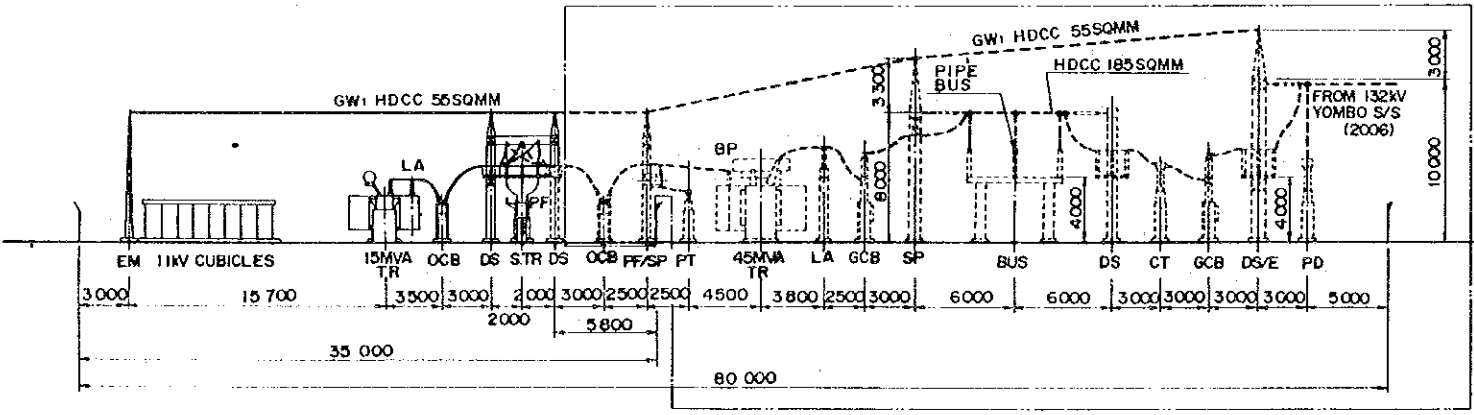
LOCATION MAP
(NONE SCALE)

LEGEND :

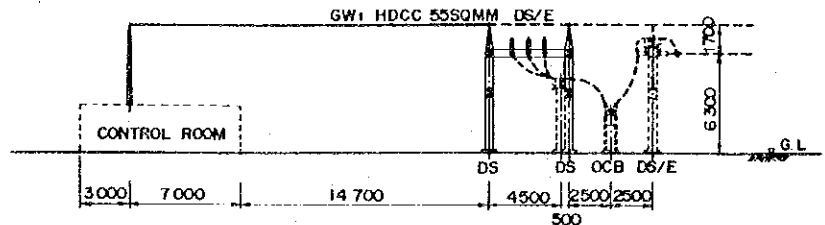
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S.TR : STATION TRANSFORMER
- EM : EARTH MAST
- PD : POTENTIAL DEVICE
- DS : DISCONNECTING SWITCH
- CT : CURRENT TRANSFORMER
- PT : POTENTIAL TRANSFORMER

NOTE :

- 1. [Dashed Box] : FUTURE EXPANSION AREA



SECTION A-A'



SECTION B-B'

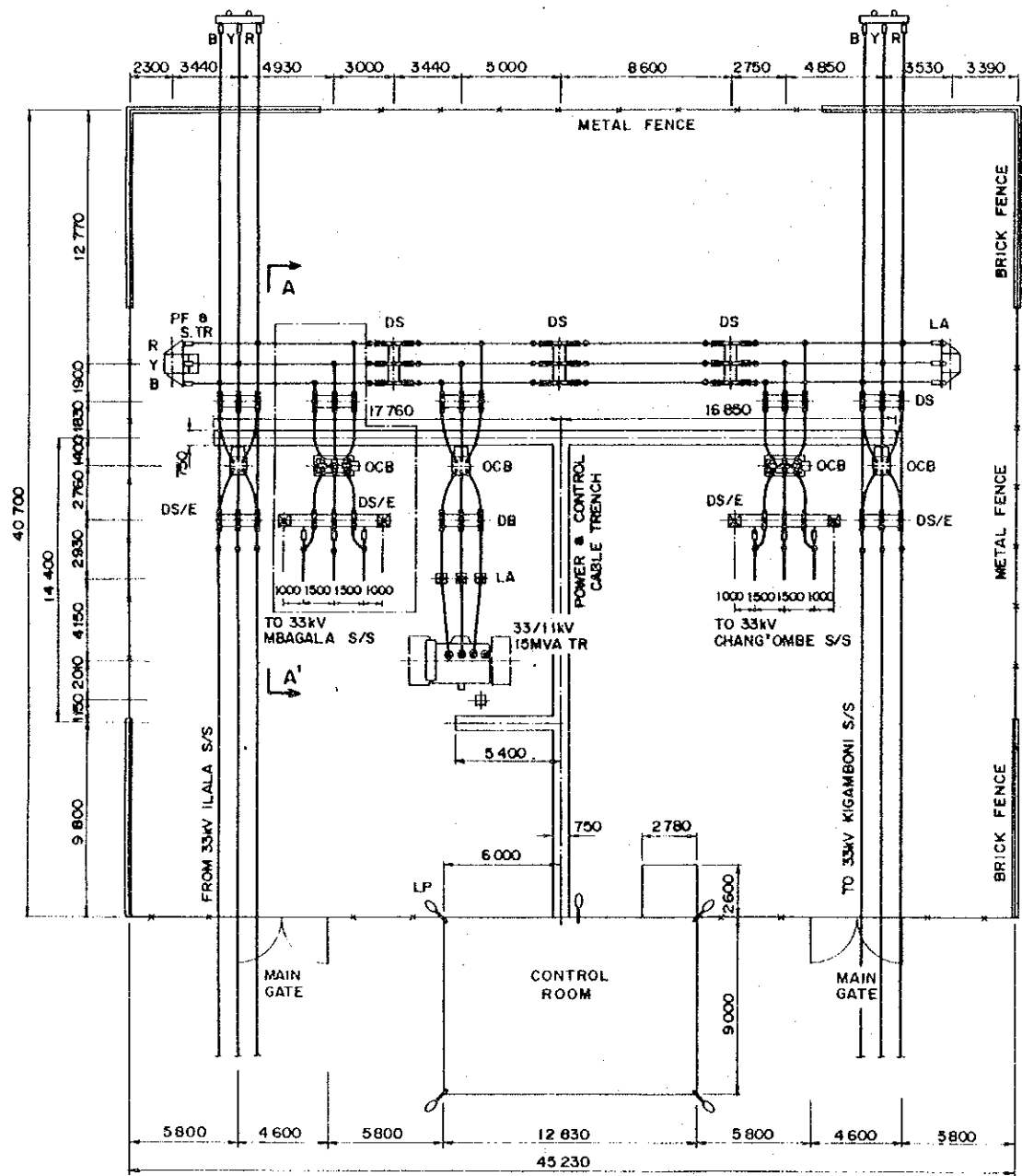
Fig. 5.4-19-2

THE UNITED REPUBLIC OF TANZANIA
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

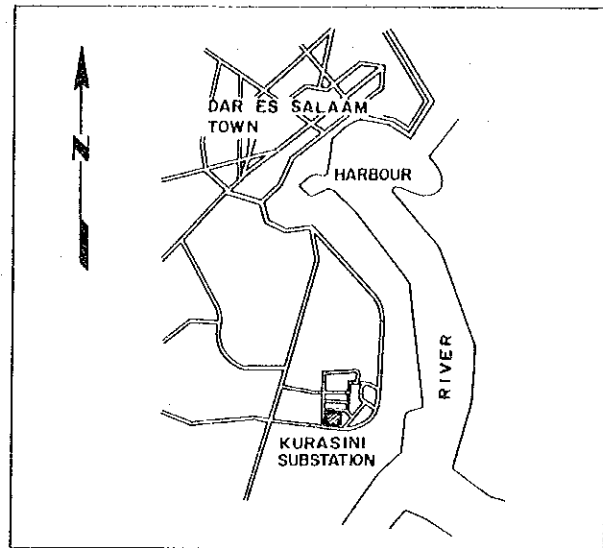
LAYOUT OF MBAGALA SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED :
TR.:	RECOMMENDED :
CK.:	APPROVED :

LOCATION	DATE	DESCRIPTION	BY
REVISION			



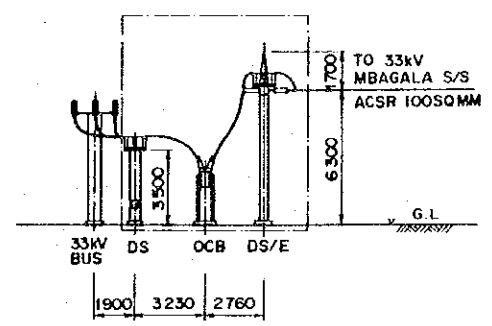
P L A N



LOCATION MAP
(NONE SCALE)

- LEGEND :
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - DS : DISCONNECTING SWITCH
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 15MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER

NOTE :
I. [] : EXPANSION FEEDER



SECTION A - A'

Fig 5.4-20-2

THE UNITED REPUBLIC OF TANZANIA
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

LAYOUT OF KURASINI SUBSTATION

ELECTRIC POWER DEVELOPMENT CO. LTD.
TOKYO, JAPAN

DR.: SUBMITTED;
TR.: RECOMMENDED;
CE.: APPROVED;

LOCATION	DATE	DESCRIPTION	BY
REVISION			

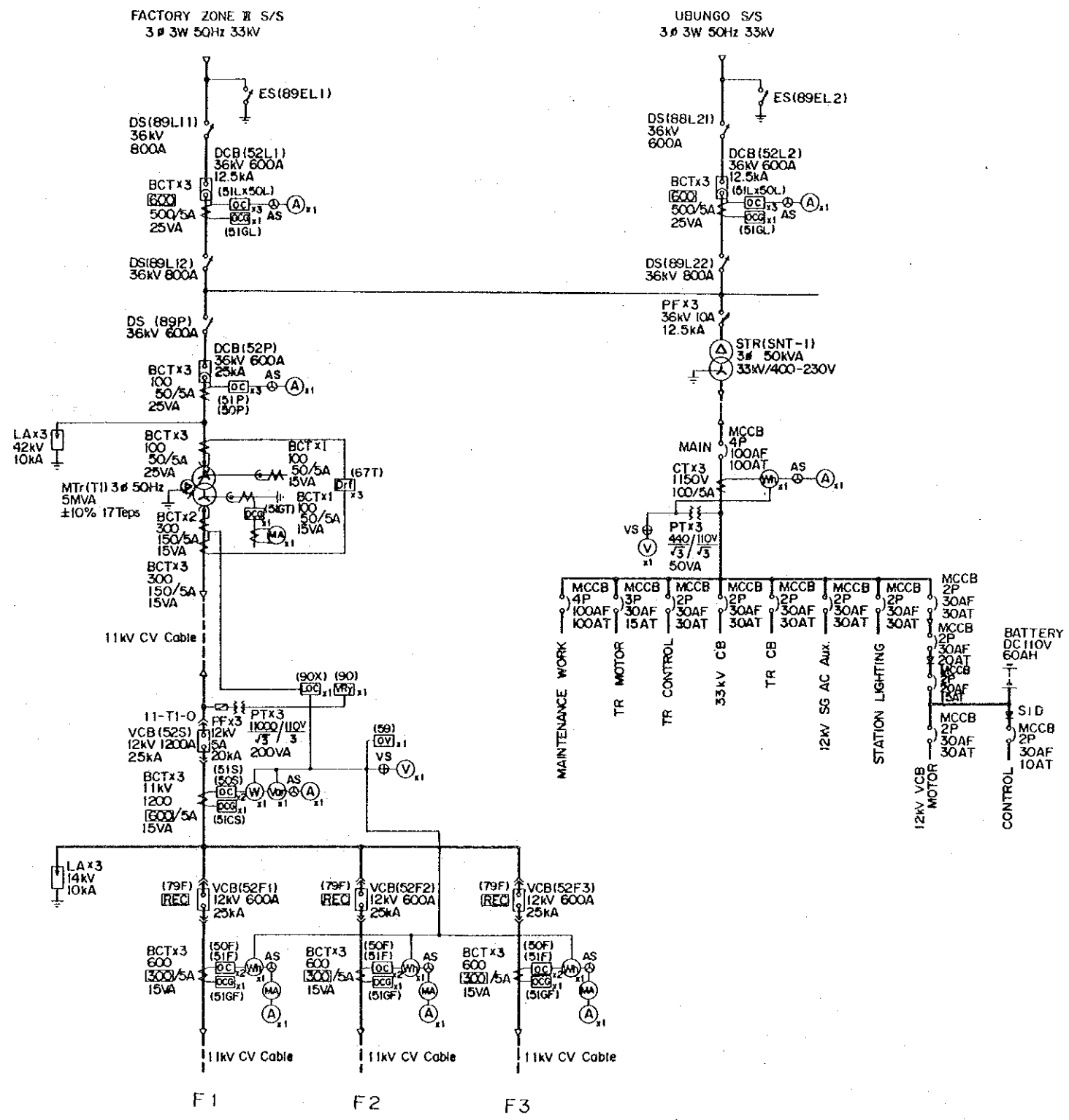


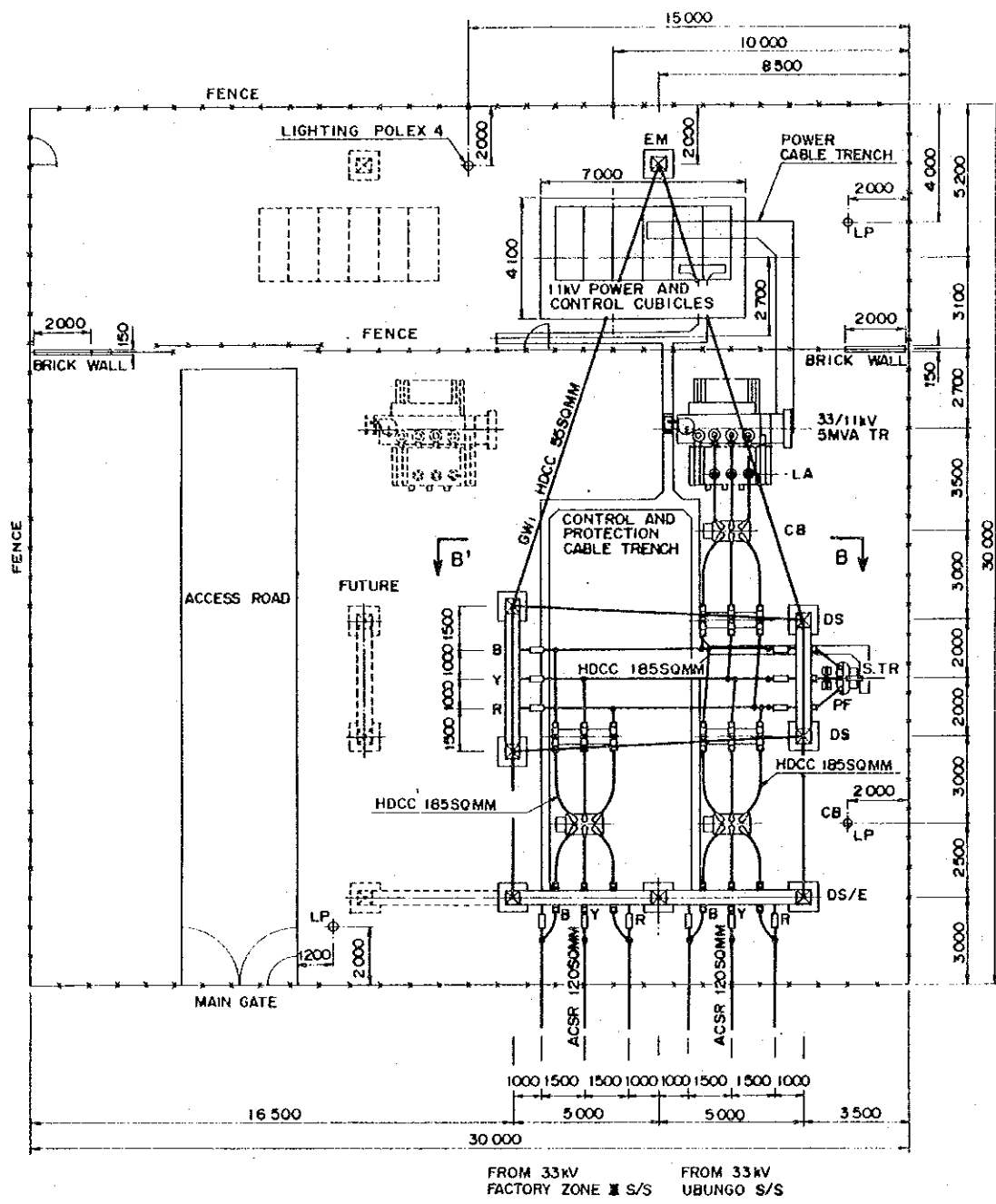
Fig. 5.4- 21-1

THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

**SINGLE LINE DIAGRAM OF
 TABATA SUBSTATION**

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

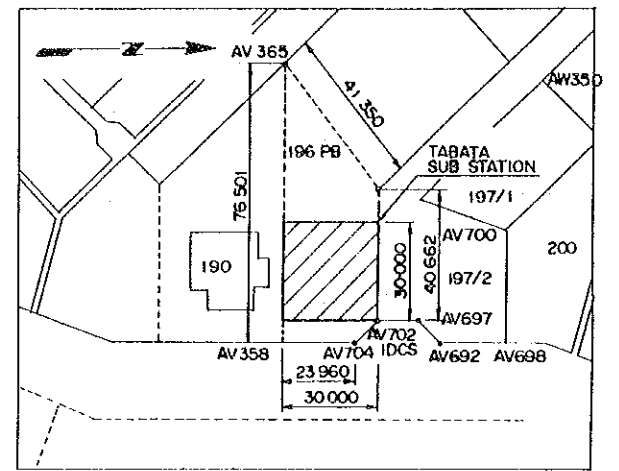
LOCATION	DATE	DESCRIPTION	BY
REVISION			



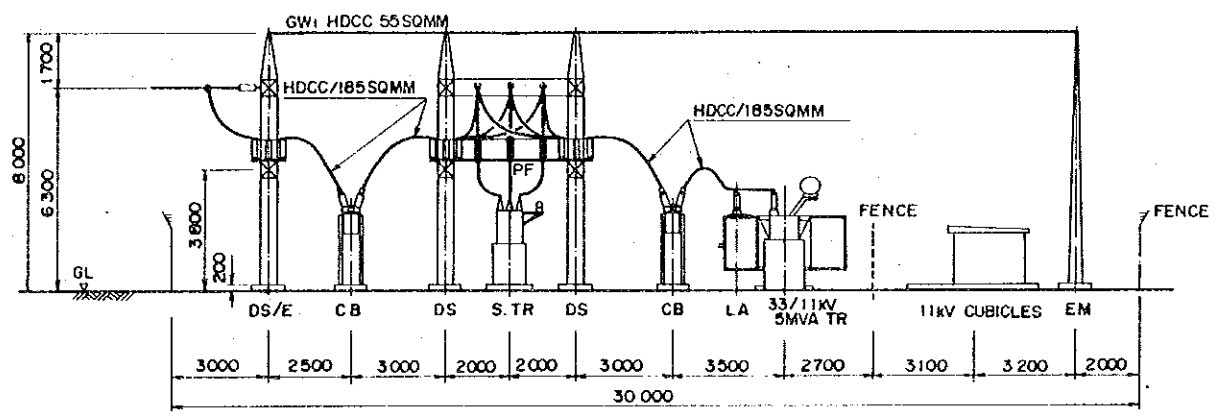
PLAN

- LEGEND :**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - DS : DISCONNECTING SWITCH
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - TR : 5MVA MAIN TRANSFORMER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S.TR : STATION TRANSFORMER
 - EM : EARTH MAST

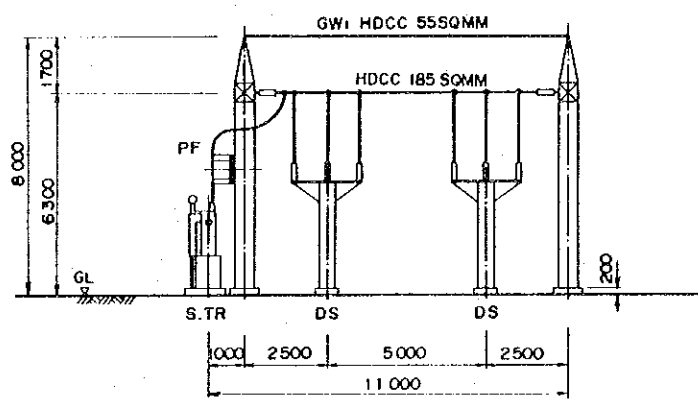
NOTE :
 1. ----- FUTURE EXPANSION



LOCATION MAP
(NONE SCALE)



SECTION A-A'



SECTION B-B'

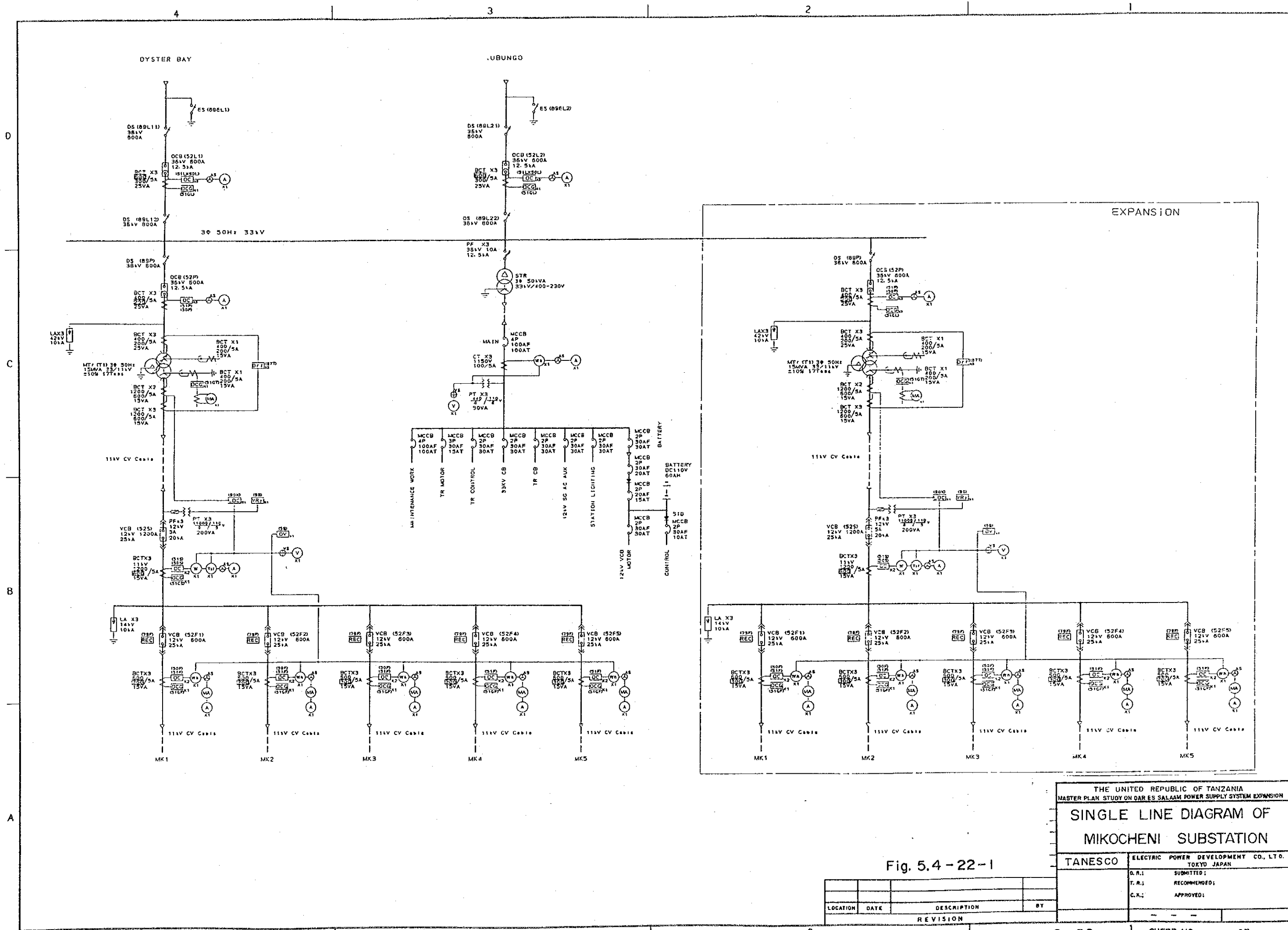
Fig. 5.4-21-2

THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

LAYOUT OF TABATA SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO, JAPAN
DR.:	SUBMITTED:
TR.:	RECOMMENDED:
CK.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			



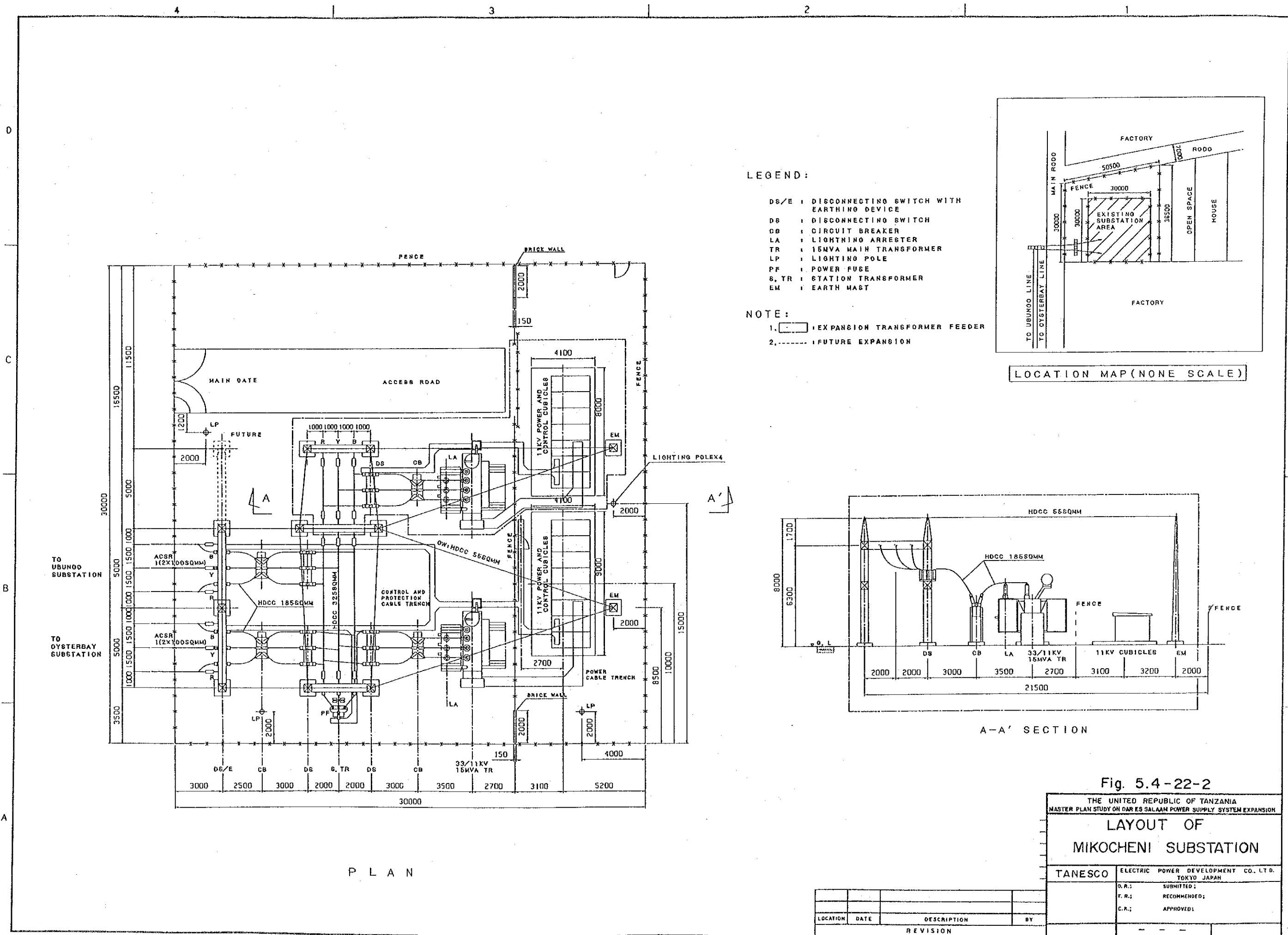
THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

SINGLE LINE DIAGRAM OF MIKOCHENI SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
F.R.:	RECOMMENDED:
C.K.:	APPROVED:

Fig. 5.4 - 22 - 1

LOCATION	DATE	DESCRIPTION	BY
REVISION			

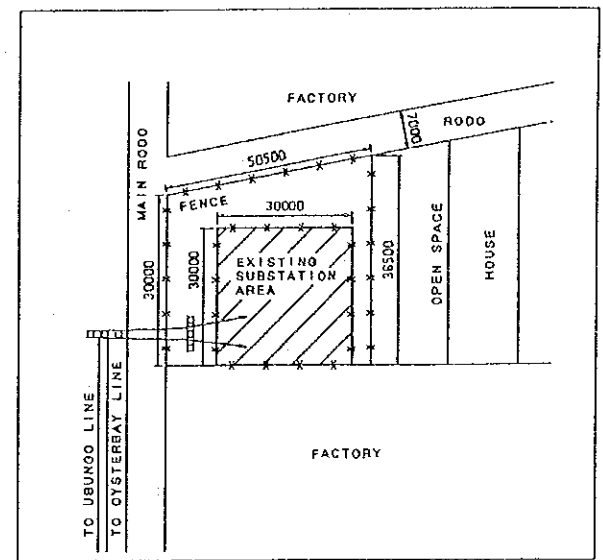


LEGEND:

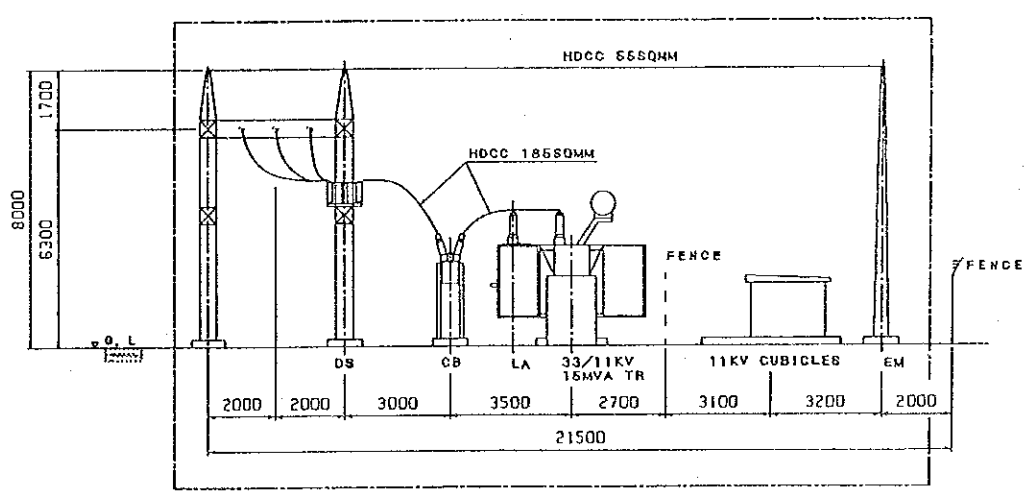
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- DS : DISCONNECTING SWITCH
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- TR : 15MVA MAIN TRANSFORMER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S, TR : STATION TRANSFORMER
- EM : EARTH MAST

NOTE:

1. [Symbol] : EXPANSION TRANSFORMER FEEDER
2. [Symbol] : FUTURE EXPANSION



LOCATION MAP (NONE SCALE)



A-A' SECTION

Fig. 5.4-22-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF MIKOCHENI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.A.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

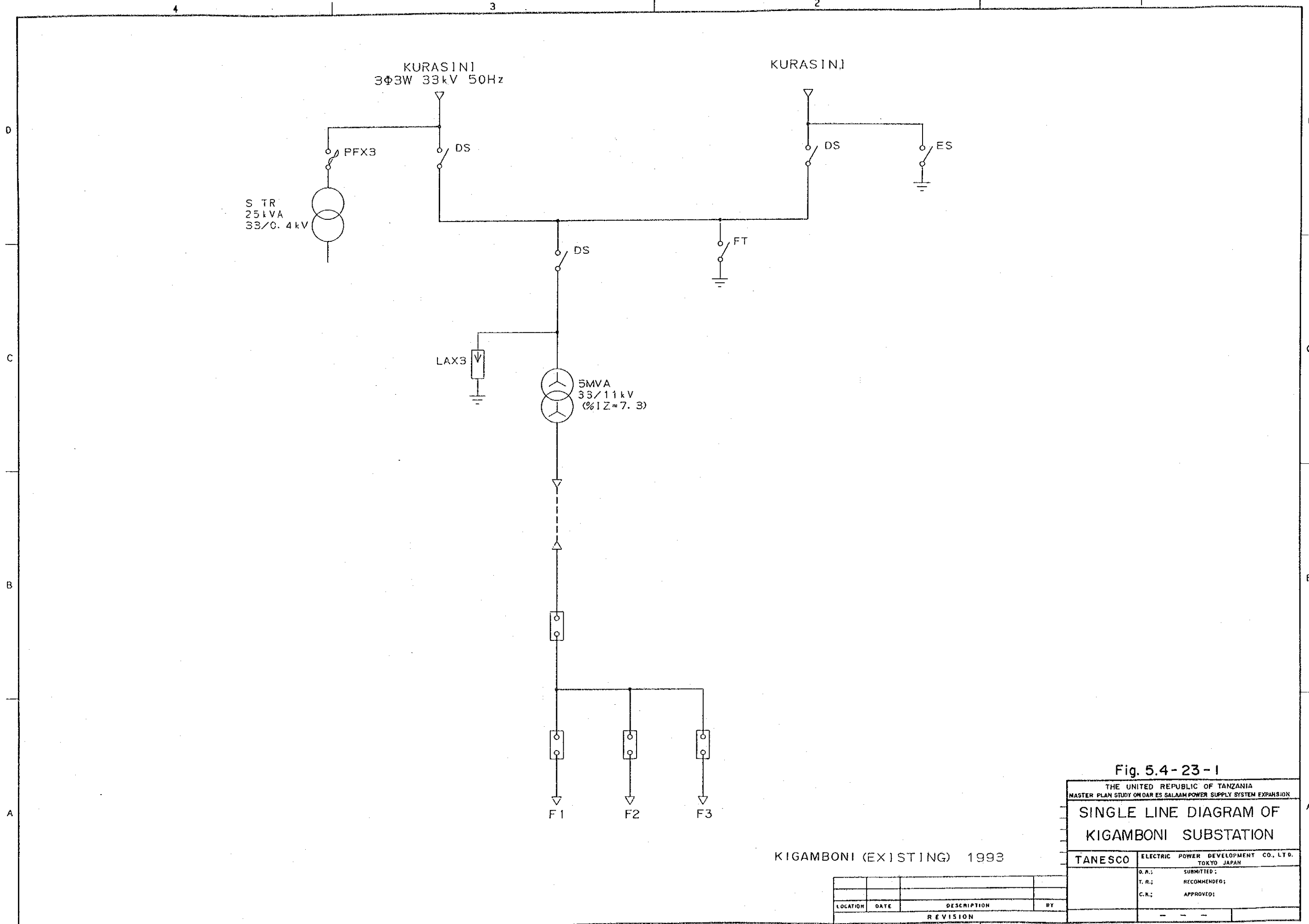


Fig. 5.4-23-1

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF KIGAMBONI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
O.A.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.R.:	APPROVED:
	- - -

KIGAMBONI (EXISTING) 1993

LOCATION	DATE	DESCRIPTION	BY
		REVISION	

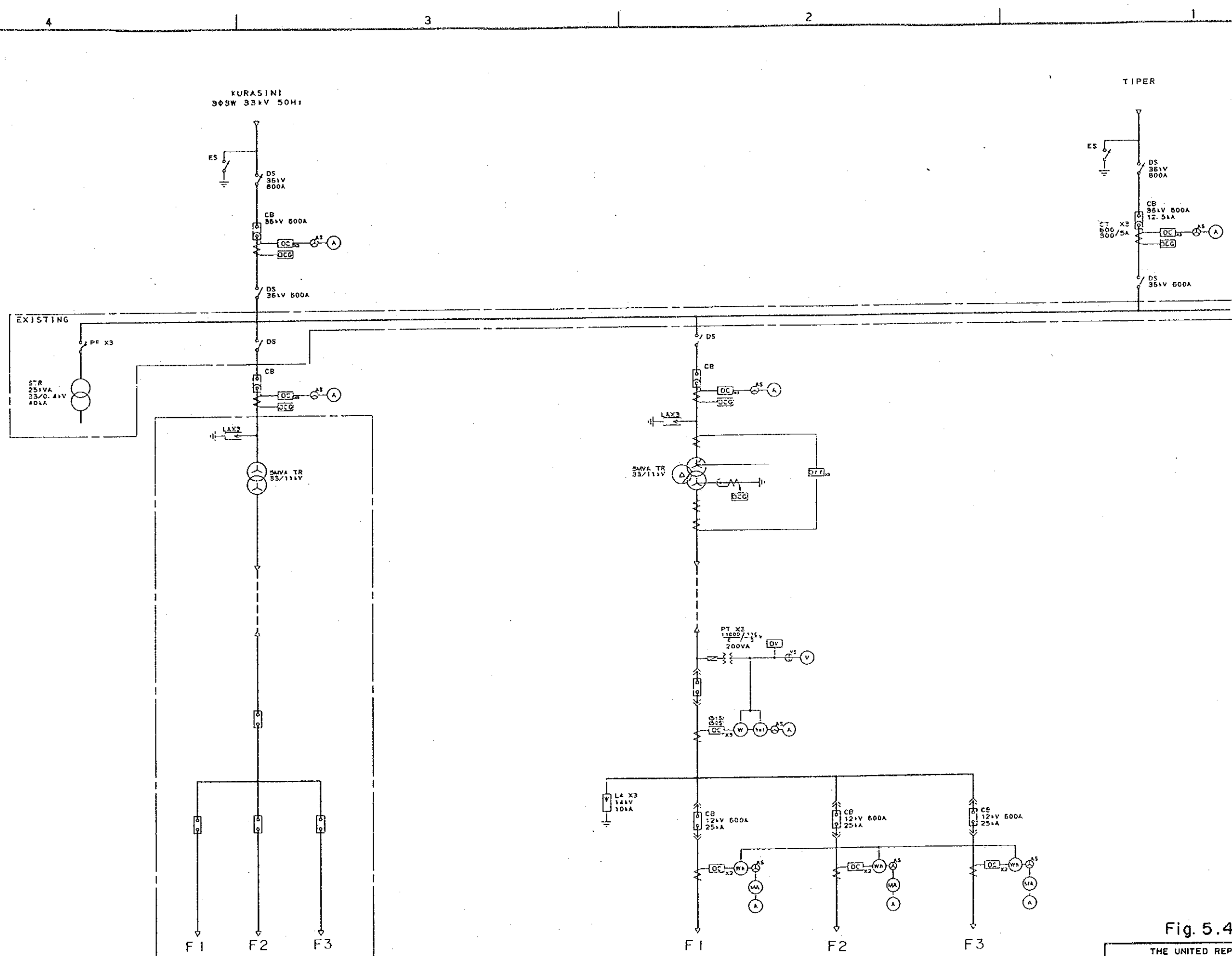
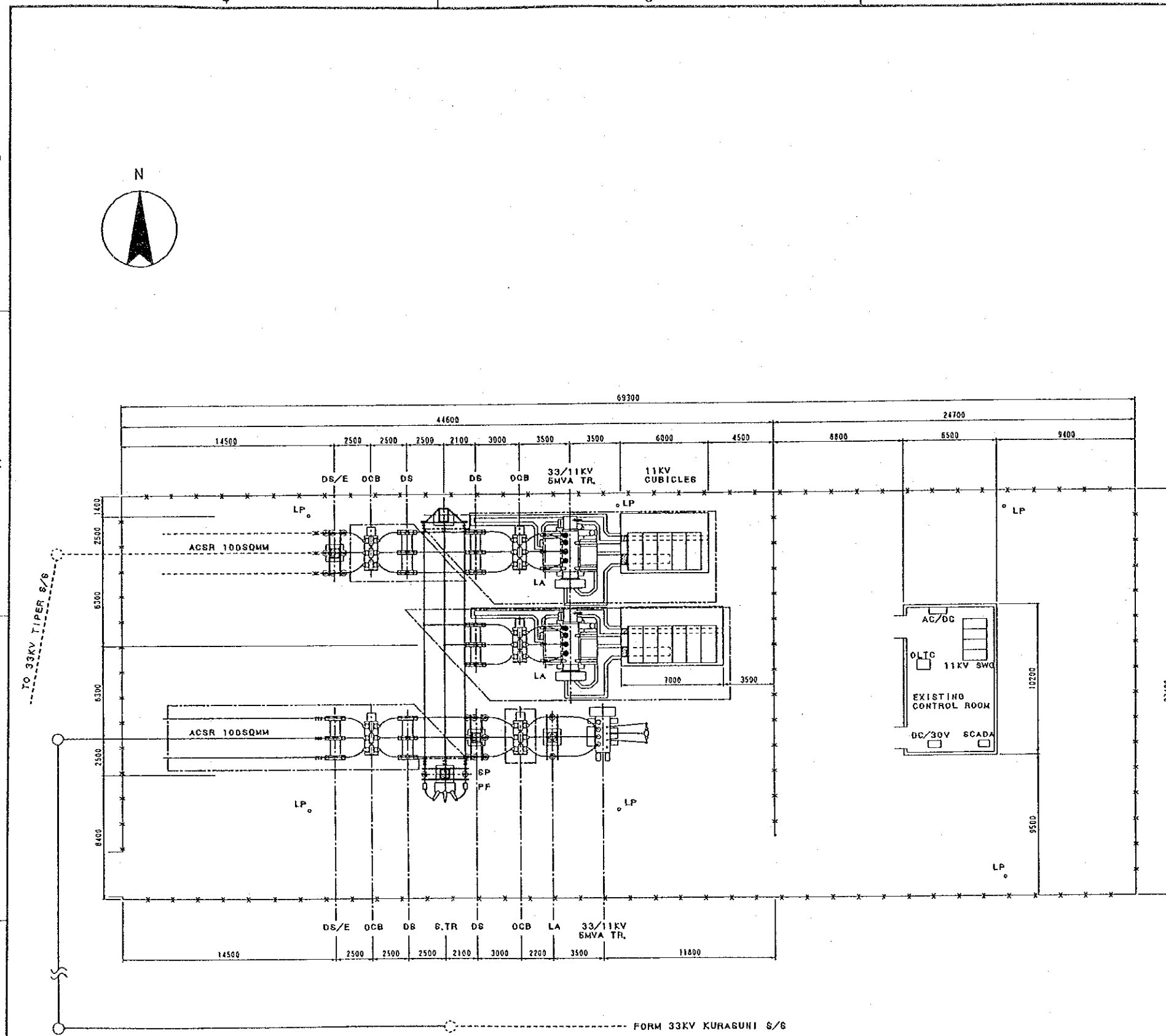


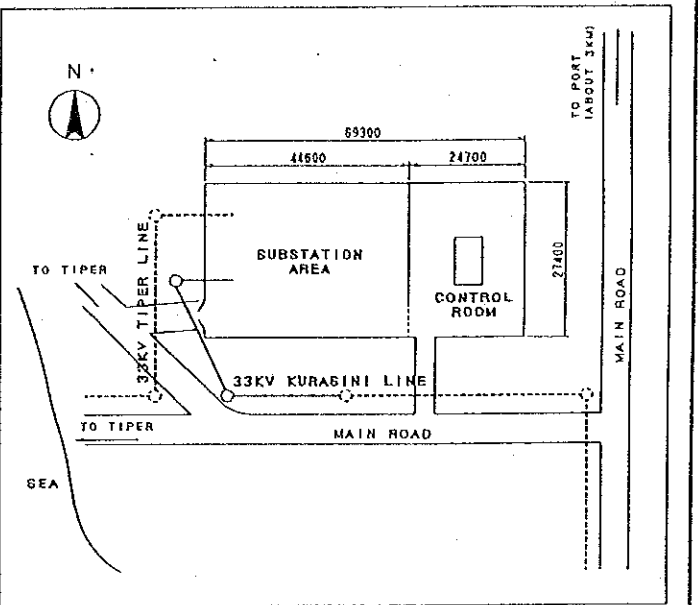
Fig. 5.4-23-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF KIGAMBONI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.K.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			



P L A N



LOCATION MAP (NONE SCALE)

LEGEND :

- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- TR : 5MVA MAIN TRANSFORMER
- S, TR : STATION TRANSFORMER
- CB : CIRCUIT BREAKER
- DS : DISCONNECTING SWITCH
- SP : STATION POST INSULATOR
- LA : LIGHTNING ARRESTER
- PF : POWER FUSE
- LP : LIGHTING POLE

NOTE :

1. [Symbol] : EXPANSION & REHABILITATION AREA
2. [Symbol] : FUTURE EXPANSION (2002 STAGE)

Fig. 5.4 - 23-3

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF KIGAMBONI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.R.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

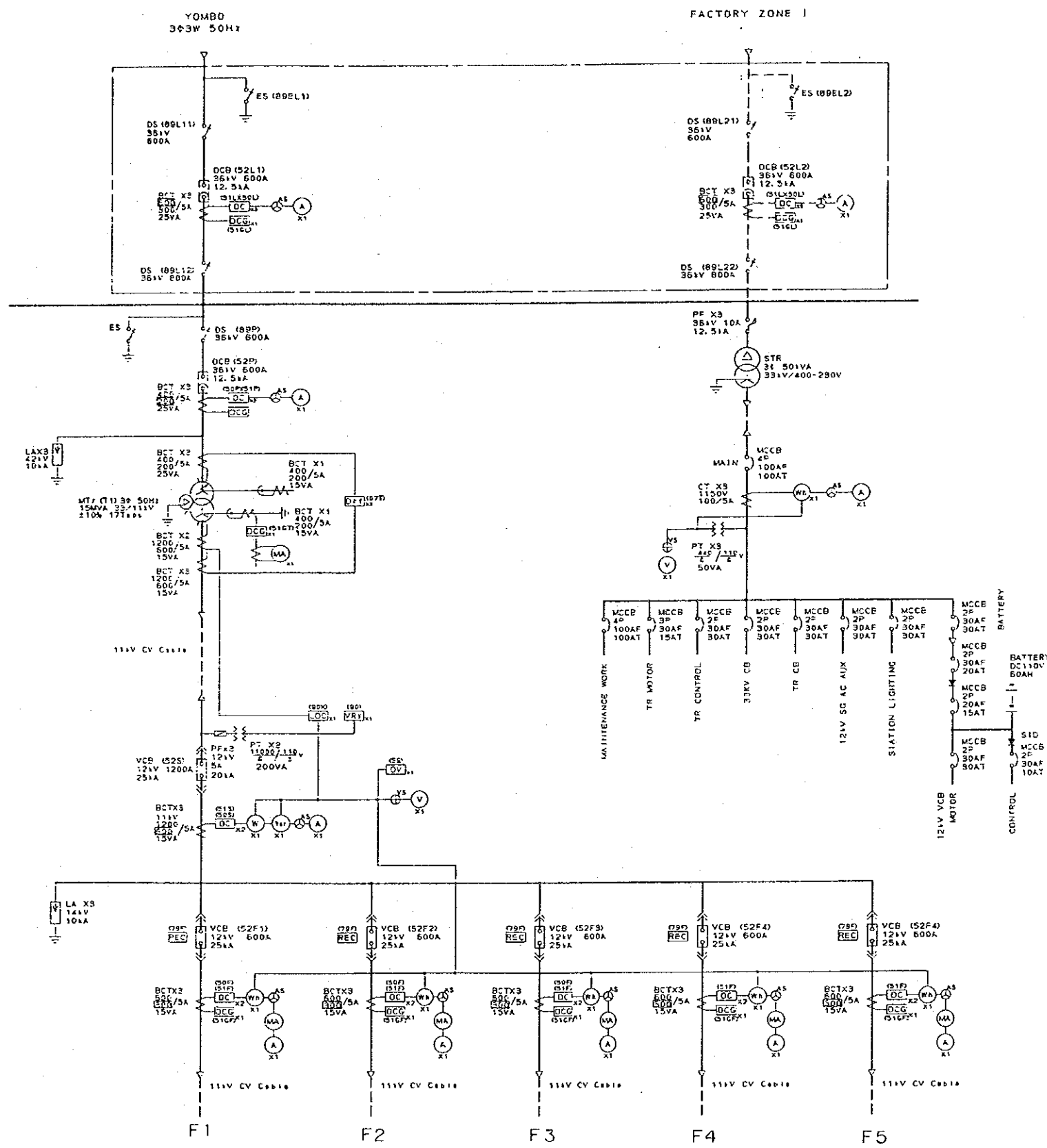


Fig. 5.4-24-1

THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

SINGLE LINE DIAGRAM OF TEMEKE SUBSTATION

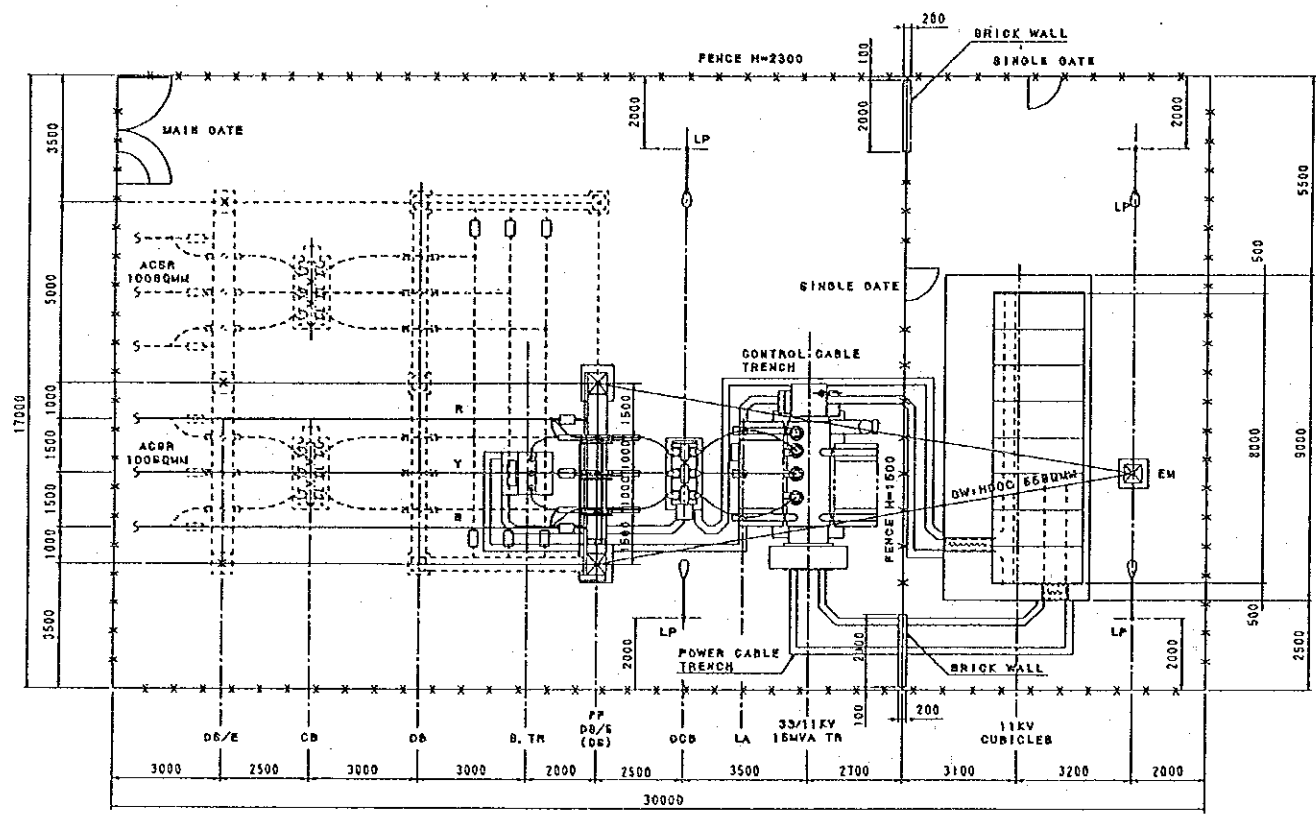
TANESCO | ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN

D.R.: SUBMITTED;
 E.R.: RECOMMENDED;
 C.R.: APPROVED;

LOCATION	DATE	DESCRIPTION	BY
REVISION			

FUTURE
(FROM 33KV FZ 1)
(BRANCH LINE)

FROM 33KV
YOMBO S/S



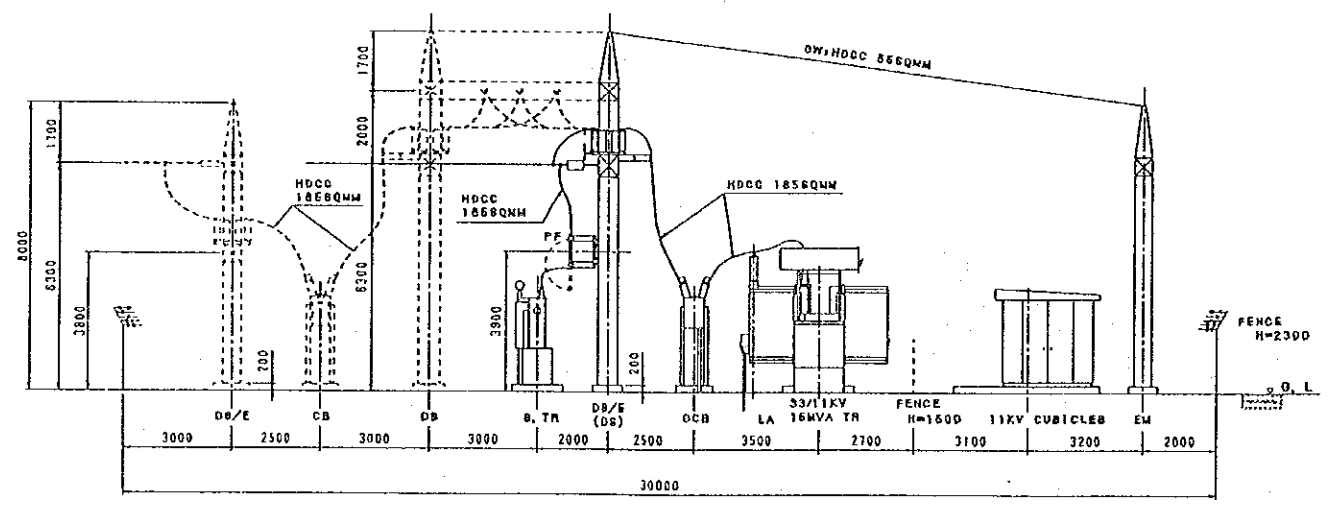
P L A N

LEGEND :

- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- TR : 15MVA MAIN TRANSFORMER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S. TR : STATION TRANSFORMER
- EM : EARTH MAST

NOTE :

- 1. ----- FUTURE EXPANSION



SECTION A-A'

Fig. 5.4-24-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF TEMEKE SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D. R. :	SUBMITTED :
F. R. :	RECOMMENDED :
C. K. :	APPROVED :

LOCATION	DATE	DESCRIPTION	BY
REVISION			

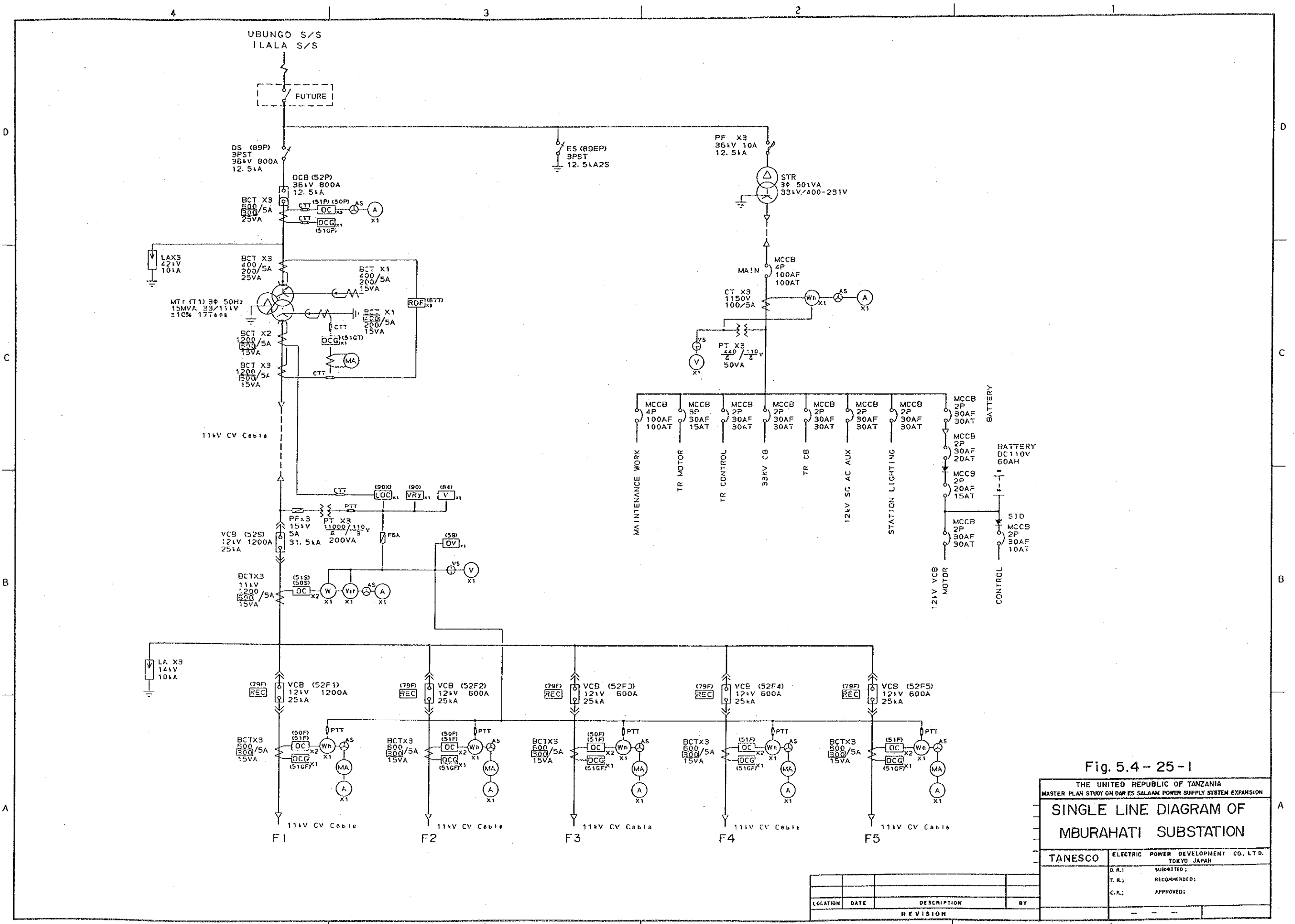


Fig. 5.4 - 25 - 1

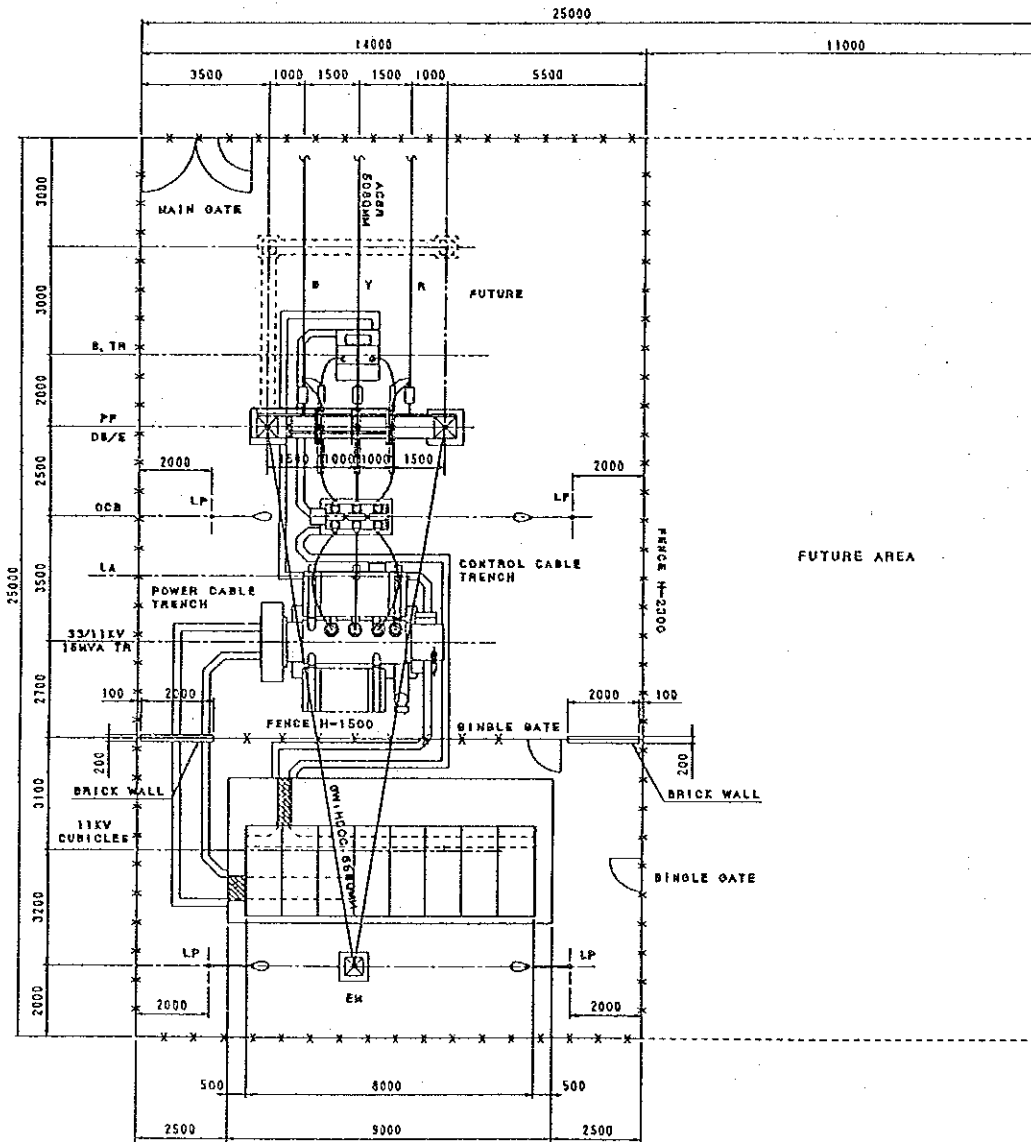
THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION			
SINGLE LINE DIAGRAM OF MBURAHATI SUBSTATION			
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN		
D.R.:	SUBMITTED:		
F.R.:	RECOMMENDED:		
C.R.:	APPROVED:		
LOCATION	DATE	DESCRIPTION	BY
REVISION			

LEGEND:

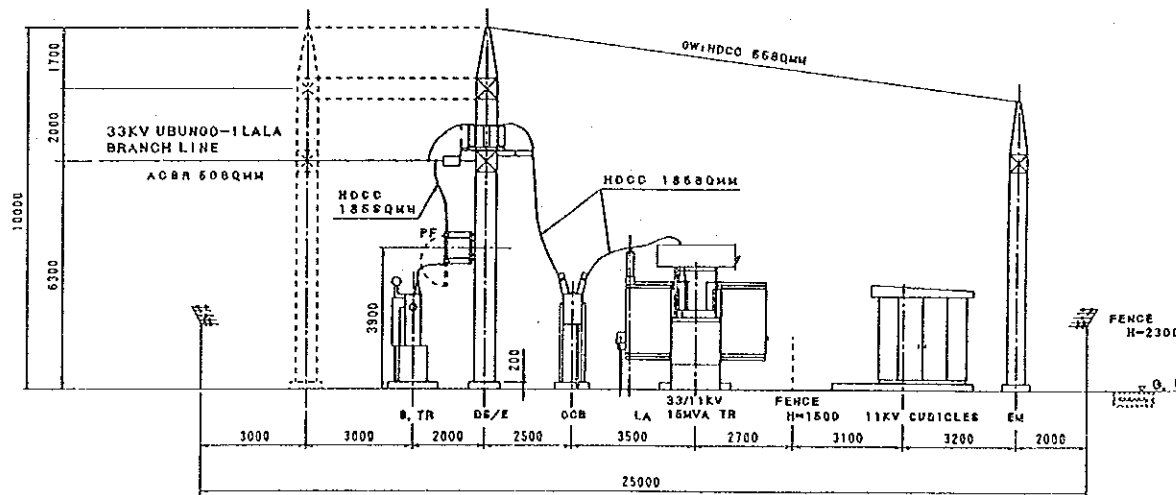
- DB/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- TR : 15MVA MAIN TRANSFORMER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S. TR : STATION TRANSFORMER
- EM : EARTH MAST

NOTE:

- 1. ----- FUTURE EXPANSION



PLAN



SECTION A-A'

Fig. 5.4 - 25-2

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON GARES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF MBURAHATI SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D. A.:	SUBMITTED:
T. R.:	RECOMMENDED:
C. X.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

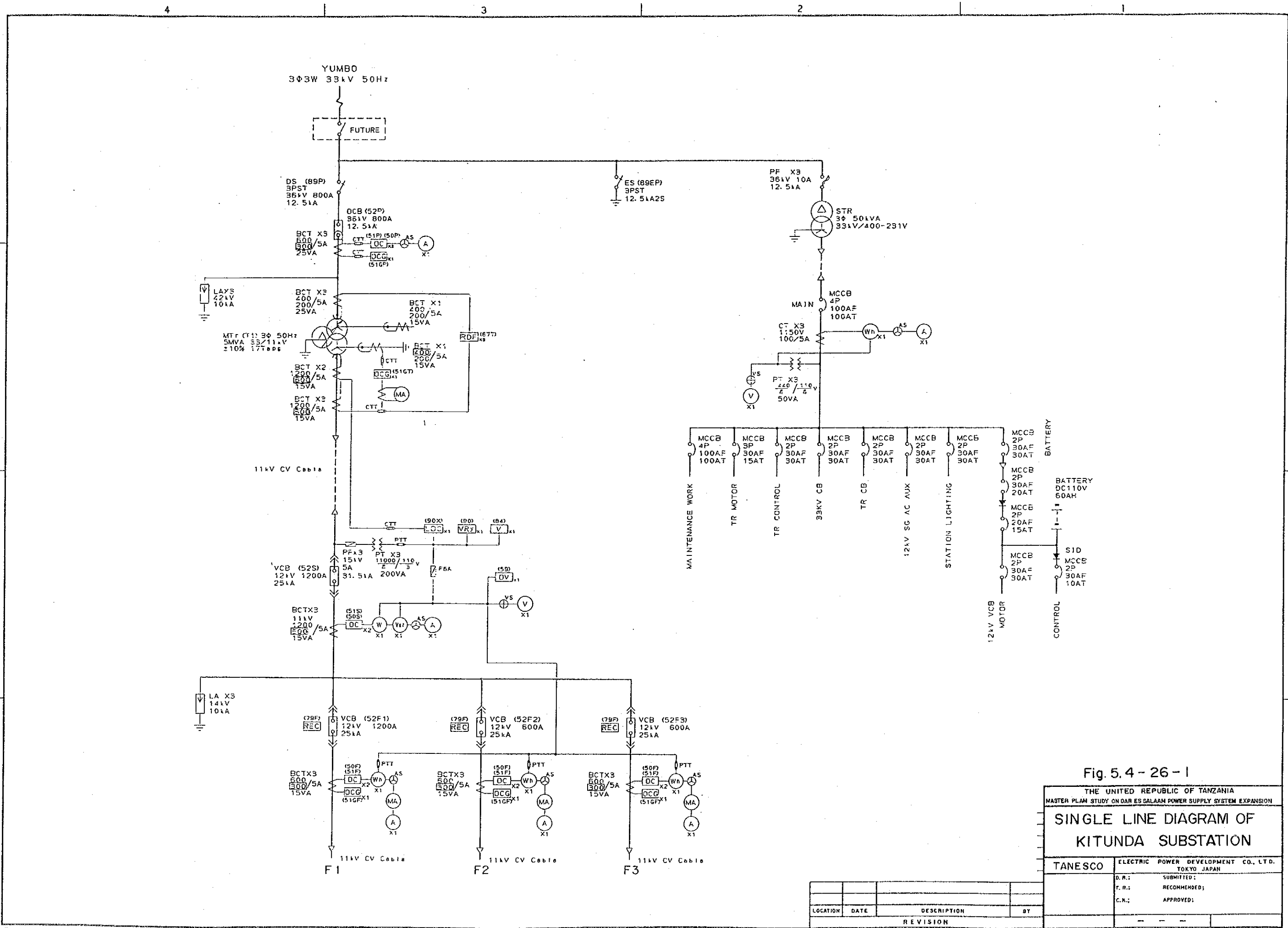


Fig. 5.4-26-1

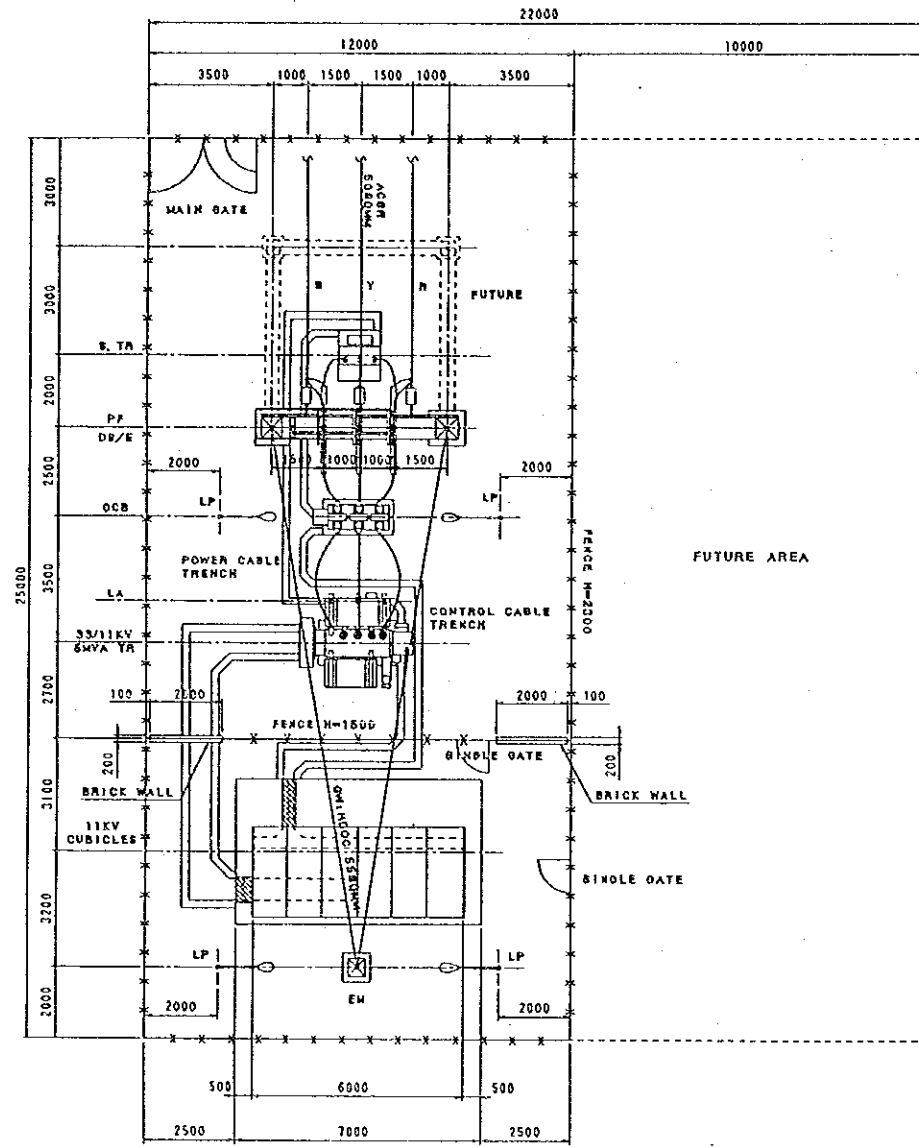
THE UNITED REPUBLIC OF TANZANIA			
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION			
SINGLE LINE DIAGRAM OF KITUNDA SUBSTATION			
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO, JAPAN		
D.R.:	SUBMITTED:		
F.R.:	RECOMMENDED:		
C.N.:	APPROVED:		
LOCATION	DATE	DESCRIPTION	BY
REVISION			

LEGEND:

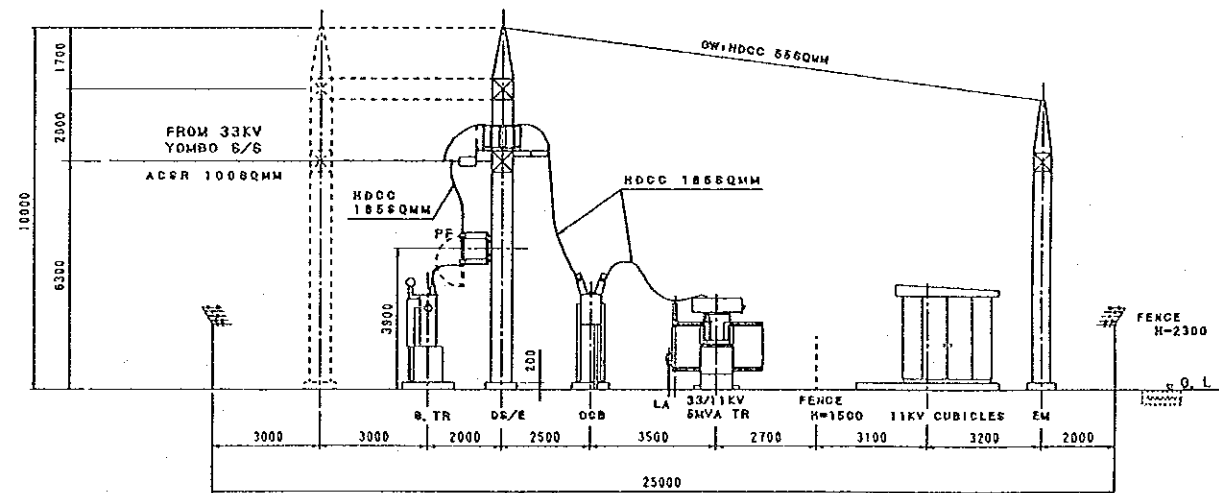
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
- CB : CIRCUIT BREAKER
- LA : LIGHTNING ARRESTER
- TR : 5MVA MAIN TRANSFORMER
- LP : LIGHTING POLE
- PF : POWER FUSE
- S, TR : STATION TRANSFORMER
- EM : EARTH MAST

NOTE:

- 1. ----- FUTURE EXPANSION



P L A N



SECTION A-A'

Fig. 5.4- 26-2

THE UNITED REPUBLIC OF TANZANIA MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
LAYOUT OF KITUNDA SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.X.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

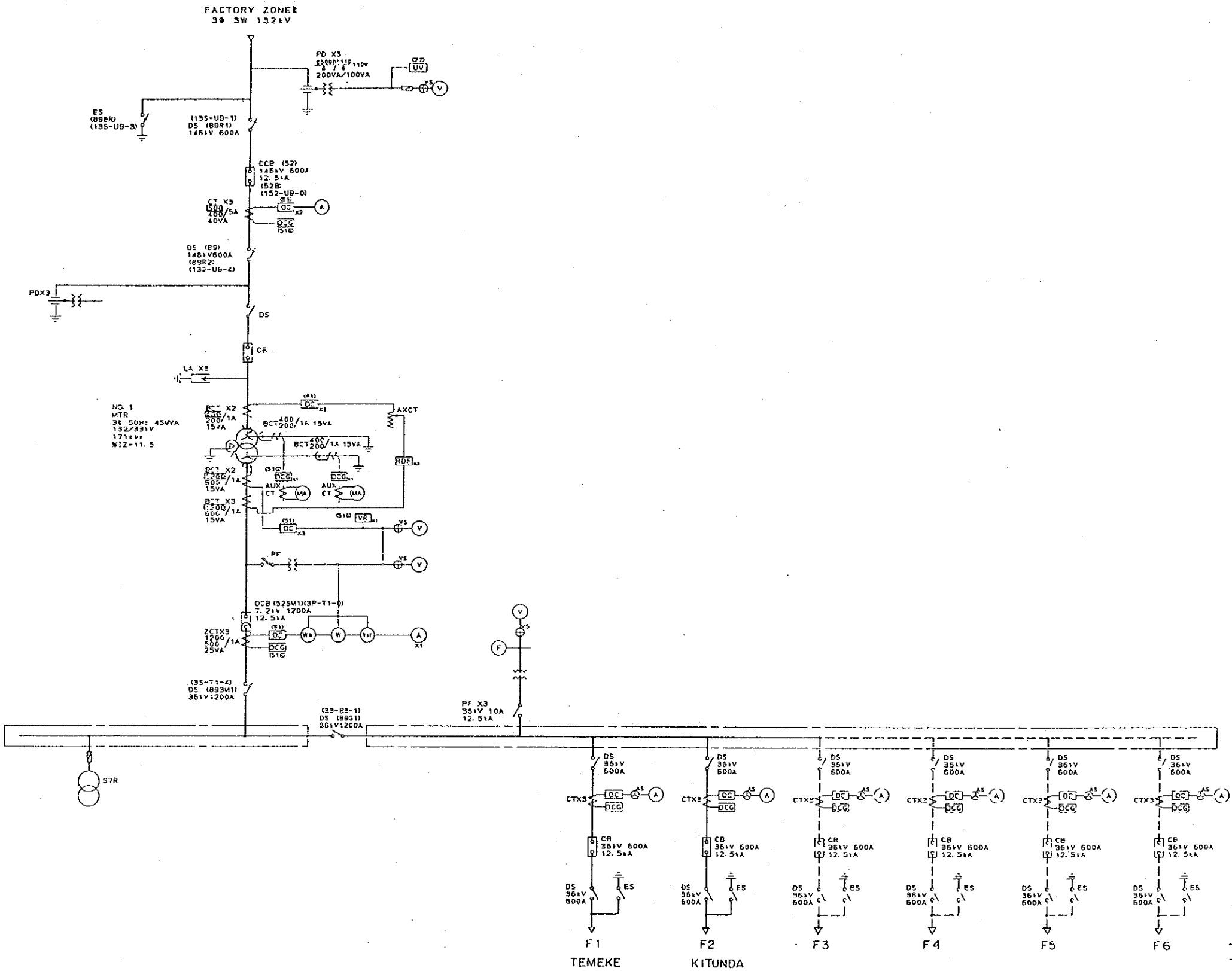
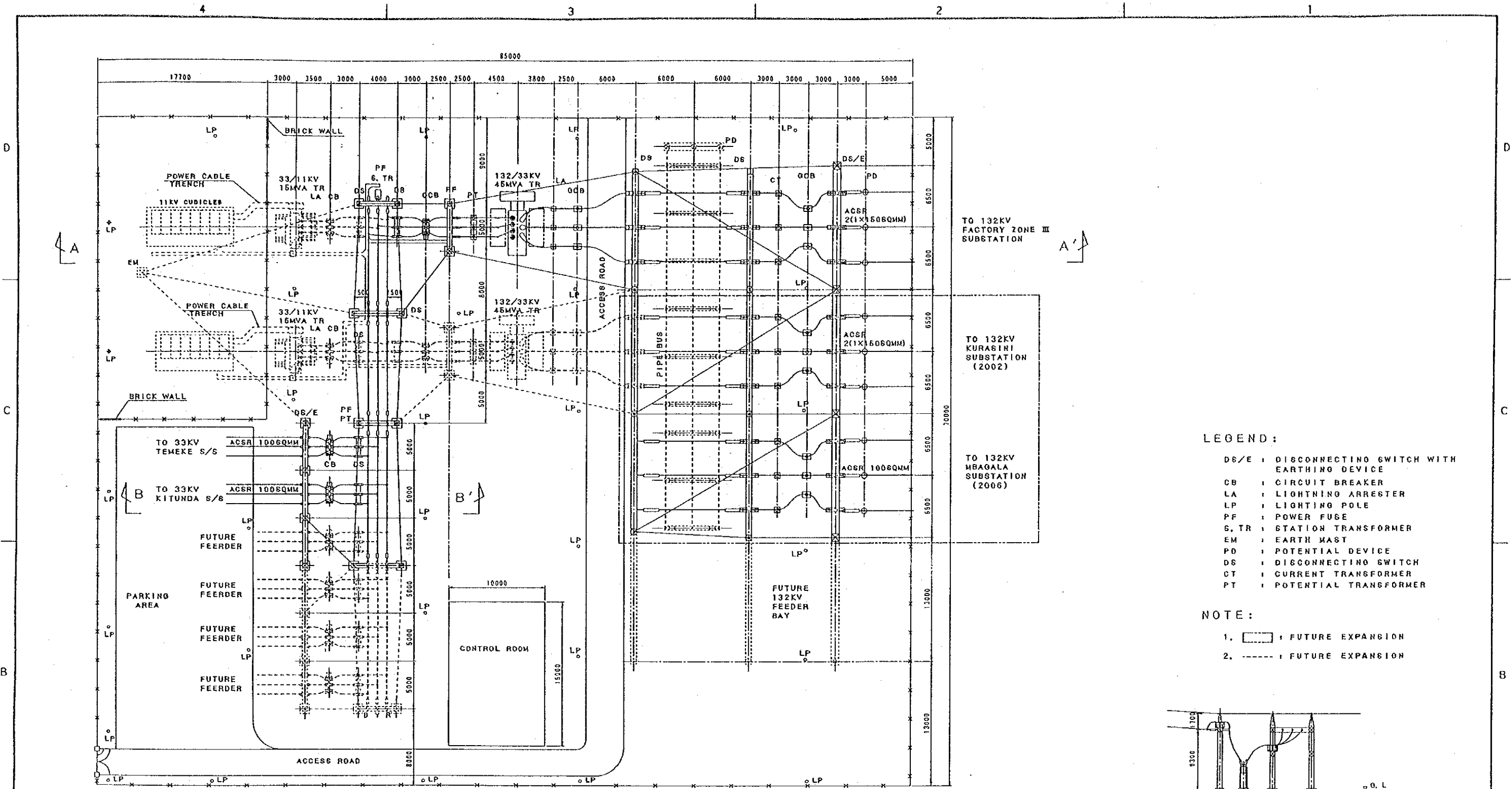


Fig. 5.4-27-1

THE UNITED REPUBLIC OF TANZANIA	
MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION	
SINGLE LINE DIAGRAM OF YOMBO SUBSTATION	
TANESCO	ELECTRIC POWER DEVELOPMENT CO., LTD. TOKYO JAPAN
D. R.:	SUBMITTED;
T. R.:	RECOMMENDED;
C. K.:	APPROVED;

LOCATION	DATE	DESCRIPTION	BY
REVISION			



- LEGEND:**
- DS/E : DISCONNECTING SWITCH WITH EARTHING DEVICE
 - CB : CIRCUIT BREAKER
 - LA : LIGHTNING ARRESTER
 - LP : LIGHTING POLE
 - PF : POWER FUSE
 - S, TR : STATION TRANSFORMER
 - EM : EARTH MAST
 - PD : POTENTIAL DEVICE
 - DS : DISCONNECTING SWITCH
 - CT : CURRENT TRANSFORMER
 - PT : POTENTIAL TRANSFORMER

- NOTE:**
1. [Solid Line] : FUTURE EXPANSION
 2. [Dashed Line] : FUTURE EXPANSION

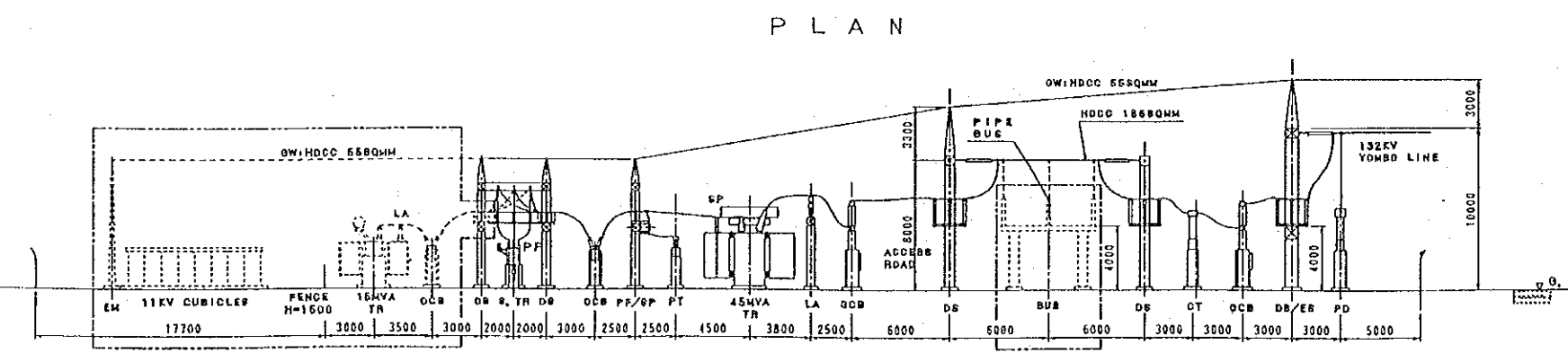
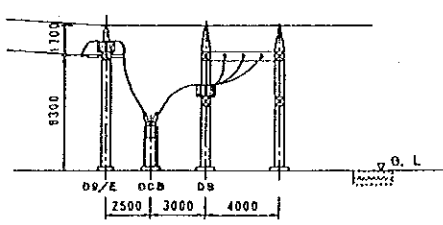


Fig. 5.4 -27-2

THE UNITED REPUBLIC OF TANZANIA
 MASTER PLAN STUDY ON DAR ES SALAAM POWER SUPPLY SYSTEM EXPANSION

LAYOUT OF YOMBO SUBSTATION

TANESCO	ELECTRIC POWER DEVELOPMENT CO. LTD. TOKYO JAPAN
D.R.:	SUBMITTED:
T.R.:	RECOMMENDED:
C.X.:	APPROVED:

LOCATION	DATE	DESCRIPTION	BY
REVISION			

