

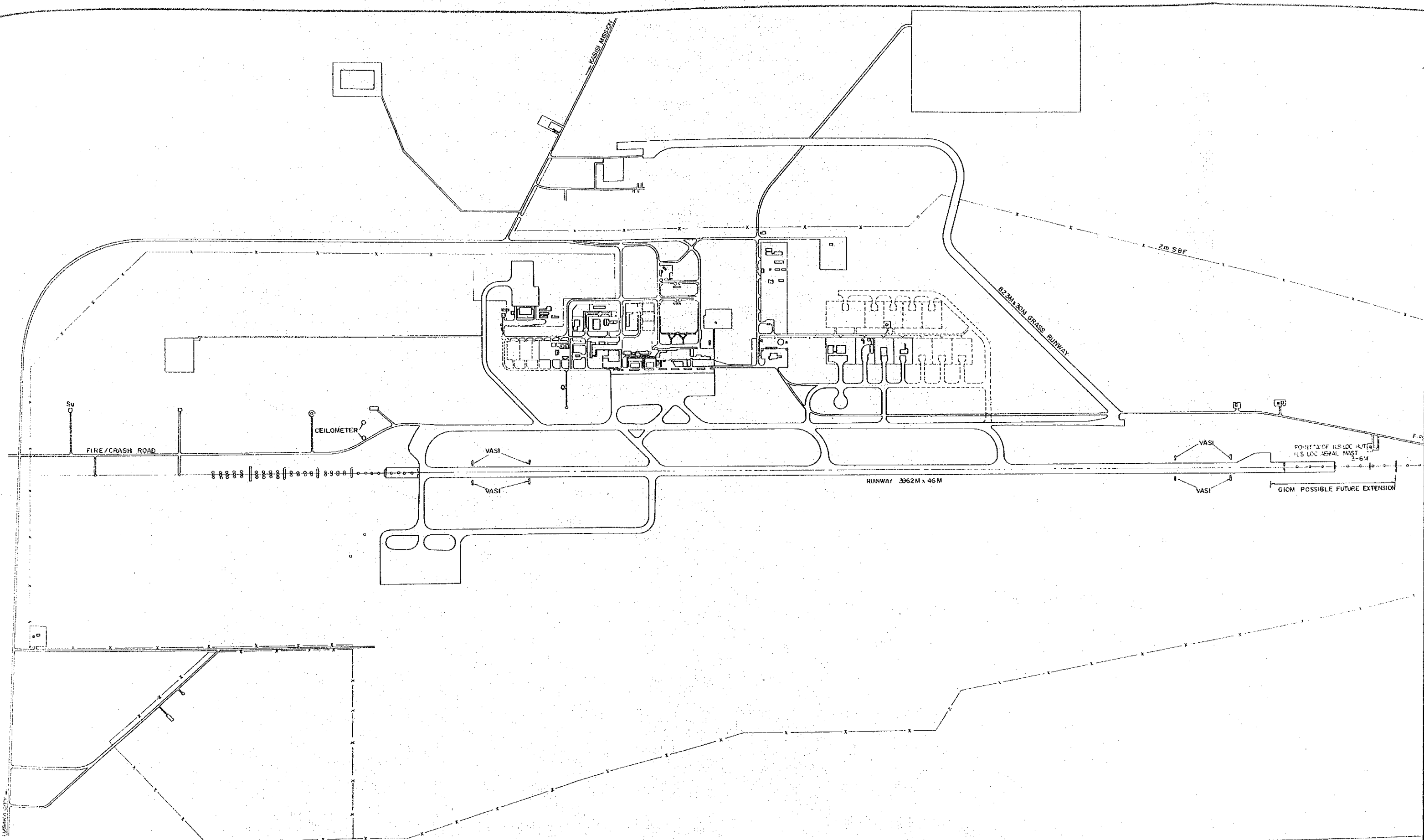
APPENDIX C

**SUPPLEMENTAL MATERIALS ON EXISTING
AIRFIELD FACILITIES (CHAPTER 3,
SUBCHAPTER 3-2)**

TABLE OF CONTENTS

APPENDIX C SUPPLEMENTAL MATERIALS ON EXISTING AIRFIELD FACILITIES (CHAPTER 3, SUBCHAPTER 3-2)

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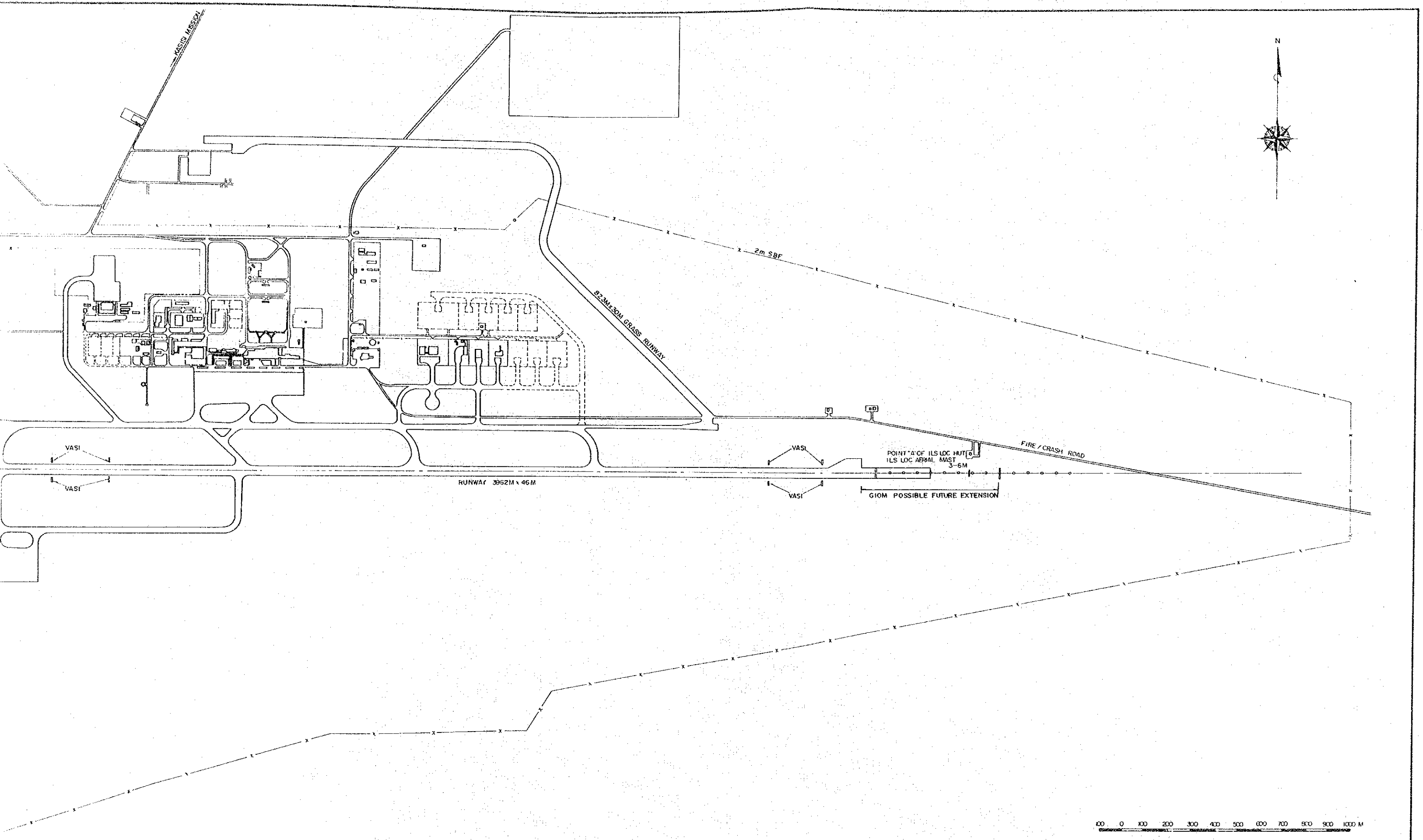


LUSAKA INTERNATIONAL AIRPORT DEVELOPMENT PROJECT

REPUBLIC OF ZAMBIA

FEASIBILITY STUDY, 1985

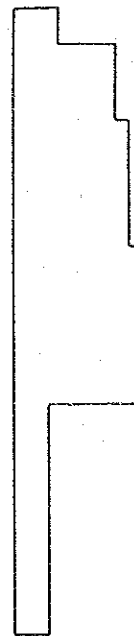
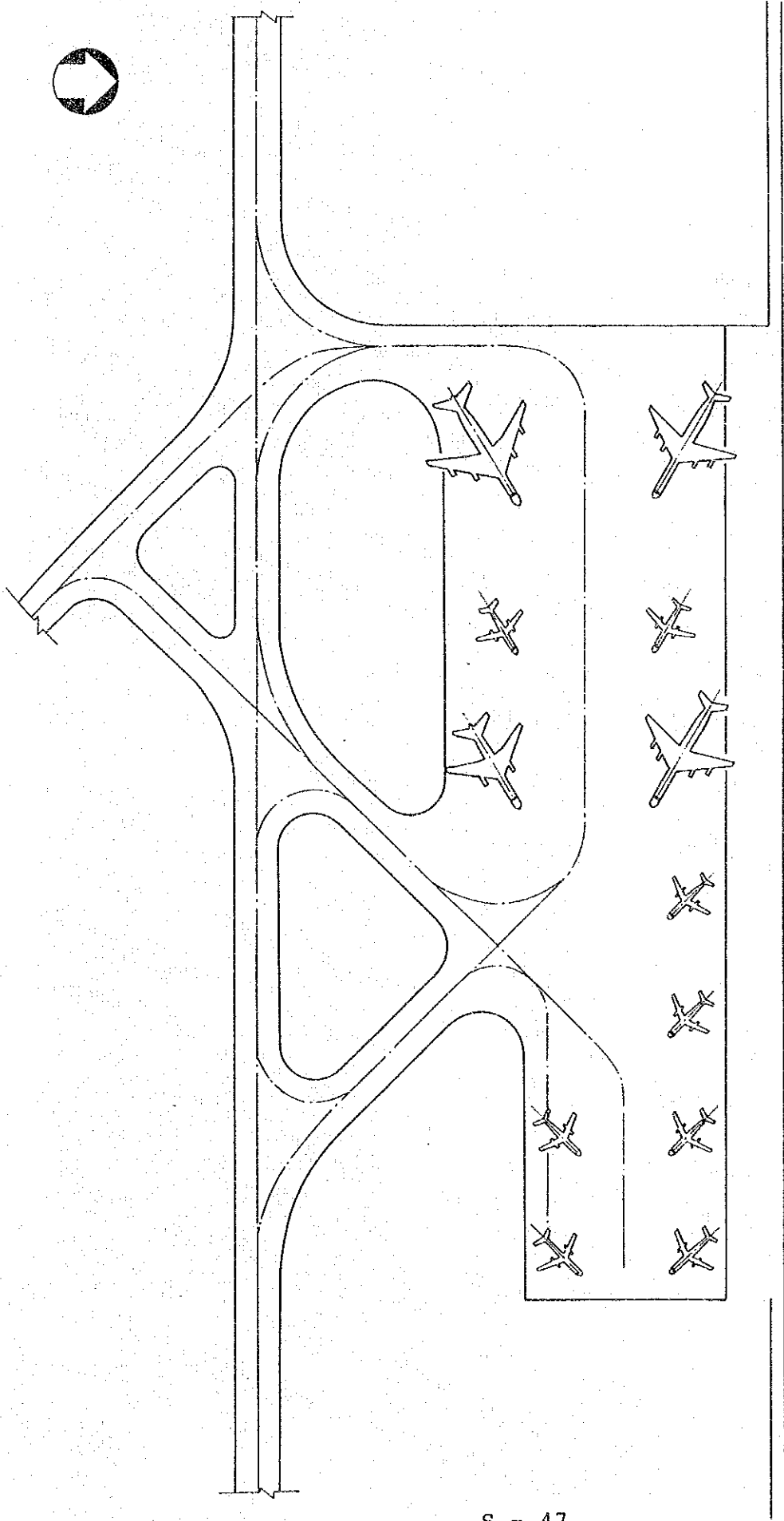
JAPAN INTERNATIONAL COOPERATION



PROJECT
 STUDY. 1985

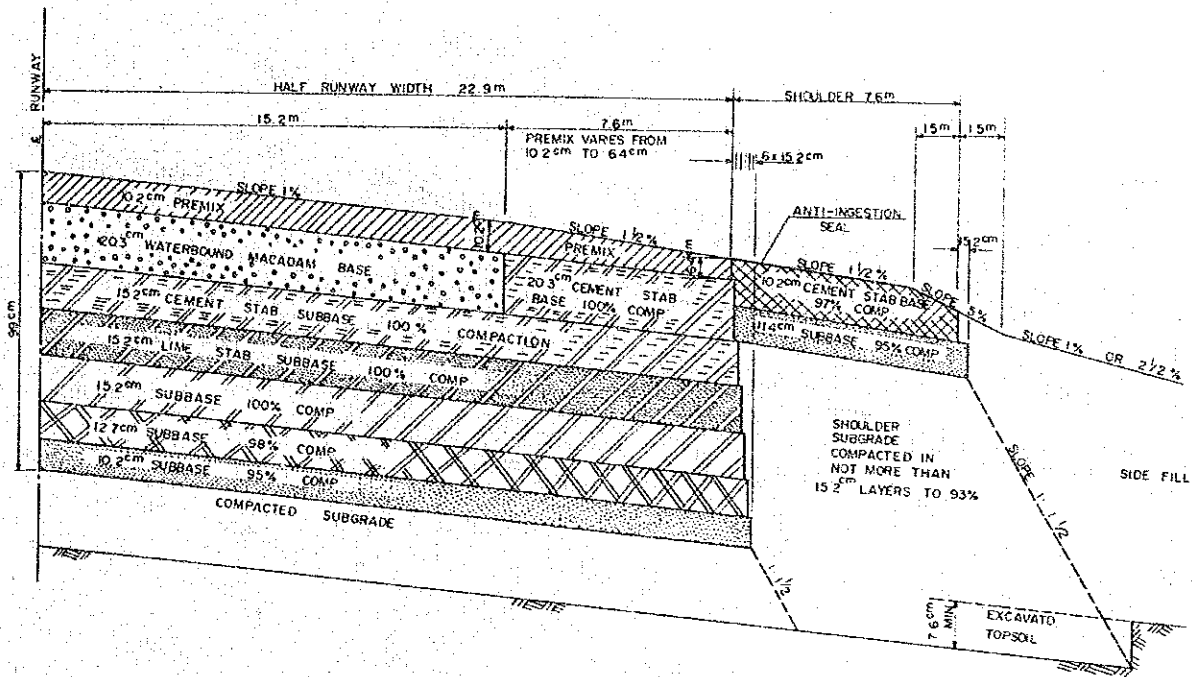
C - 1
 JAPAN INTERNATIONAL COOPERATION AGENCY

AIRPORT		DWG
LAYOUT PLAN	EXISTING	NO.

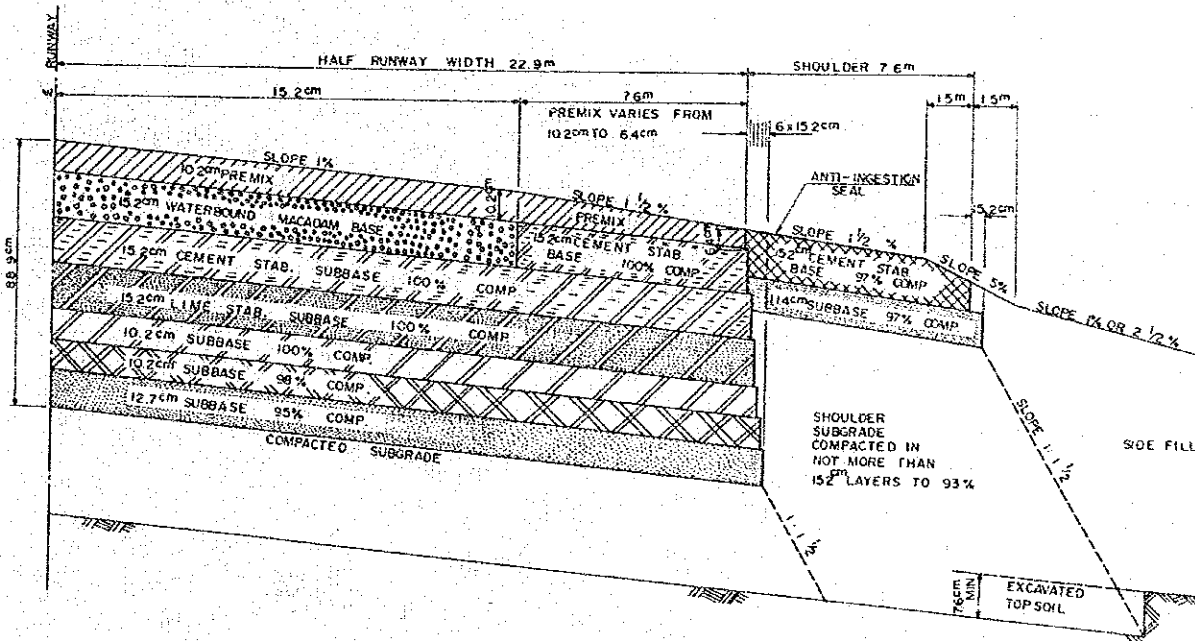


C-2 Apron Configuration

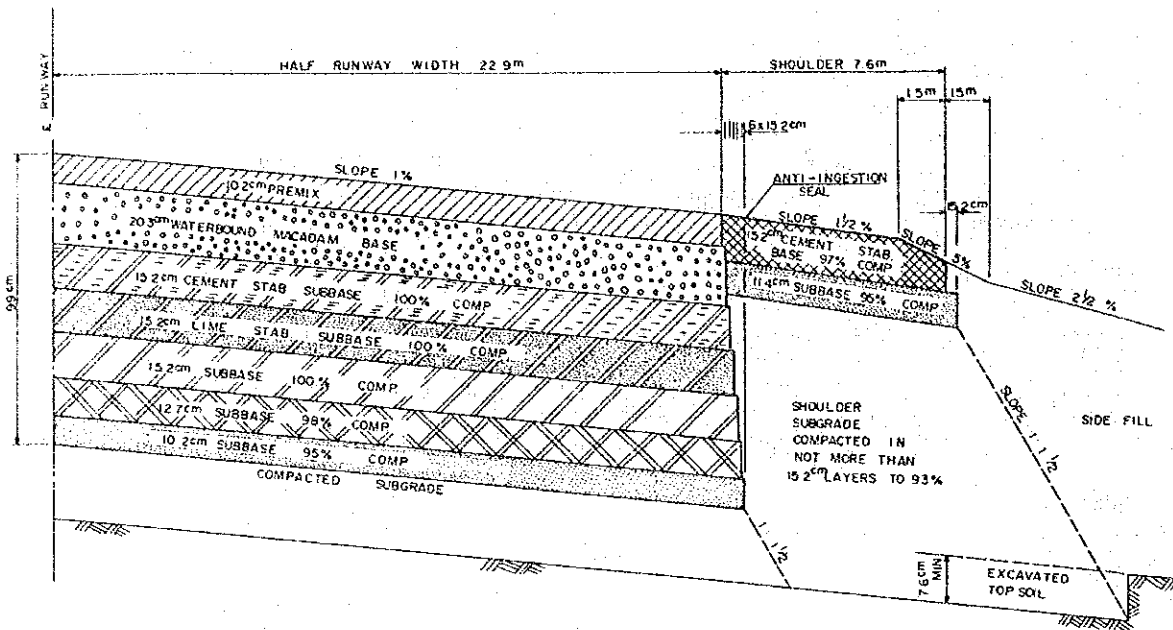
C-4 Cross Section of Pavements



C-4-1 Flexible Pavement of Type R1

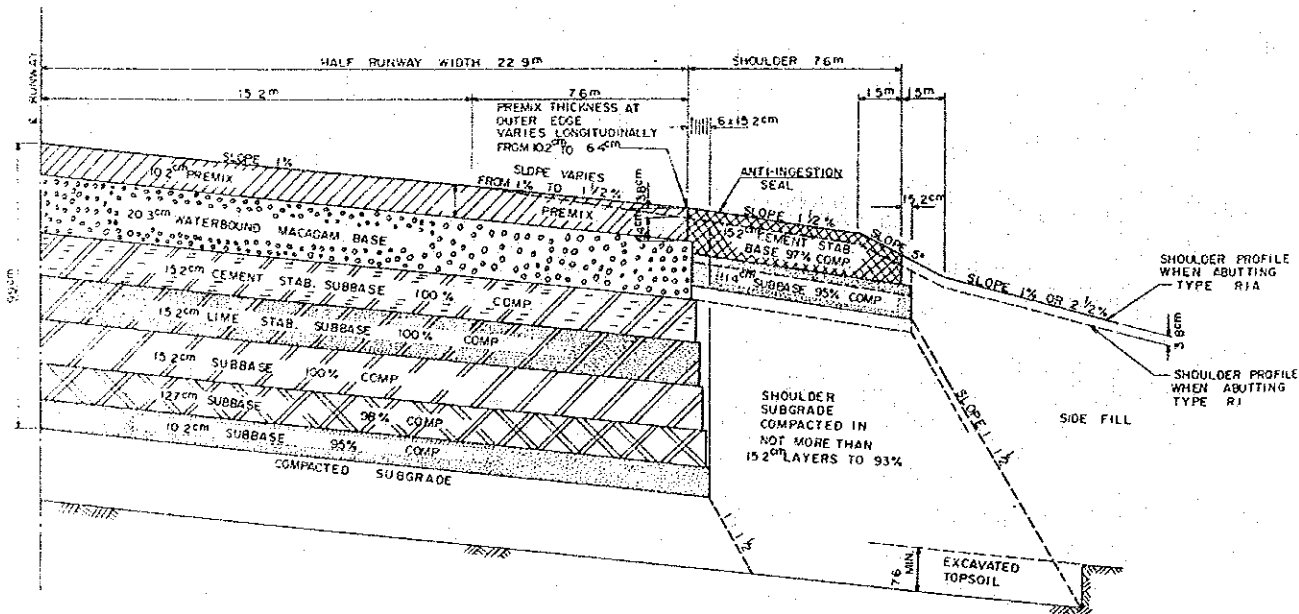


C-4-2 Flexible Pavement of Type R2



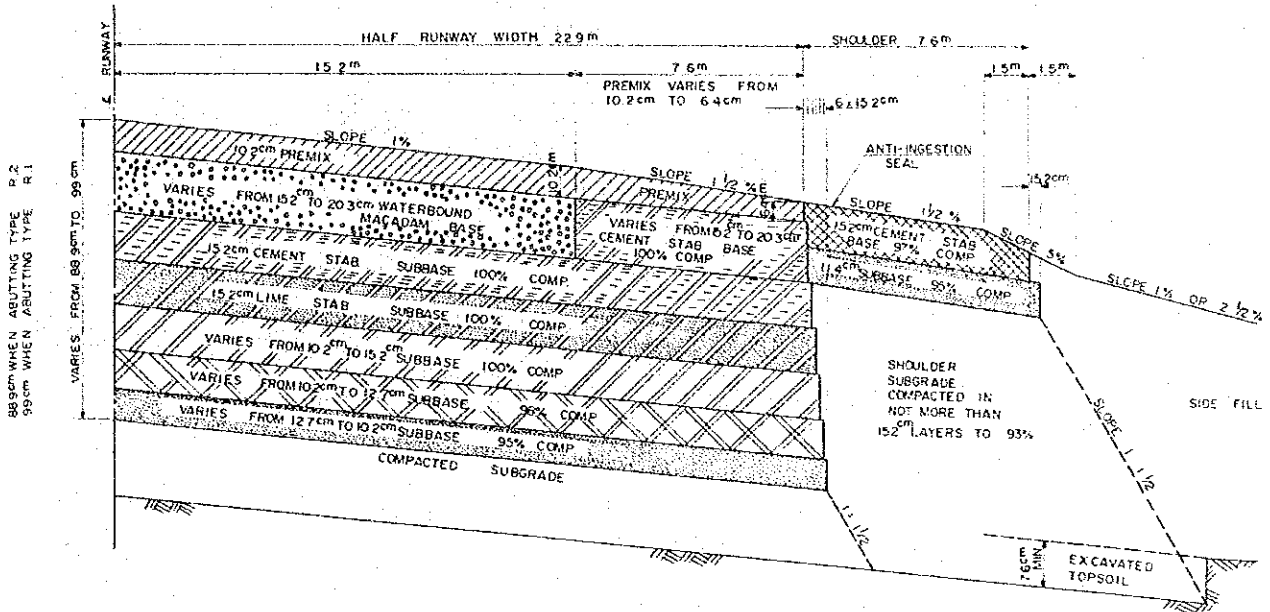
NOTE : SHOULDER OMITTED AT TAXIWAY TURN-OFF

C-4-3 Flexible Pavement of Type R1A



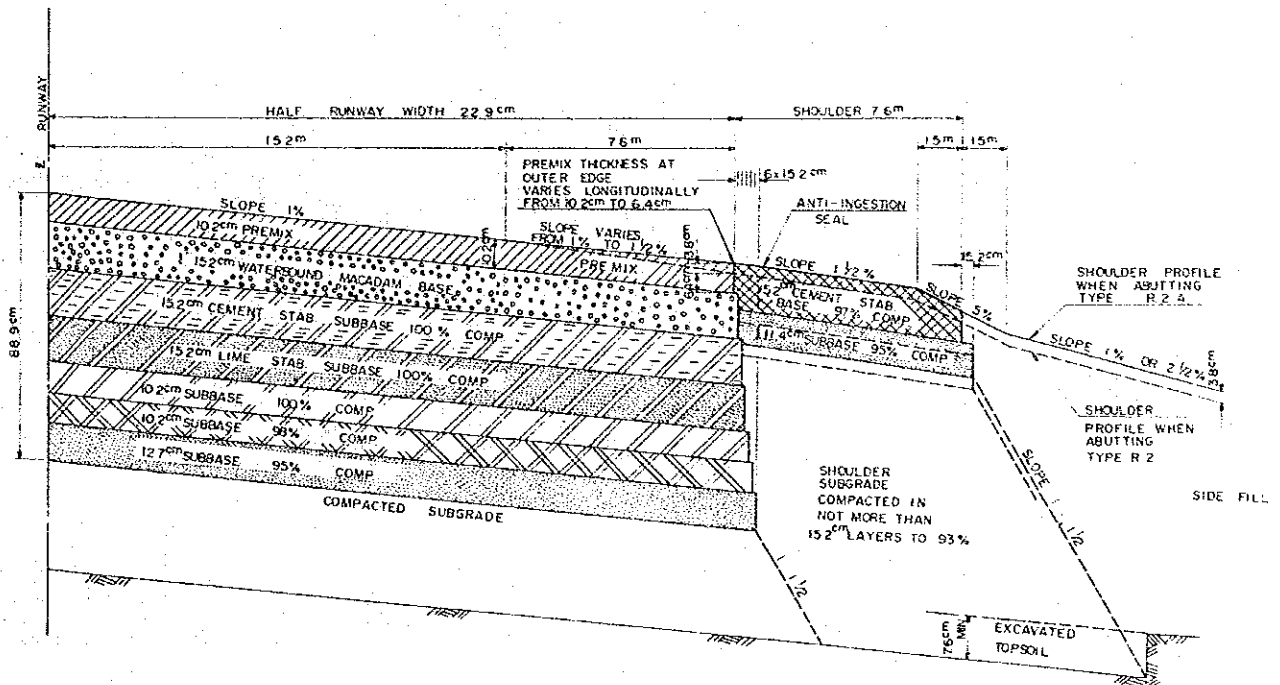
NOTE THIS IS A PREMIX TRANSITION SECTION BETWEEN TYPES R1 AND R1A

C-4-4 Flexible Pavement of Type R1AB



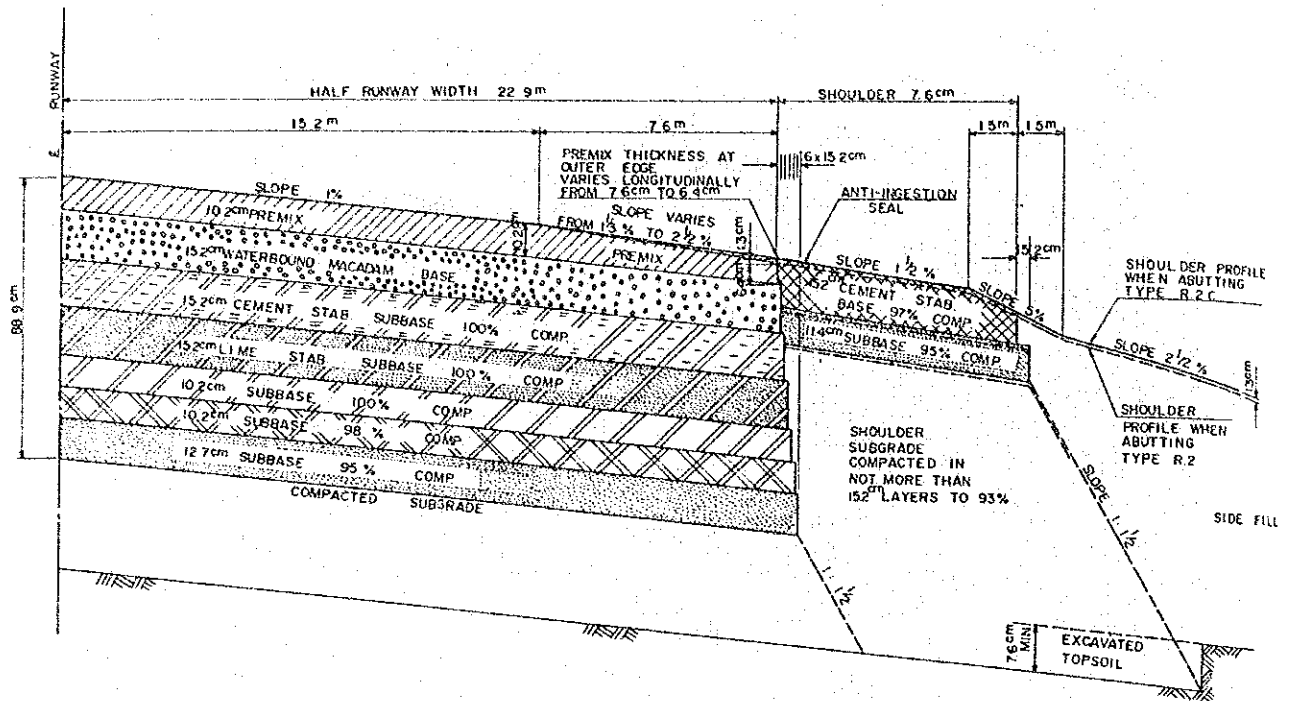
NOTE THIS IS A BASE AND SUBBASE TRANSITION SECTION BETWEEN TYPES R1 AND R2

C-4-5 Flexible Pavement of Type R12



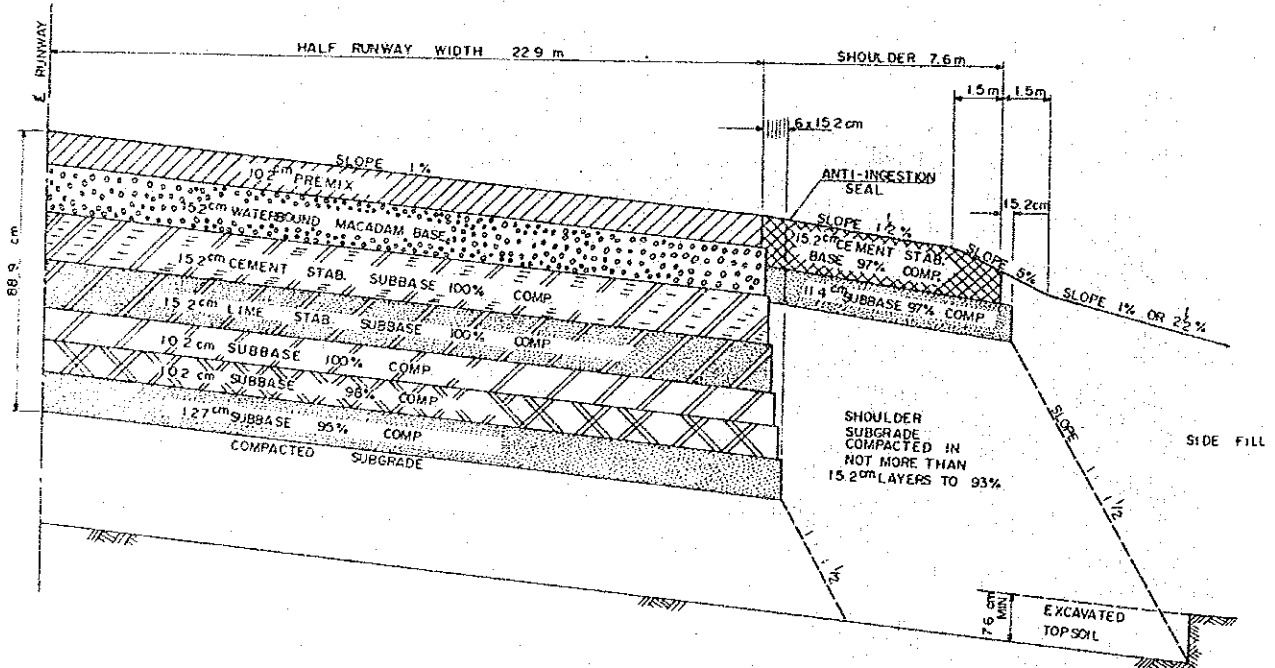
NOTE THIS IS A PREMIX TRANSITION SECTION BETWEEN TYPES R2 AND R2A

C-4-6 Flexible Pavement of Type R2AB



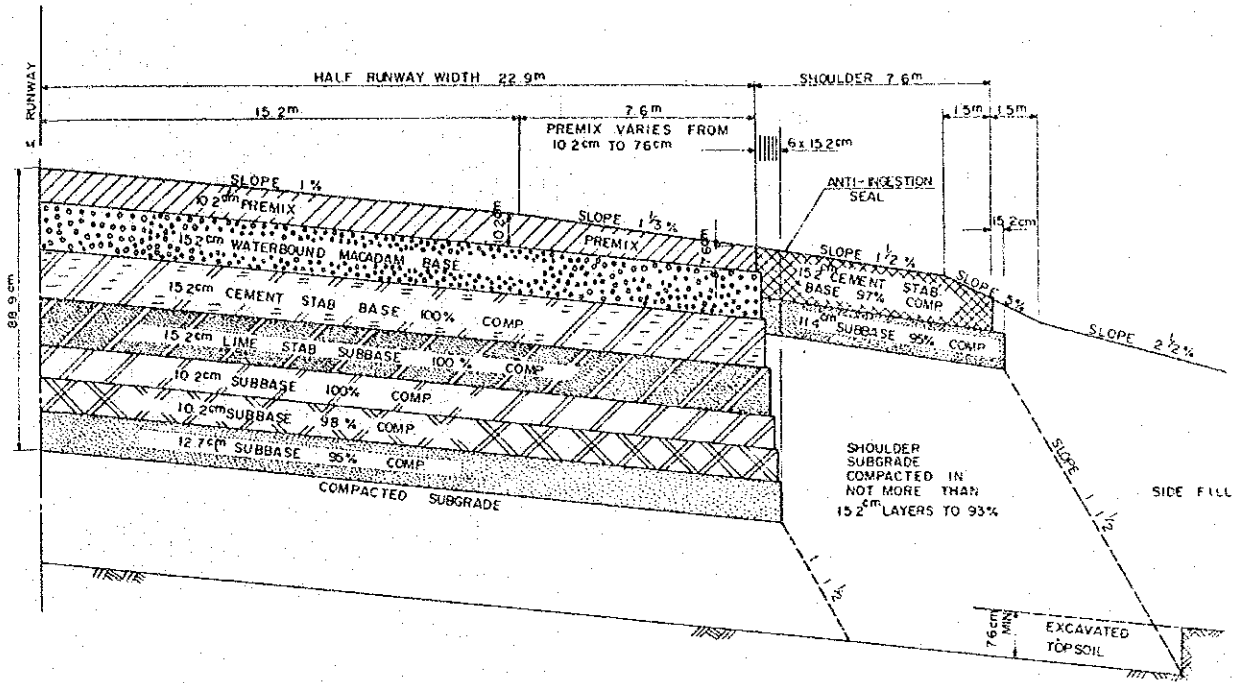
NOTE THIS IS A PREMIX TRANSITION SECTION BETWEEN TYPES R2 AND R2C

C-4-7 Flexible Pavement of Type R2BC



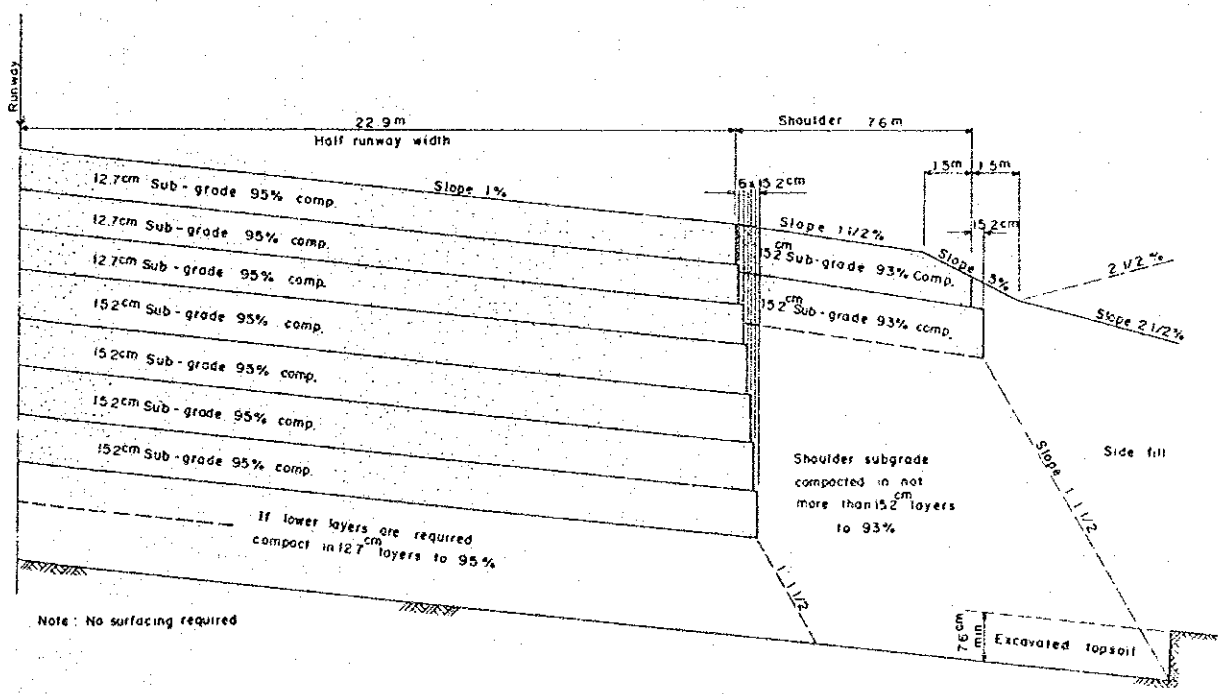
NOTE SHOULDER OMITTED AT TAXIWAY TURN-OFFS

C-4-8 Flexible Pavement of Type R2A

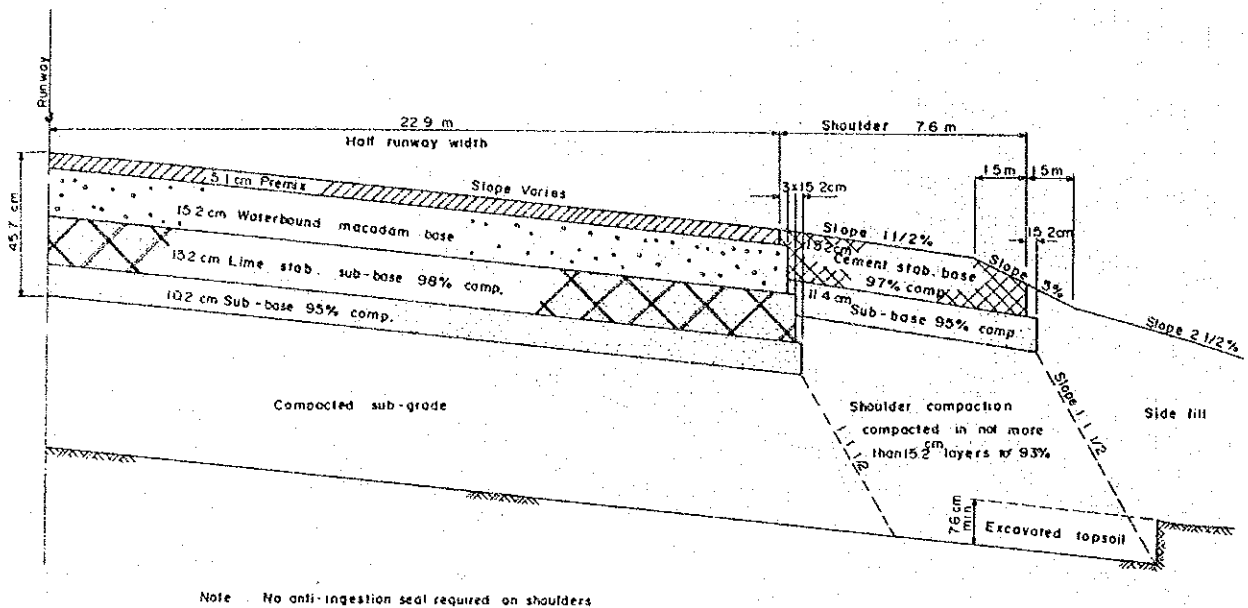


NOTE SHOULDER OMITTED AT TAXIWAY TURN-OFF

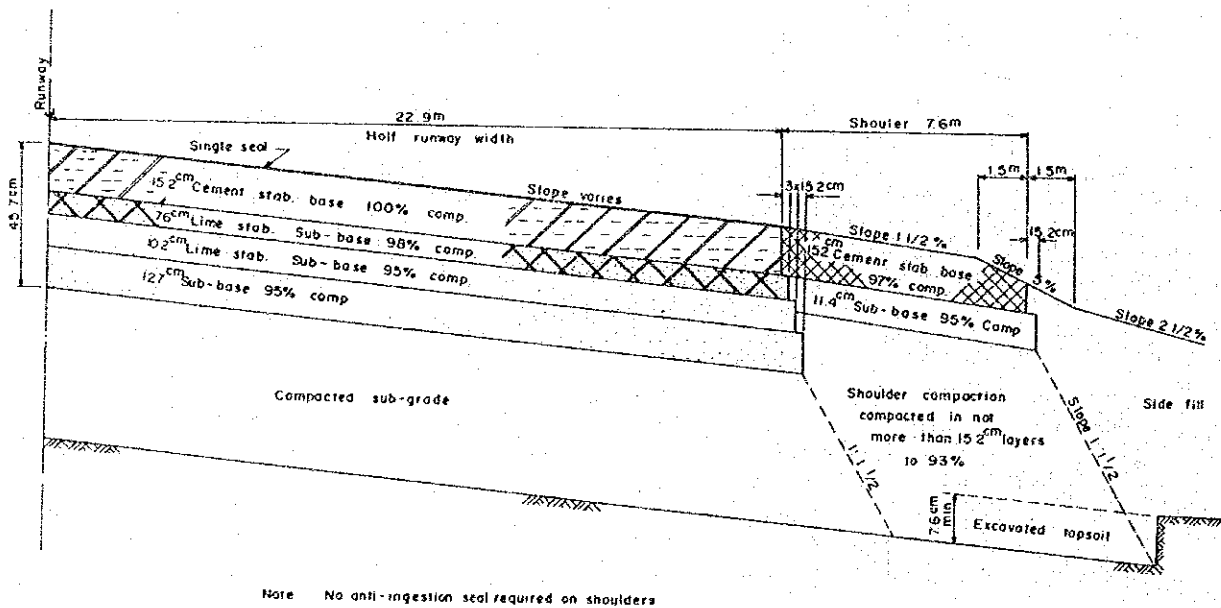
C-4-9 Flexible Pavement of Type R2C



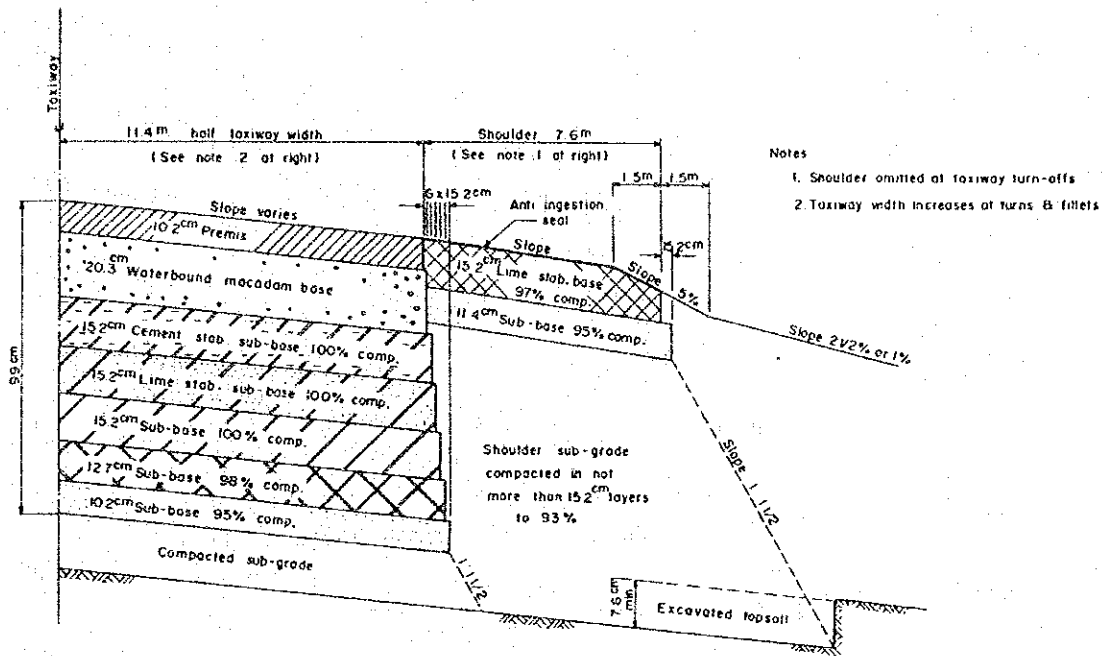
C-4-10 Flexible Pavement of Type R6



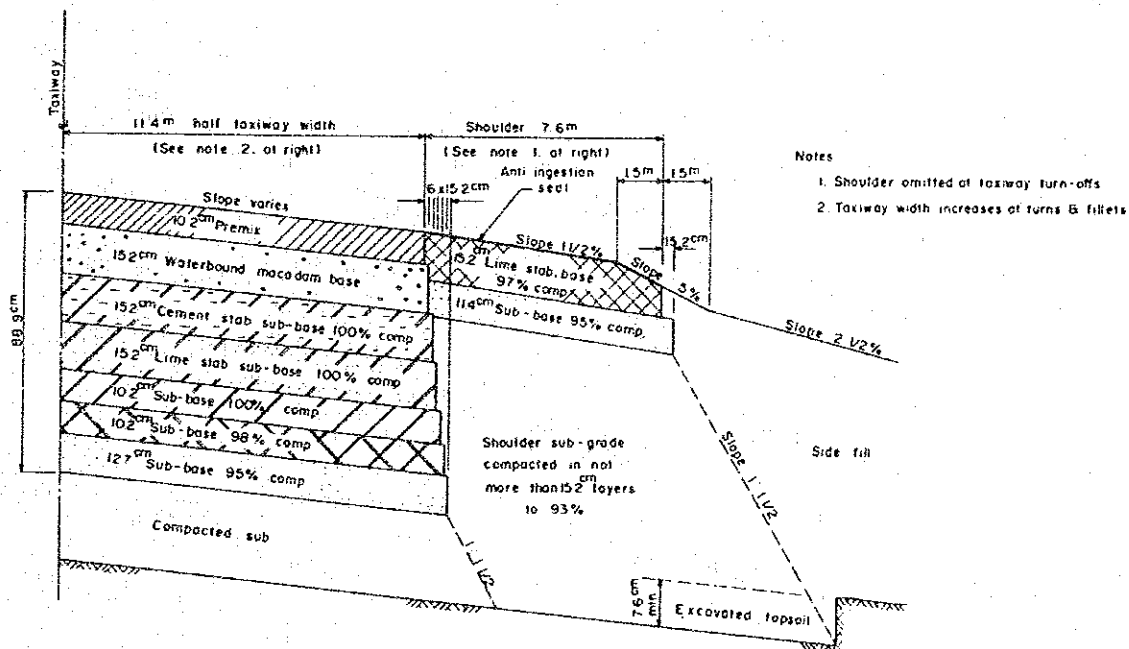
C-4-11 Flexible Pavemne of Type R5



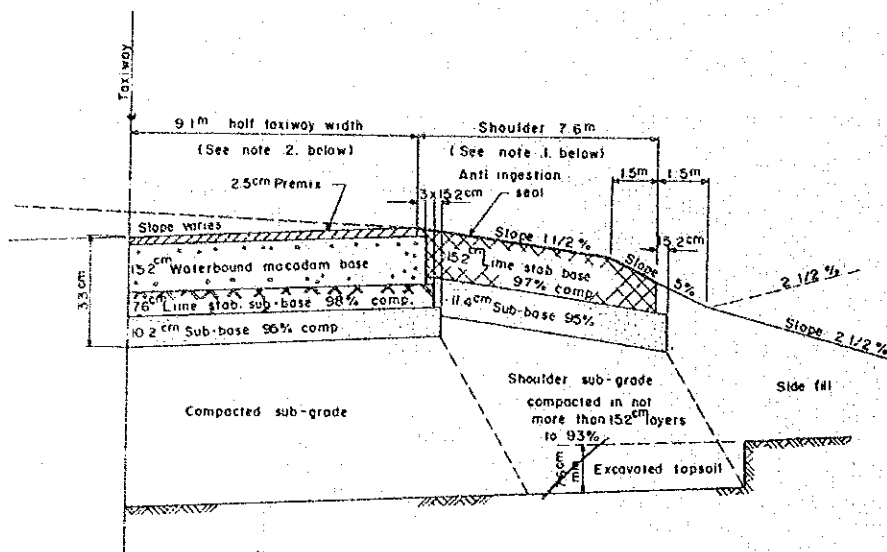
C-4-12 Flexible Pavement of Type R5A



C-4-13 Flexible Pavement of Type T1



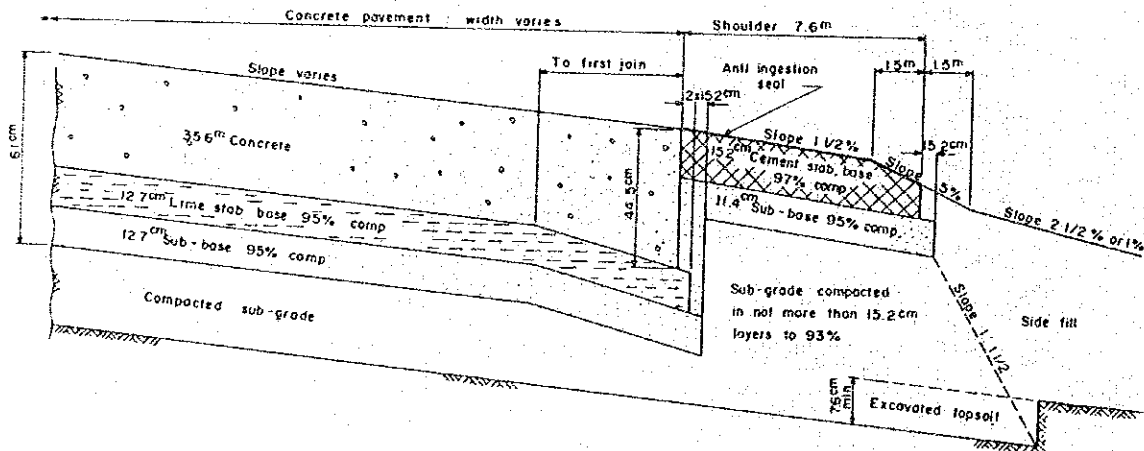
C-4-14 Flexible Pavement of Type T2



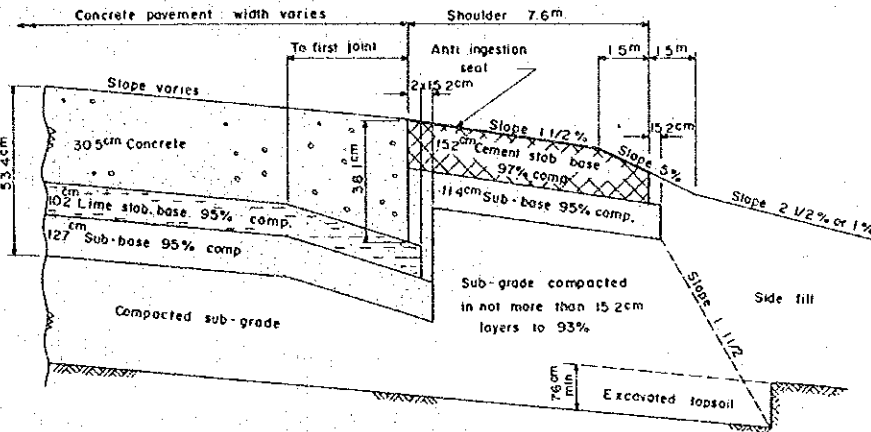
Notes

- 1 Shoulder omitted at taxiway turn-offs
- 2 Taxiway width increases at running up apron & at fillets

C-4-15 Flexible Pavement of Type T4



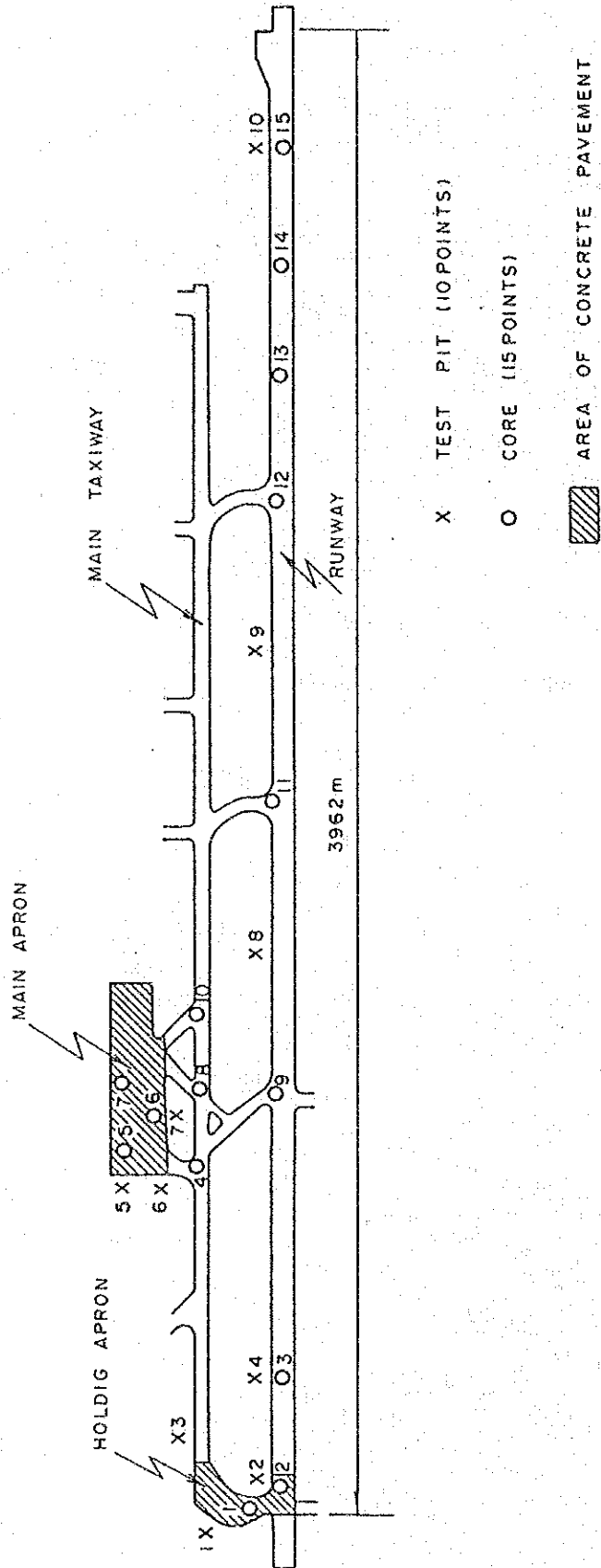
C-4-16 Rigid Pavement of Type C1



C-4-17 Rigid Pavement of Type C2

C-5 Field Survey on Pavement

C-5-1 Bearing Test



8 1 60

C-5-1-1 Station of Field Survey

C-5-1-2 Compressive Strength of Concrete Slab

Core No.	Strength (kgf/cm ²)	Size of Core Specimen Diameter X Height (cm)		
1	340	15	X	29.8
2	227	15	X	30.0
5	239	10	X	19.0
6	221	15	X	29.5
7	125*	15	X	30.0

* Excluded from calculation.

C-5-1-3 In situ CBR of Subgrade

Pit No.	CBR (%)		
1	4.8	, 6.5	, 4.5
2	9.7	, 11.3	, 26.1*
3	3.2	, 3.2	, 3.9
4	2.3	, 2.3	, 4.2
5	5.5	, 8.1	, 8.7
6	29.1*	, 25.8*	, 27.0*
7	2.6	, 2.3	, 2.6
8	7.4	, 7.1	, 7.1
9	8.1	, 5.8	, 7.1
10	8.1	, 7.1	, 6.5

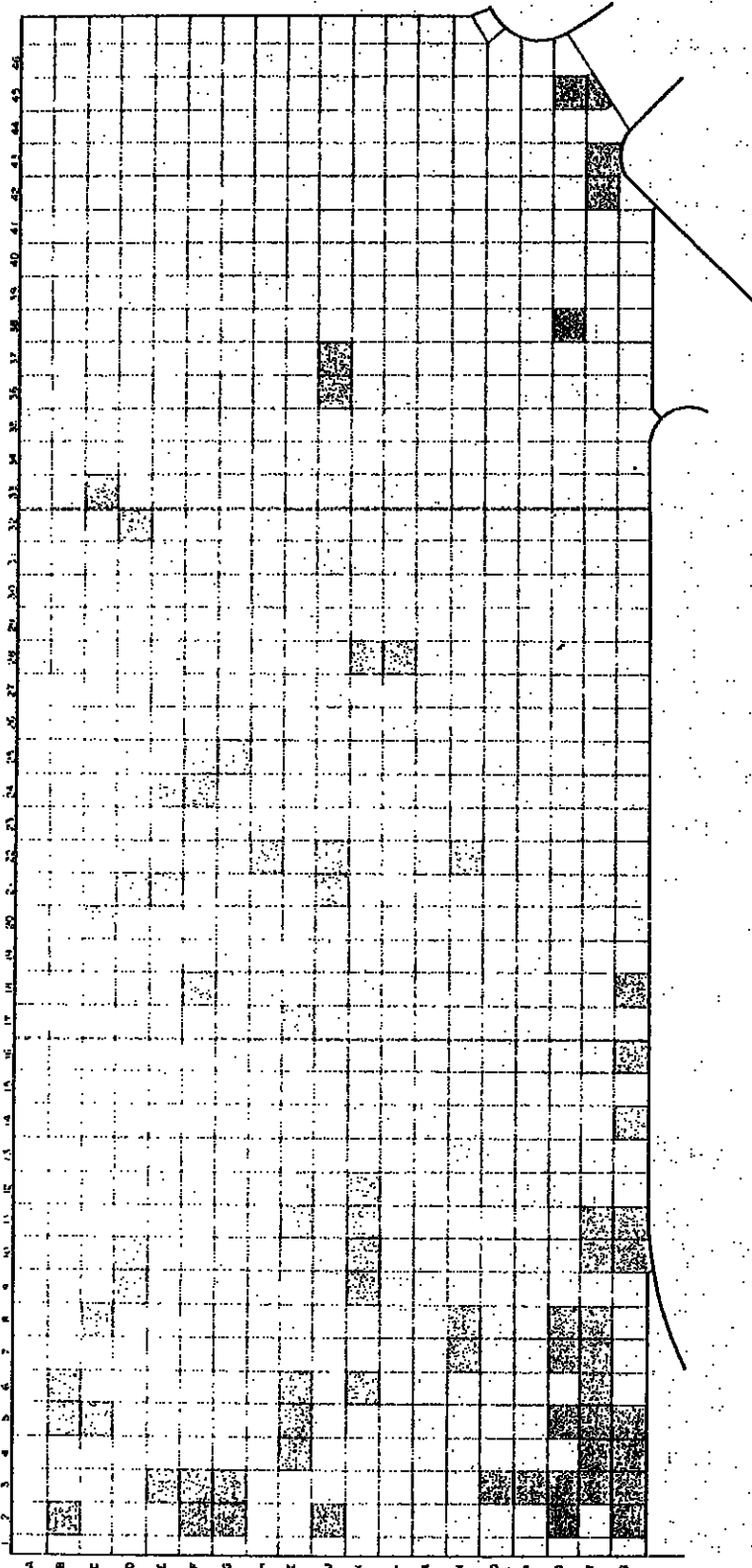
* Excluded from calculation.

C-5-1-4 Marshall Stability of Premix

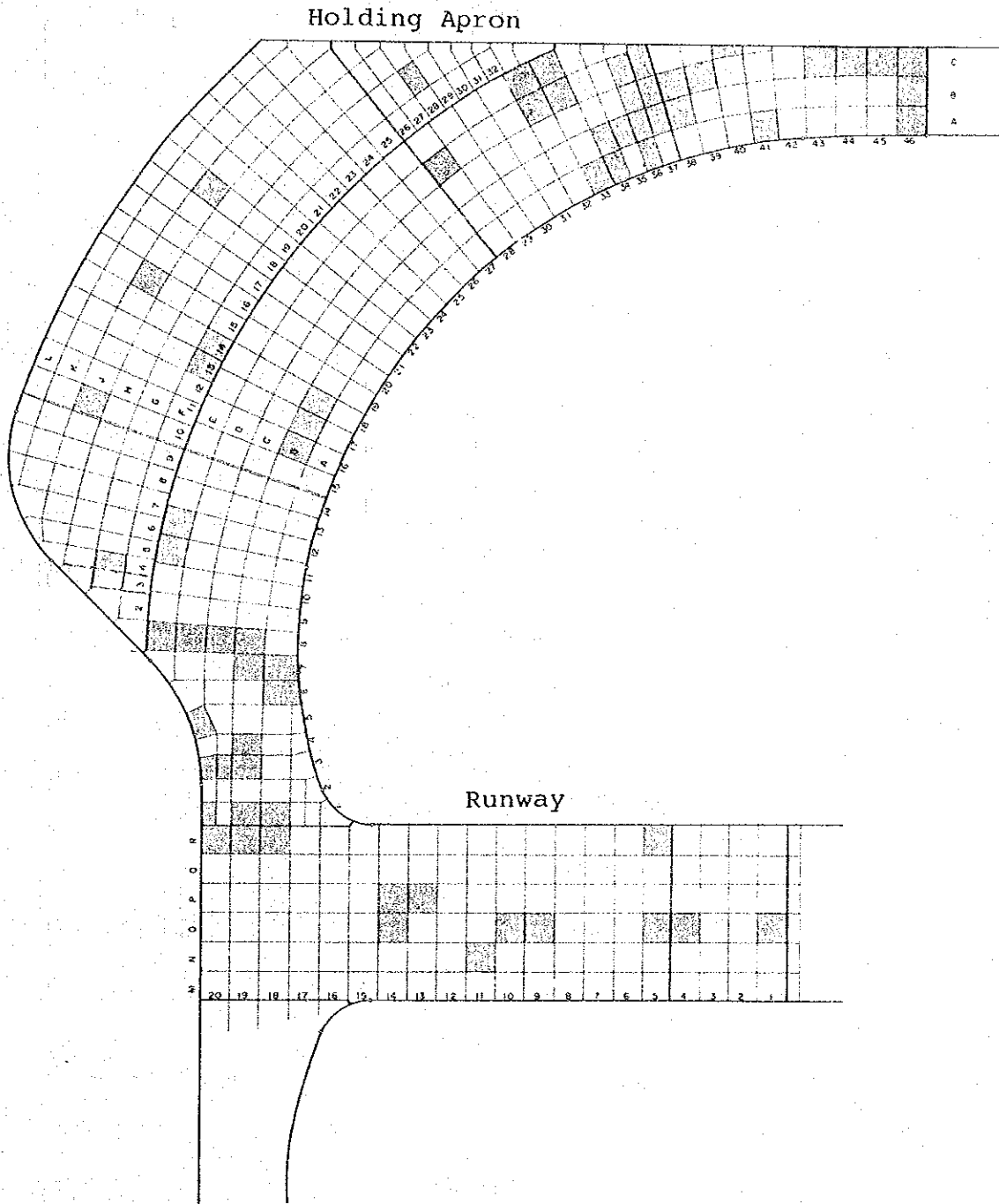
Core No.	Stability (kg)	Size of Core Specimen Diameter X Height (cm)		
4	1,346	9.8	X	7.5
8	1,180	10.0	X	7.6
9	1,436	9.7	X	7.6
10	1,098	10.0	X	7.5
12	1,247	9.2	X	7.6
13	1,166	9.7	X	7.4
14	1,019	9.4	X	7.4
15	1,240	9.2	X	7.5

C-5-2 Observation of Concrete Slabs

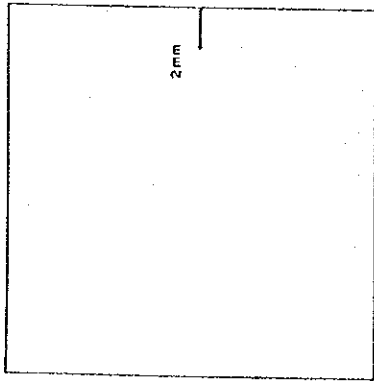
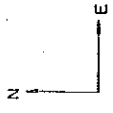
Both cement and lime-stabilized soils were granular, of which compressive strength was zero. The locations of cracks of concrete slabs are shown in C-5-2-1 and C-5-2-2, and conditions of cracks at each location are shown in C-5-2-3 to 19.



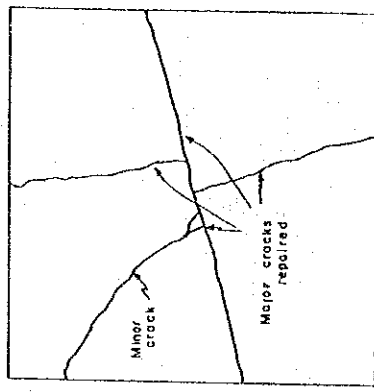
C-5-2-1 Location of Cracked Slabs of Main Apron



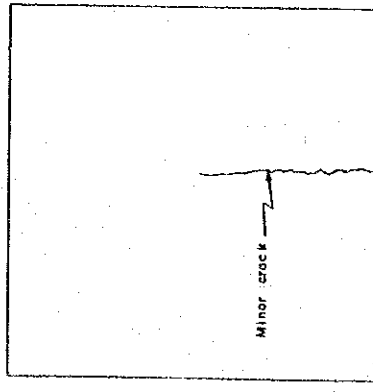
C-5-2-2 Location of Cracked Slabs of Holding Apron and Runway



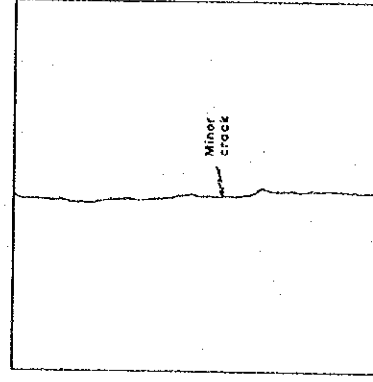
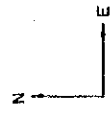
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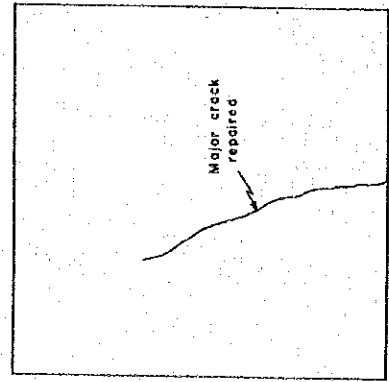
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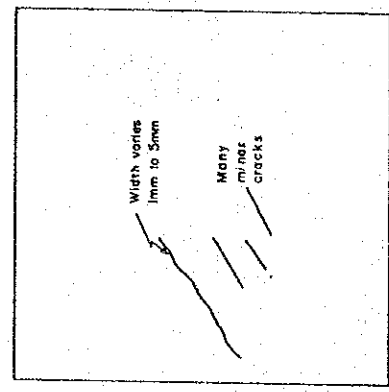
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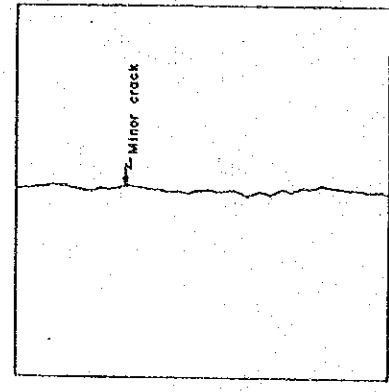
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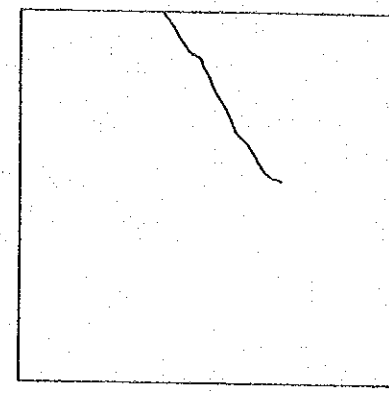
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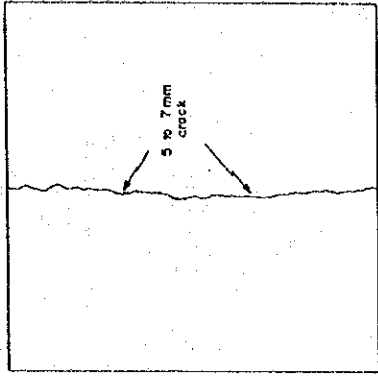
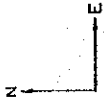
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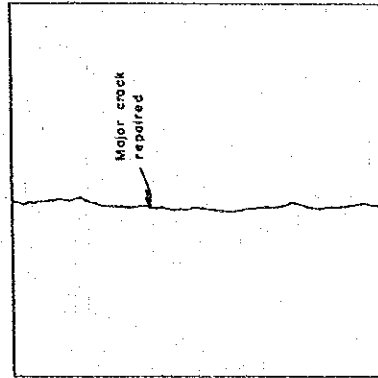
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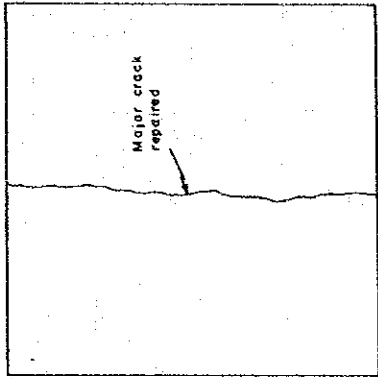
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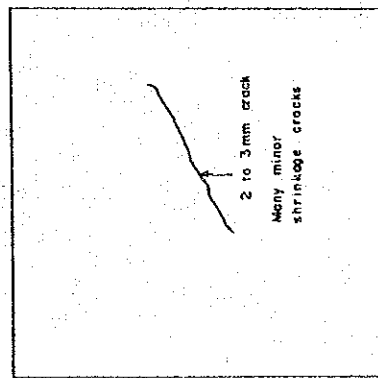
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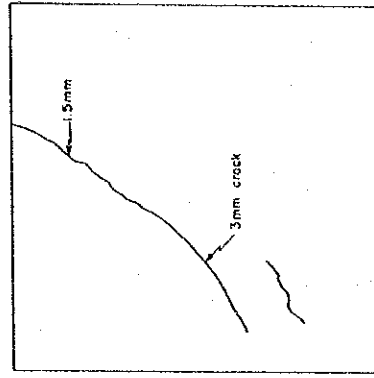
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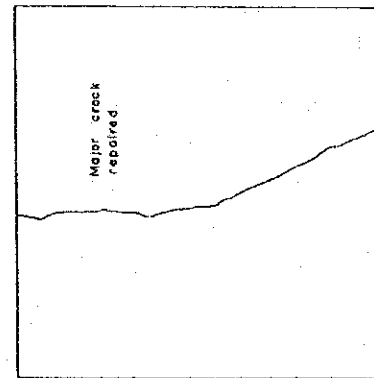
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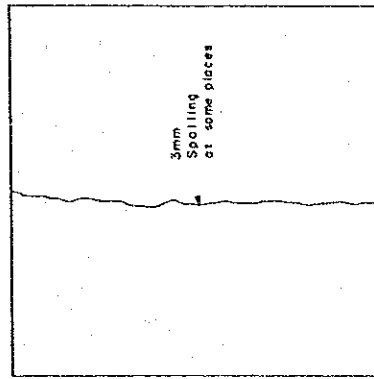
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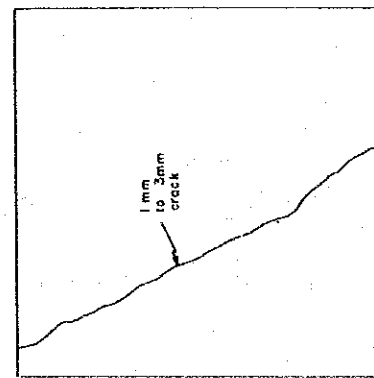
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P3

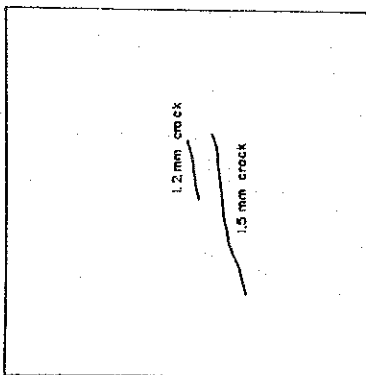


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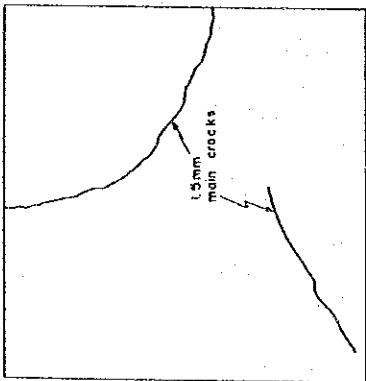


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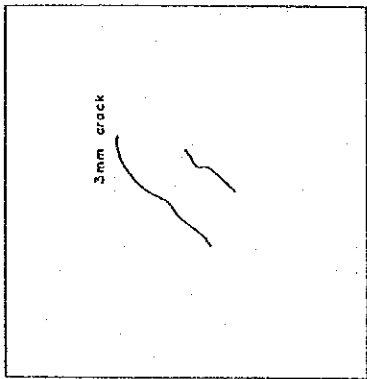
C-5-2-4 Condition of Cracks of Main Apron



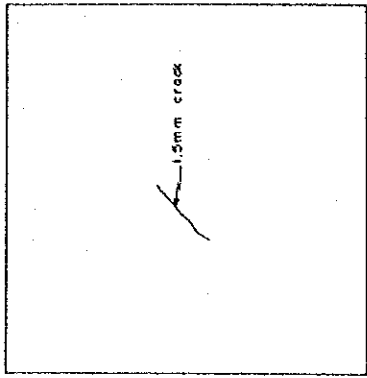
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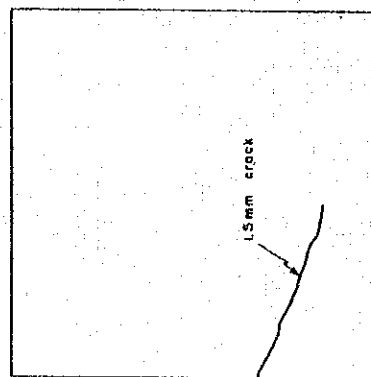
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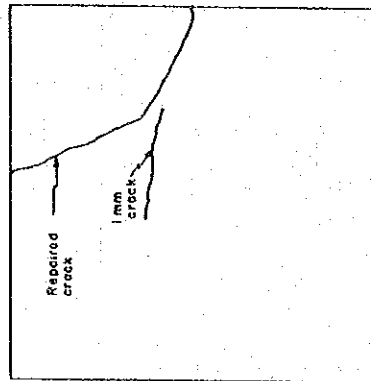
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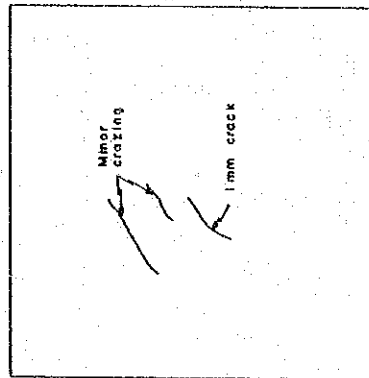
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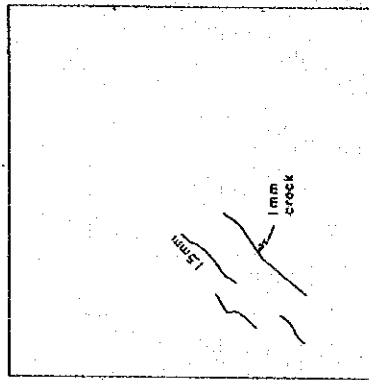
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F 24

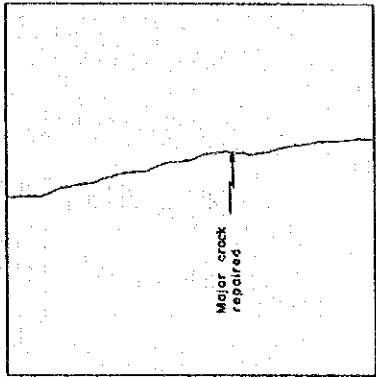
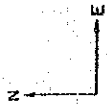


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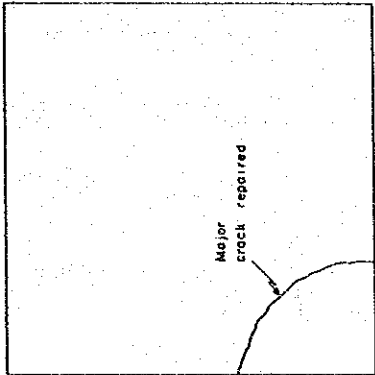


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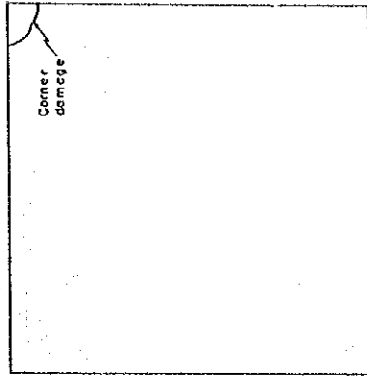
C-5-2-5 Condition of Cracks of Main Apron



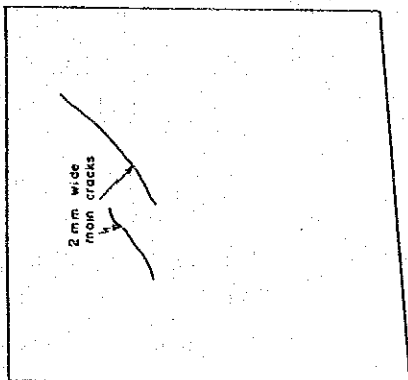
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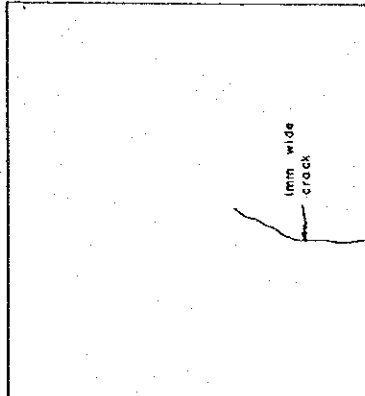
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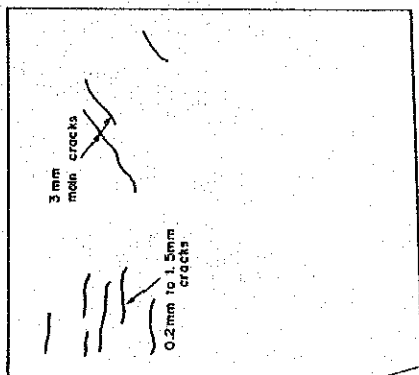
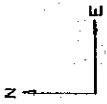
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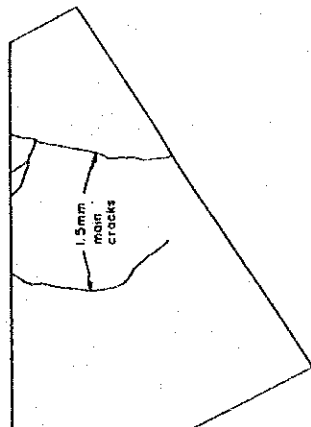
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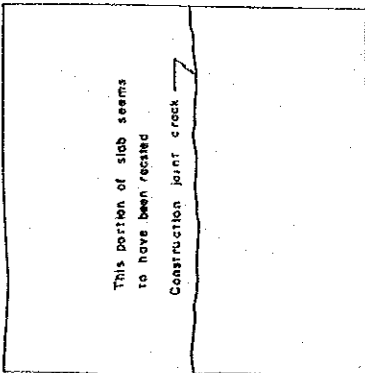
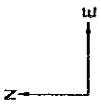
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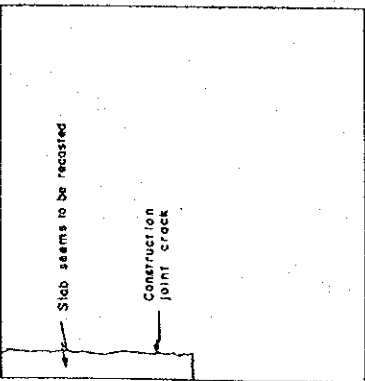
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Q45

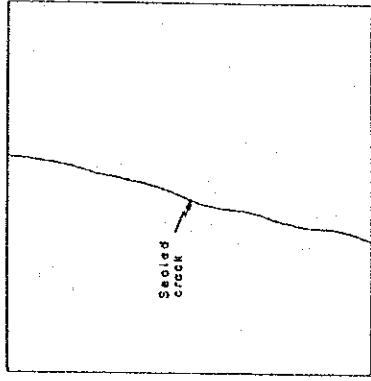
C-5-2-6 Condition of Cracks of Main Apron



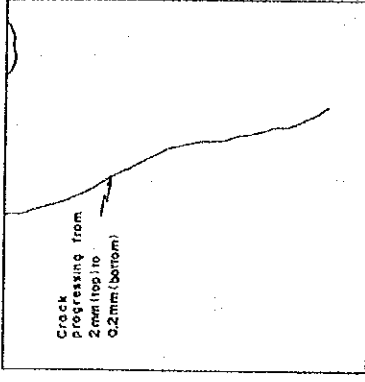
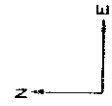
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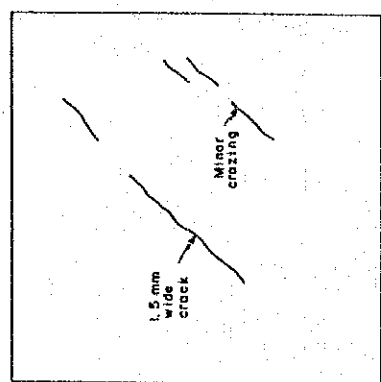
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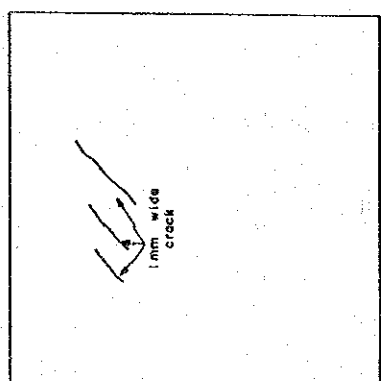
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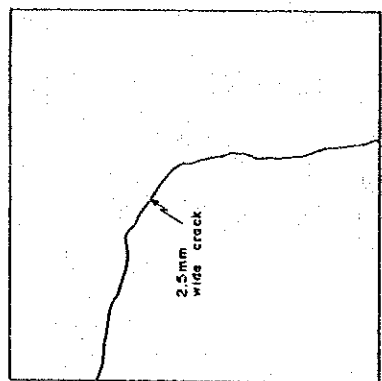
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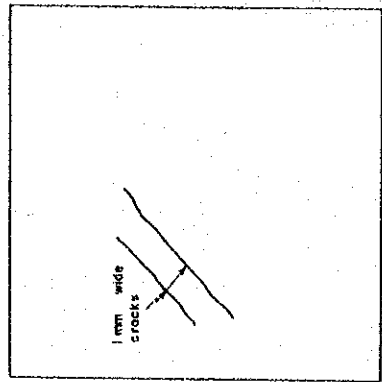
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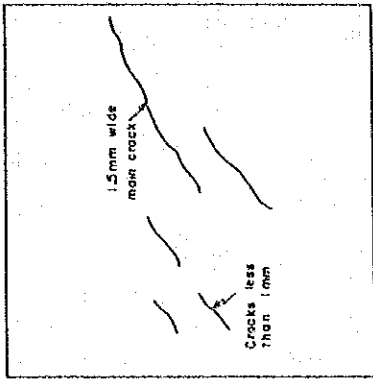
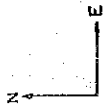
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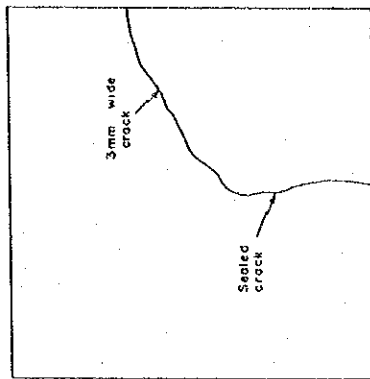
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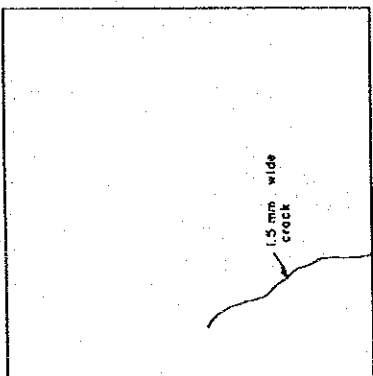
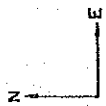
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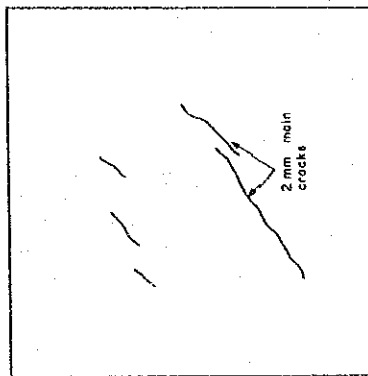
S18



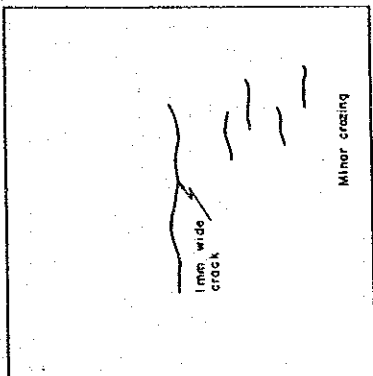
D21



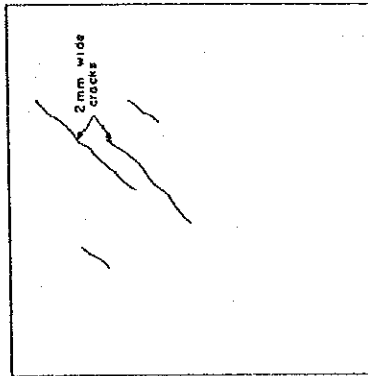
F18



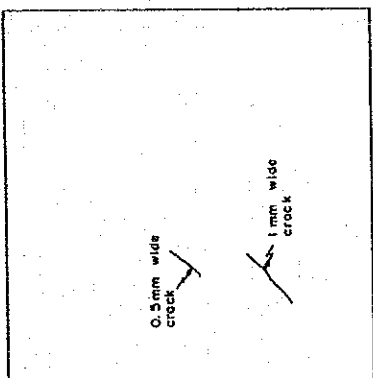
C20



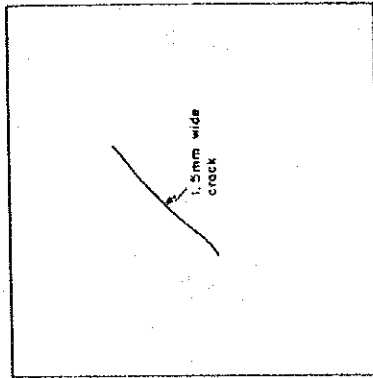
I11



S16

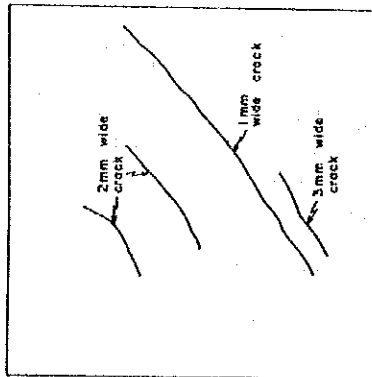


K12

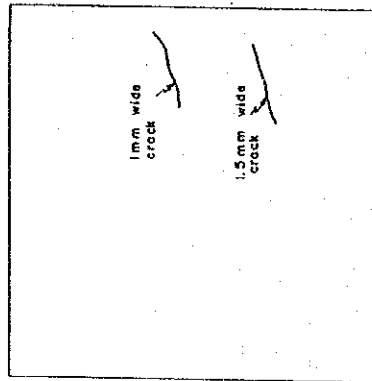


S14

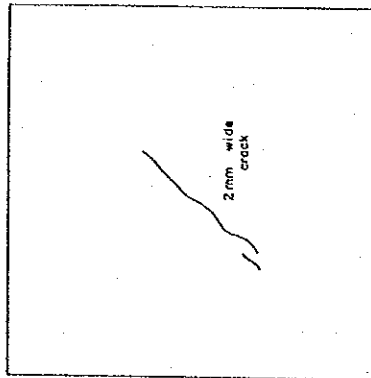
C-5-2-8 Condition of Cracks of Main Apron



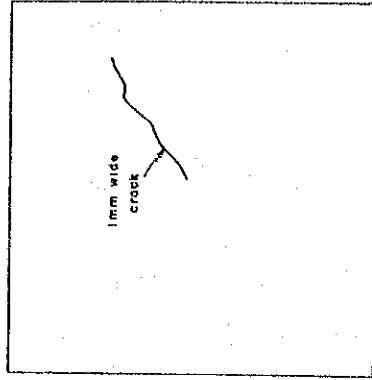
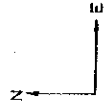
R8



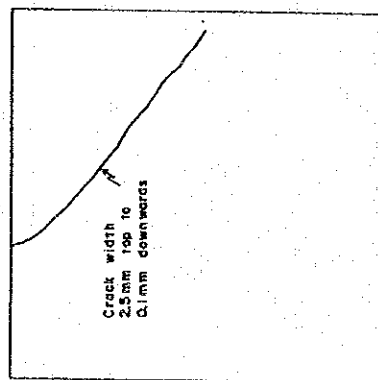
K9



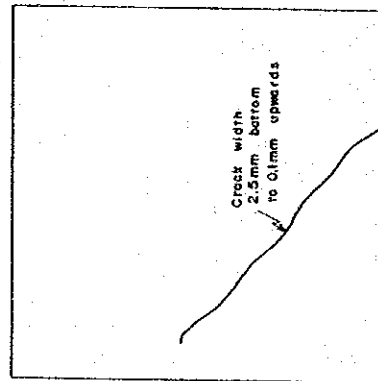
K10



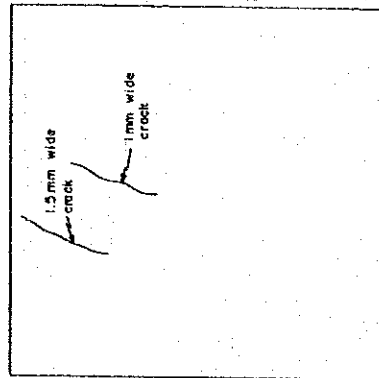
R10



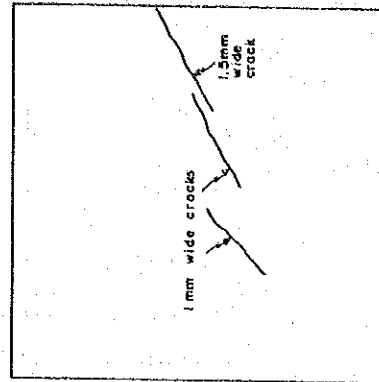
D9



D10

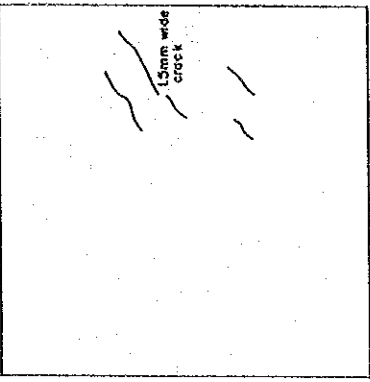


R11

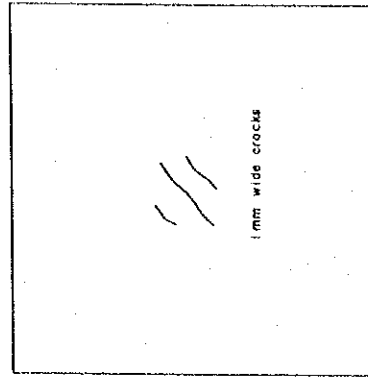


K11

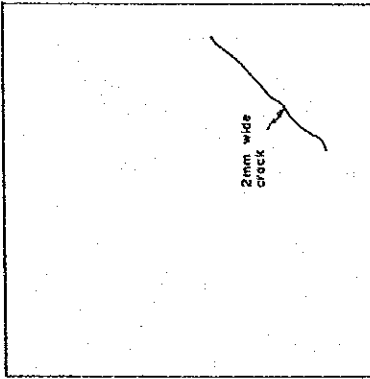
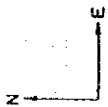
C-5-2-9 Condition of Cracks of Main Apron



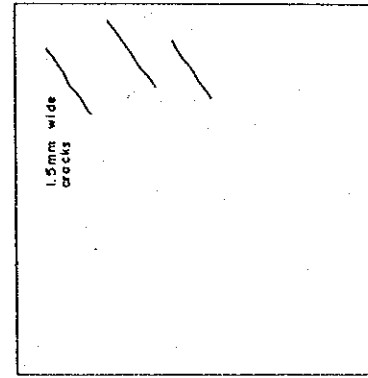
K6



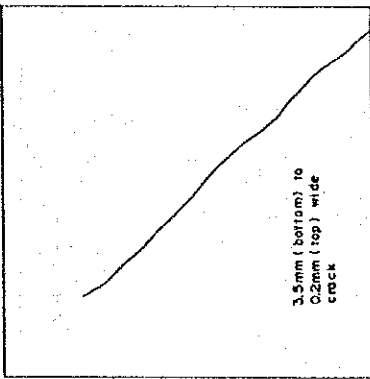
Q7



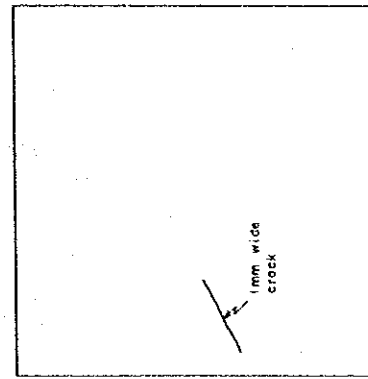
R6



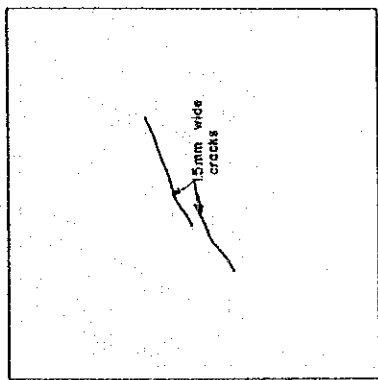
R7



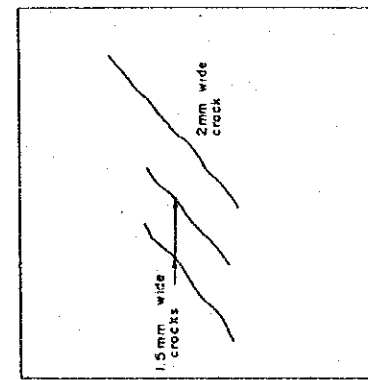
C8



Q8

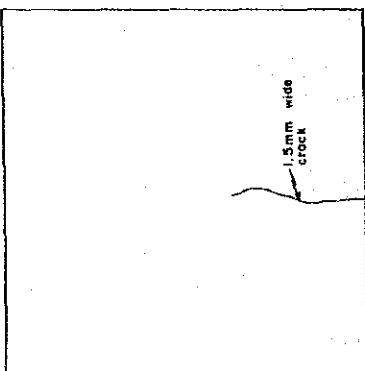


N7

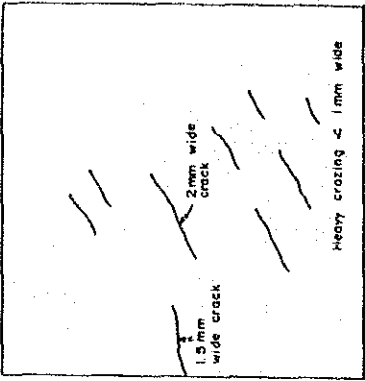


N8

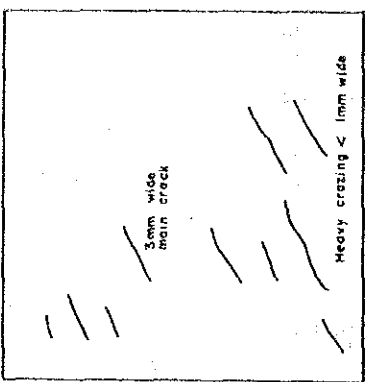
C-5-2-10 Condition of Cracks of Main Apron



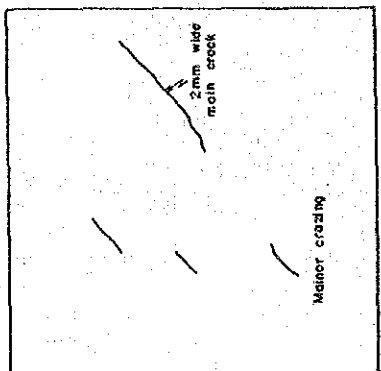
S5



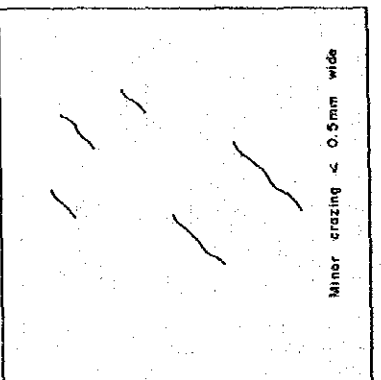
C5



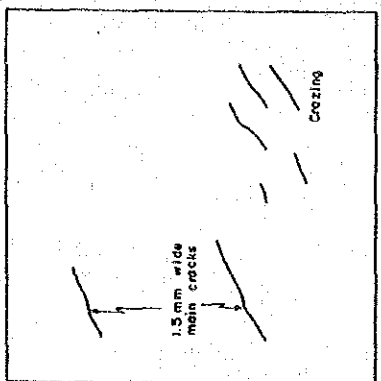
B5



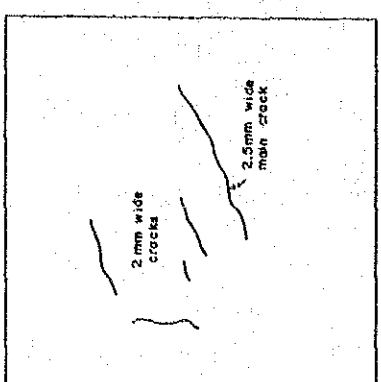
Q5



I5

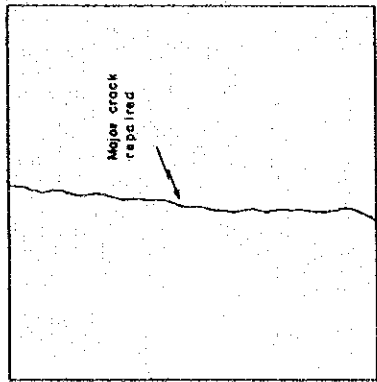
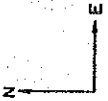


B6

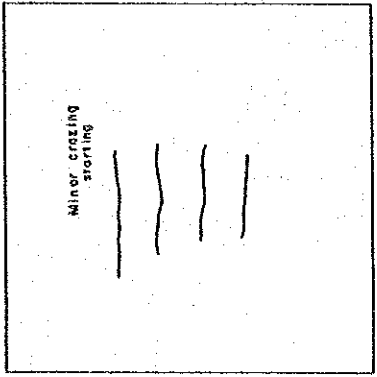


I6

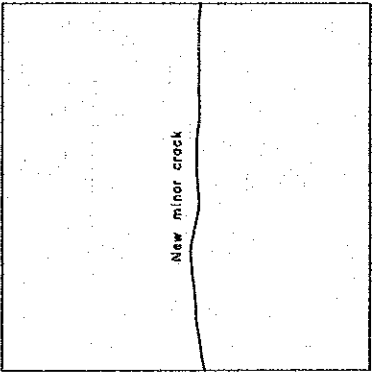
C-5-2-11 Condition of Cracks of Main Apron



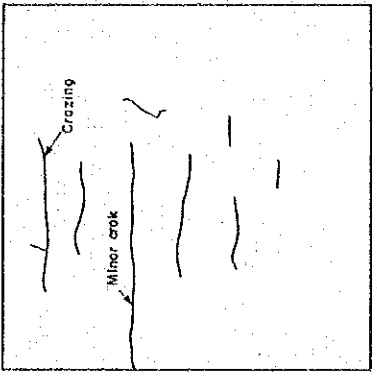
09



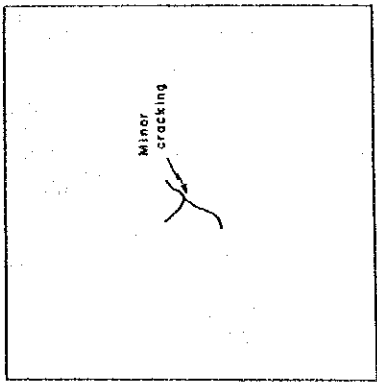
010 + 012



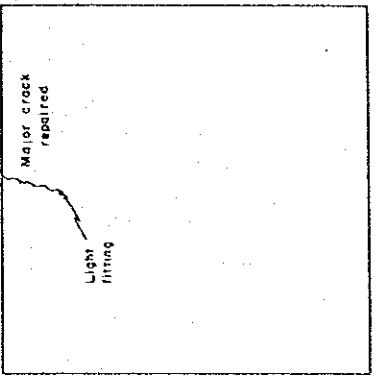
01



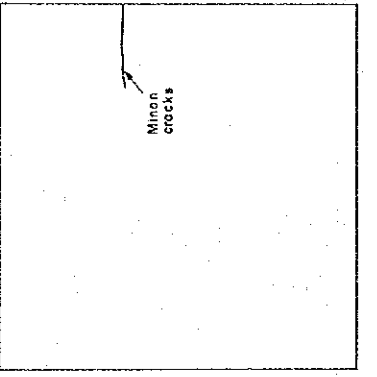
04



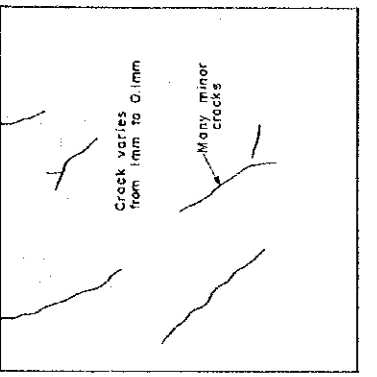
011



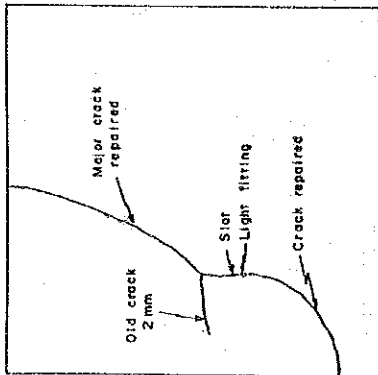
014



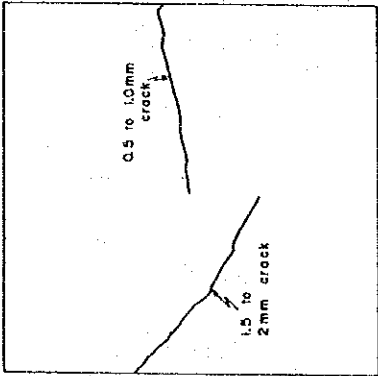
05



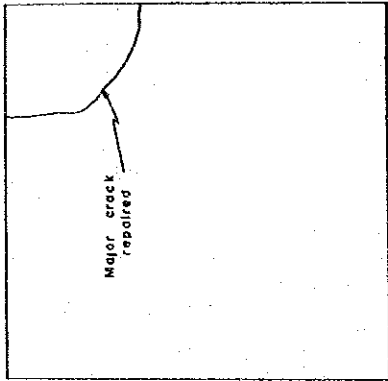
015



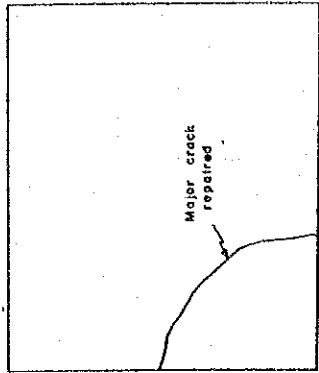
R18



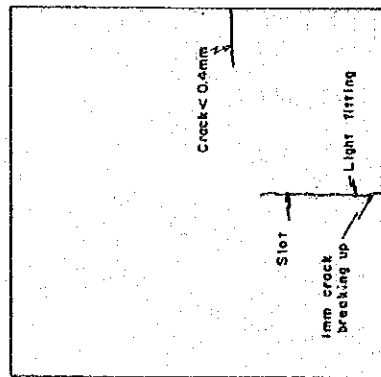
R19



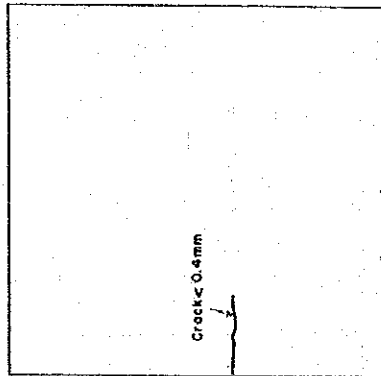
R20



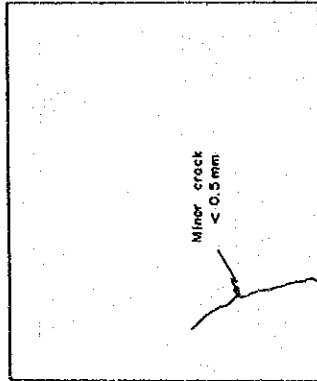
A1



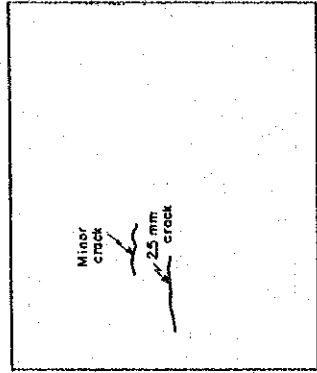
P14



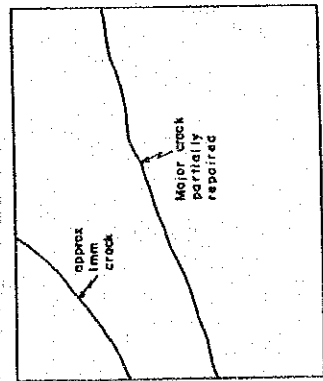
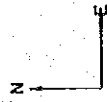
P13



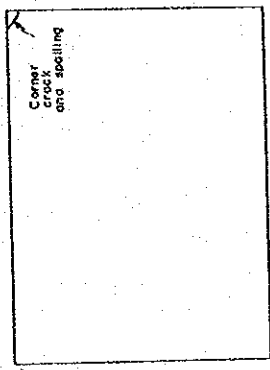
B1



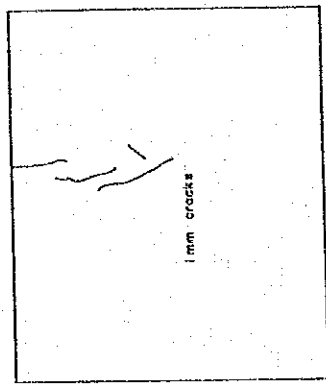
C1



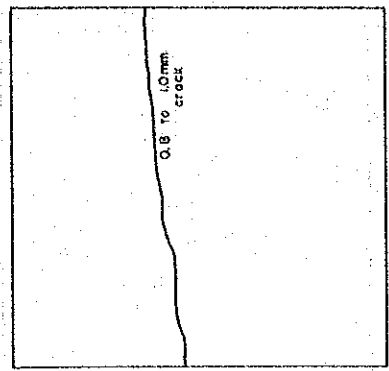
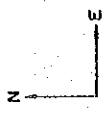
B3



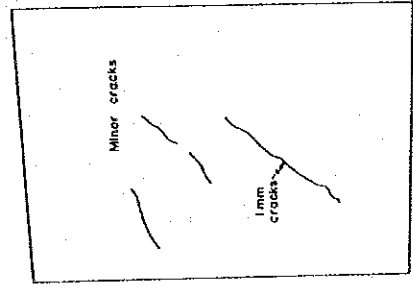
B4



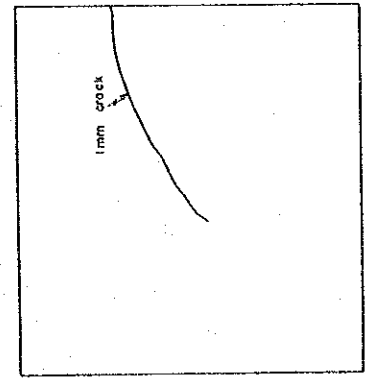
B7



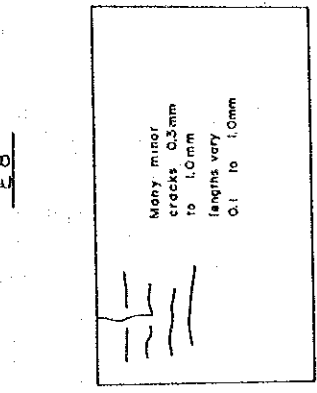
E8



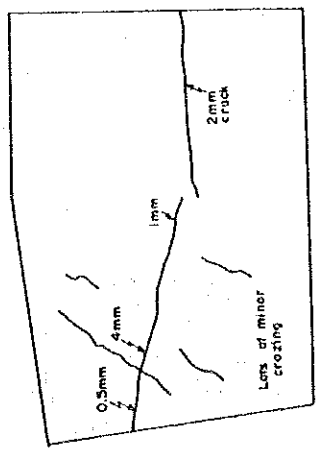
D5



G4

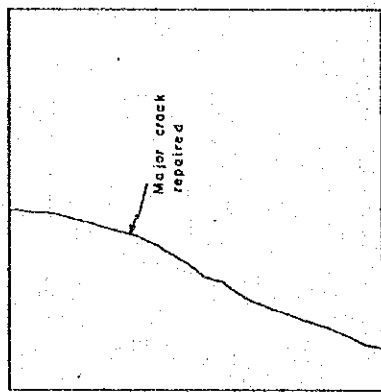
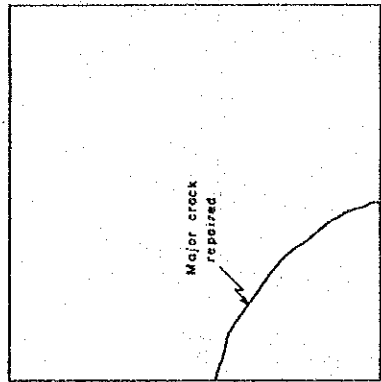
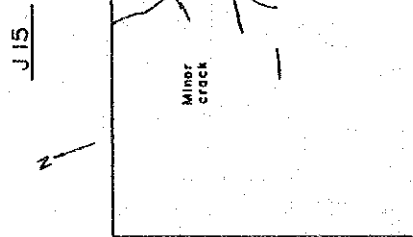
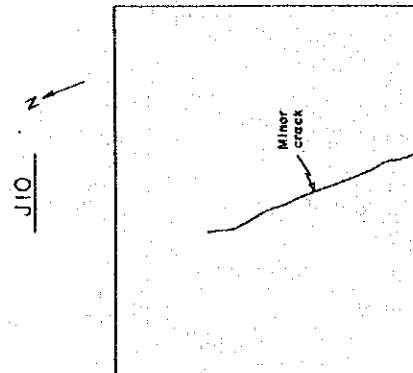
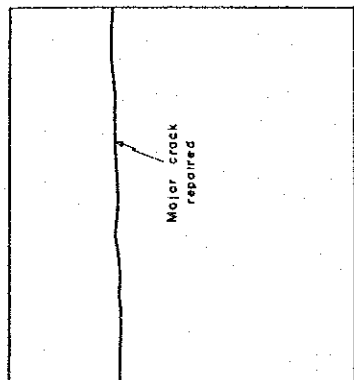
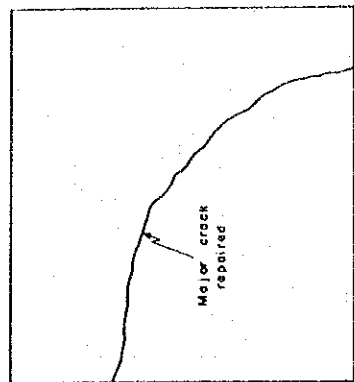
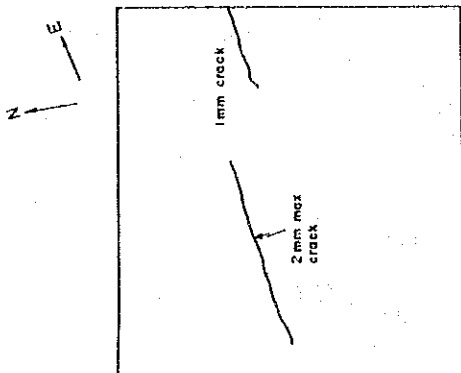


C3



D8

C-5-2-14 Condition of Cracks of Holding Apron



B8

C8

J15

J10

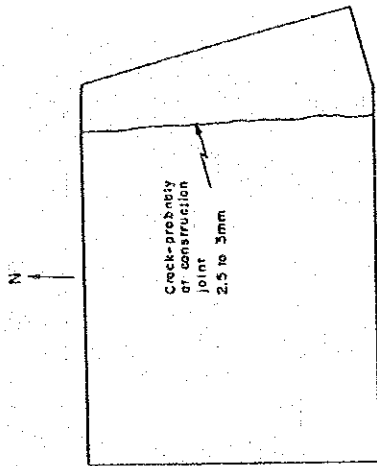
F13

F14

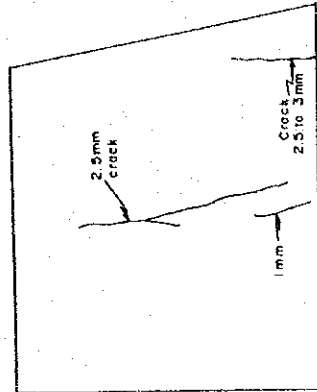
E12

E11

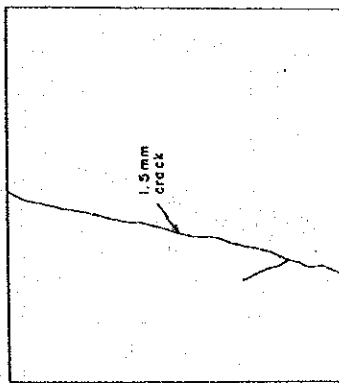
C-5-2-15 Condition of Cracks of Holding Apron



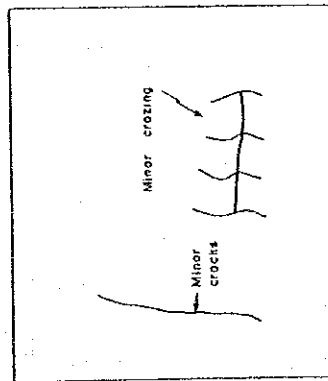
A6



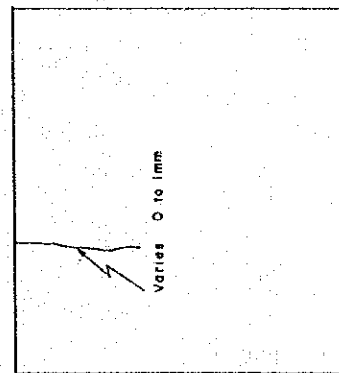
A7



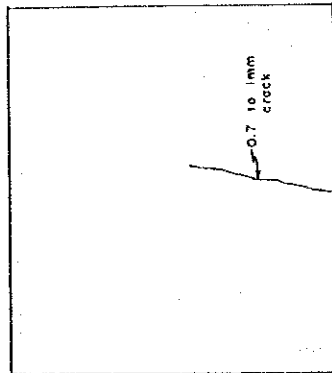
B17



J19

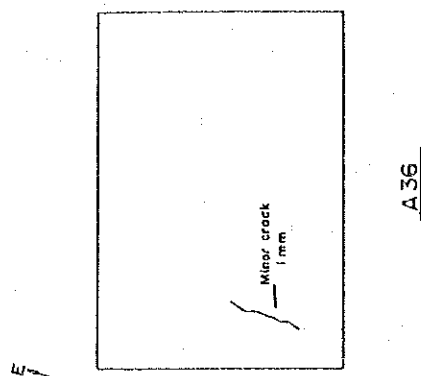


B16

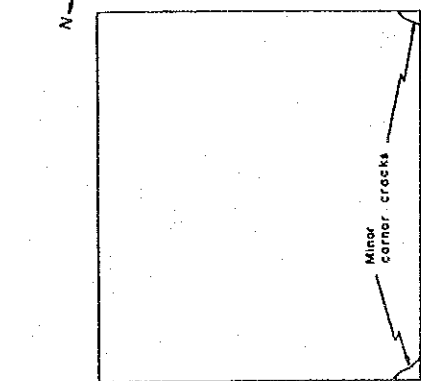


B18

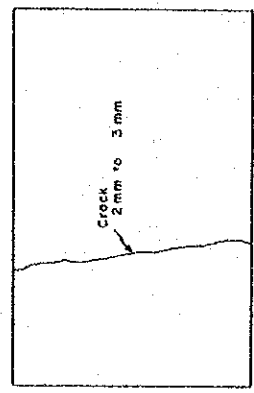
C-5-2-16 Condition of Cracks of Holding Apron



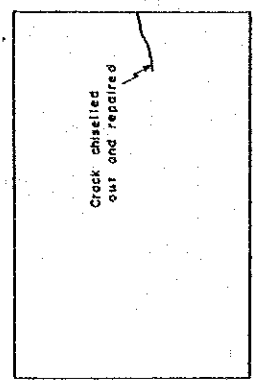
A36



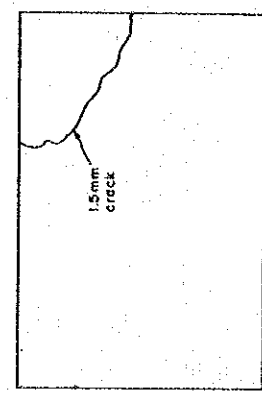
D28



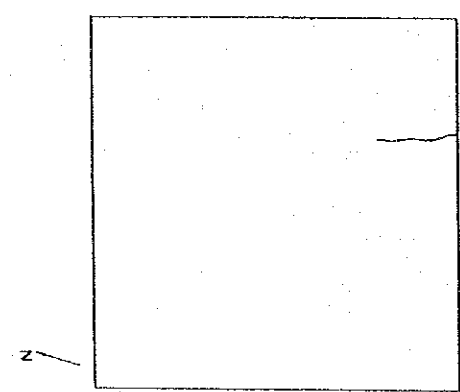
B36



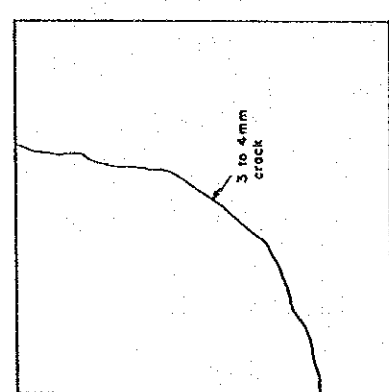
G28



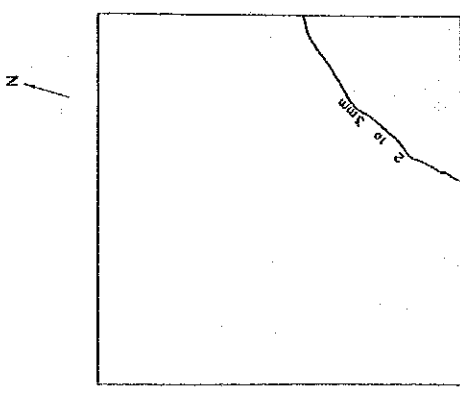
C36



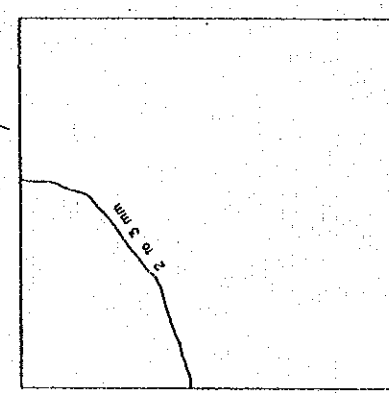
D33



D32

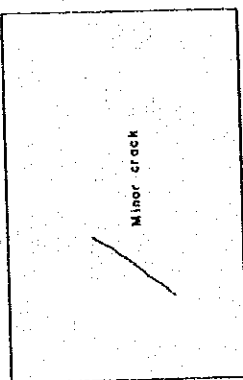


E33

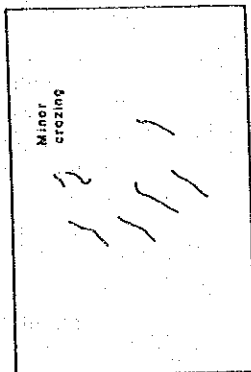


D32

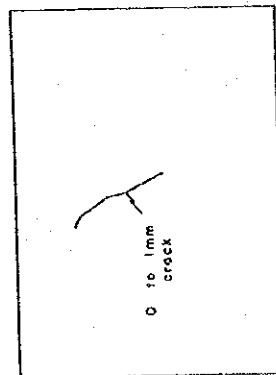
C-5-2-17 Condition of Cracks of Holding Apron



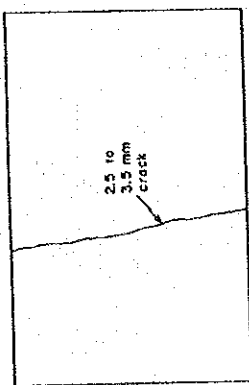
A 34



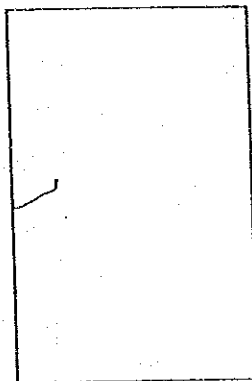
A 33



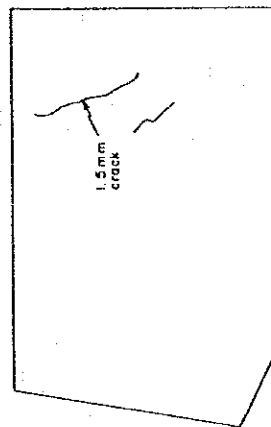
D 36



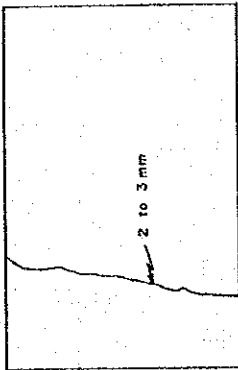
B 35



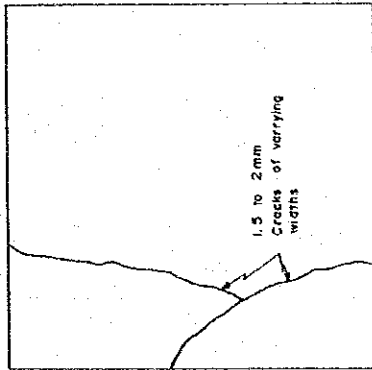
B 34



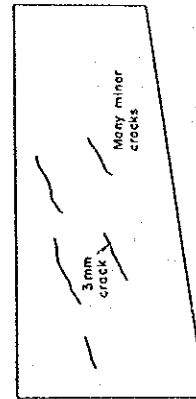
D 37



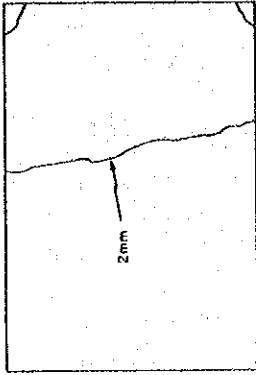
B 37



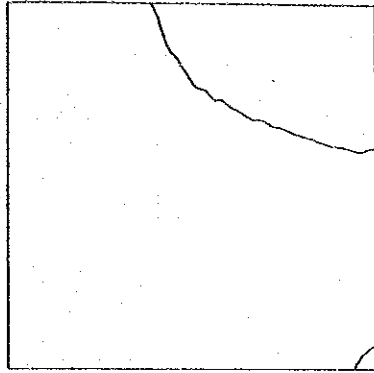
B 38



D 40



C 37

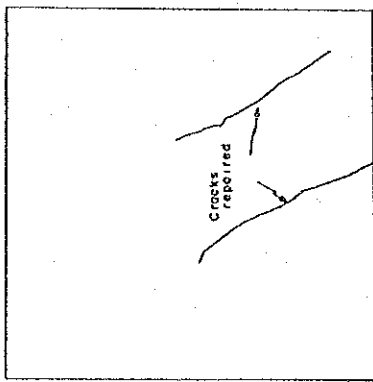


C 38

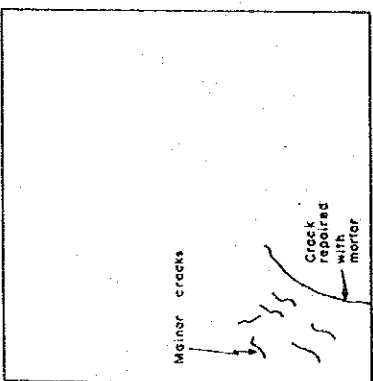


C-5-2-18 Condition of Cracks of Holding Apron

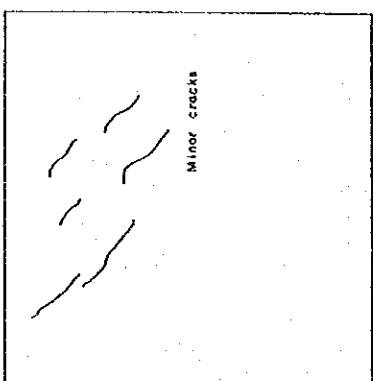
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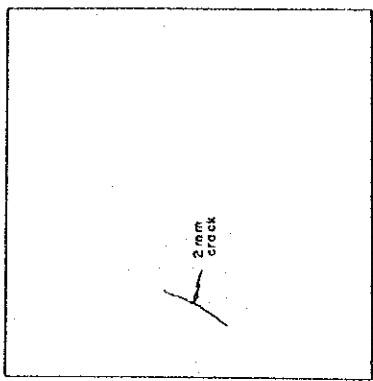
C45



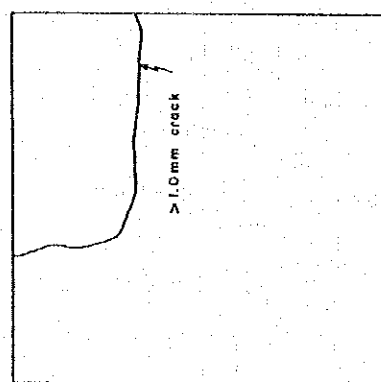
A46



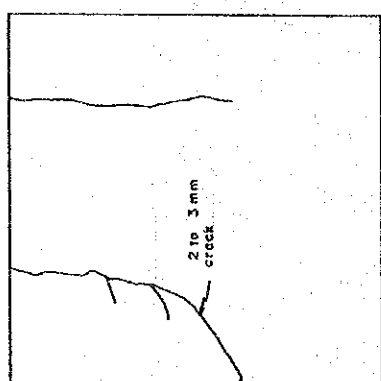
C39



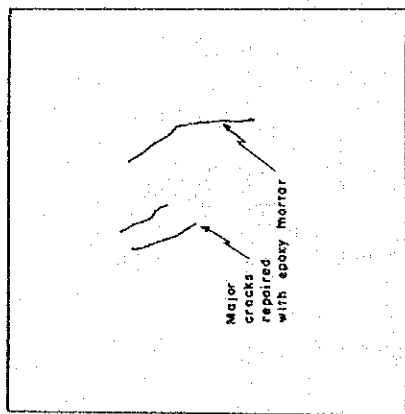
A41



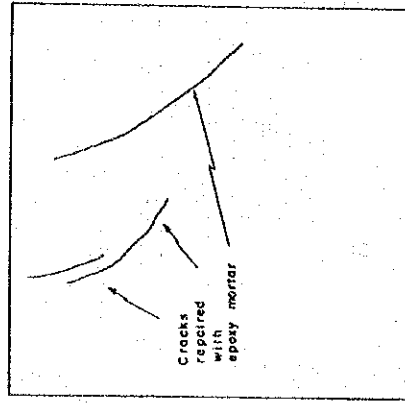
C46



B46



C43



C44

C-5-3 Analysis of Field Survey Results

(1) Design CBR of Subgrade

CBR values of test pits Nos. 8,9 and 10 are applied for runway and taxiway and the design CBR can be calculated as follows.

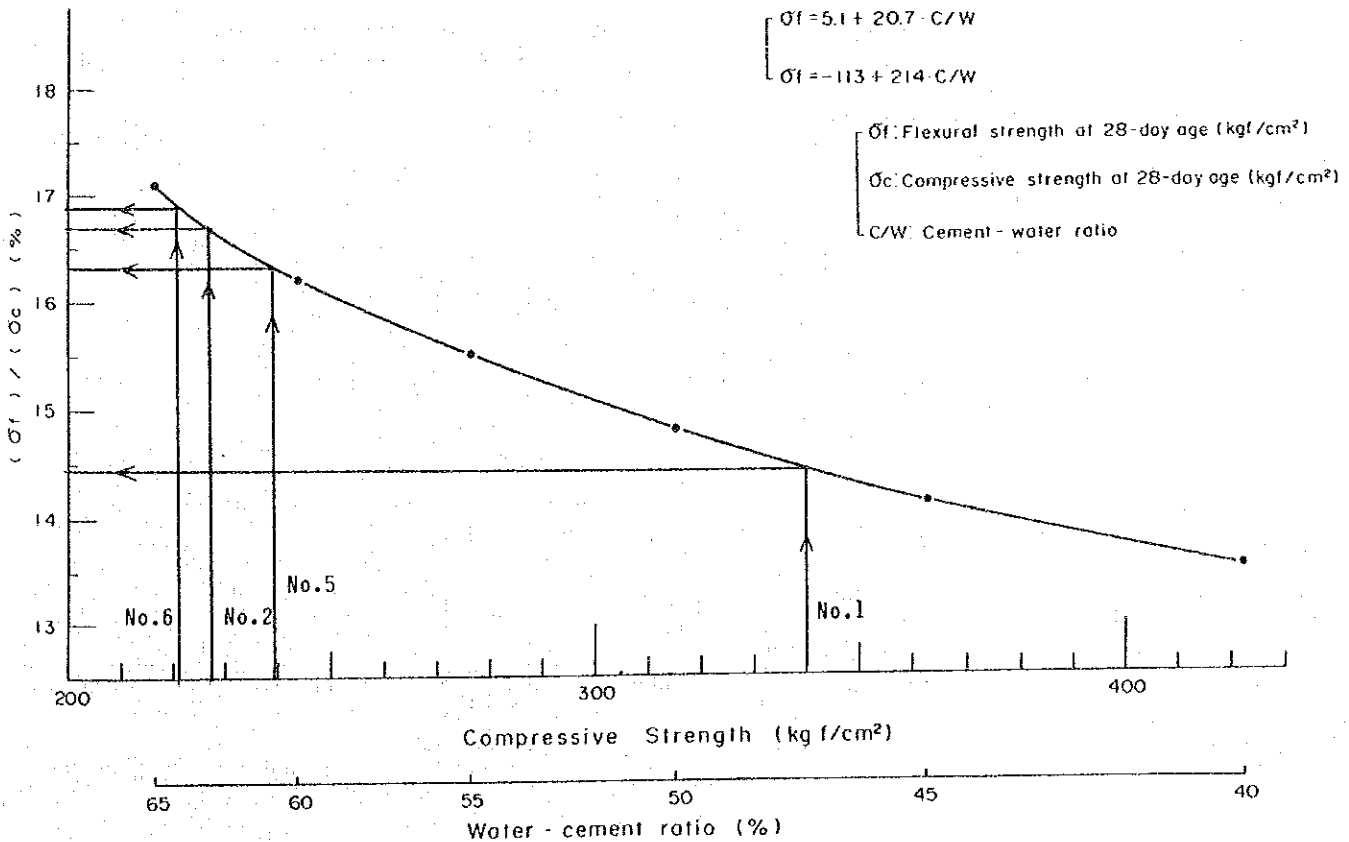
$$\text{Design CBR} = \frac{7.2+7.0+7.2}{3} - \frac{7.2-7.0}{2.547} = 7.1 \dots\dots 7\%$$

CBR values of test pits Nos. 1,2,3 and 5 are applied for the main and holding apron and the design CBR can be calculated as follows.

$$\text{Design CBR} = \frac{5.3+10.5+3.4+7.4}{4} - \frac{10.5-3.4}{3.089} = 4.3 \dots\dots 4\%$$

(2) Flexural Strength of Concrete Slab

From C-5-3-1 the flexural strength is estimated as shown in C-5-3-2.



C-5-3-1 Relation between Compressive and Flexural Strengths of Concrete

(3) Equivalent Conversion Coefficient of Existing Premix

Because the Marshall stability of premix is more than 900 kg and no cracks are present on the existing flexible pavement, the equivalent conversion coefficient is considered to be 2.0.

(4) Equivalent Conversion Coefficient of Stabilized Soils

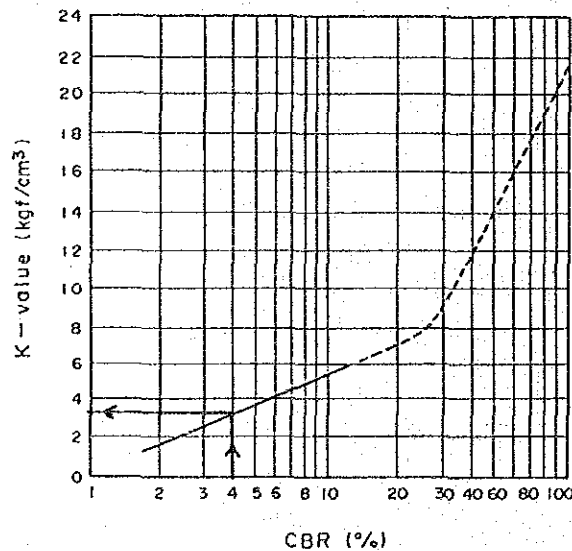
Because the stabilized soils can be estimated to be granular, the equivalent conversion coefficient is considered to be 1.0.

(5) Design K-value of Base Course of Rigid Pavement

Because the CBR of subgrade is 4%, the K-value of subgrade is estimated to be 3.5 kgf/cm^3 from C-5-3-3.

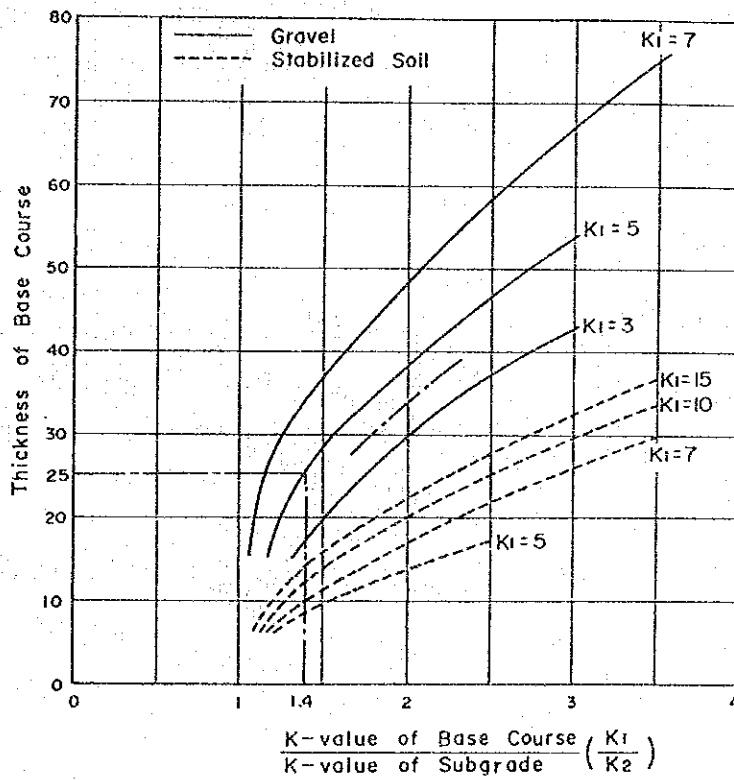
C-5-3-2 Flexural Strength of Concrete Slab

No. of Core	Estimated Strength (kgf/cm^2)
1	49
2	38
5	39
6	37
Average	40



C-5-3-3 Relation between CBR and K-value of Subgrade

Because the thickness of base and subbase courses of rigid pavement is 25cm, the design K-value of base course is estimated to be 5 kgf/cm³ from C-5-3-4.



C-5-3-4 Design Curve for Thickness of Base and Subbase Course

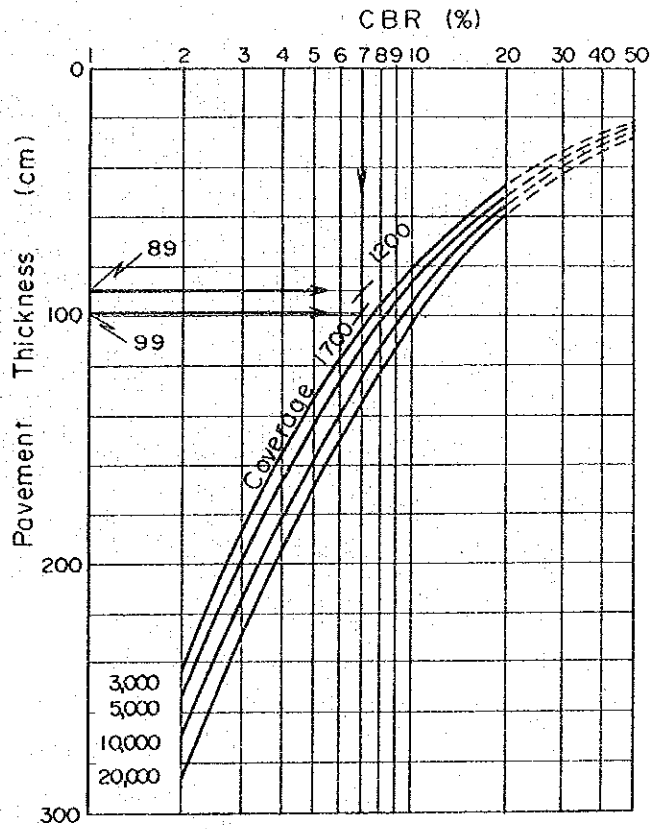
C-6 Evaluation of Pavements

C-6-1 Runway

The existing runway has flexible pavement of type R2 with the thickness of 89 cm and the CBR of 7%. The relation between the pavement thickness and the CBR of the subgrade is shown in C-6-2-1, which indicates the design coverage of the runway pavement to be 1200 times. On the basis of air transport demand forecast, this coverage is reached in 1992, and, therefore, the existing runway is considered to withstand the forecast aircraft load safely until the end of 1992.

C-6-2 Taxiway

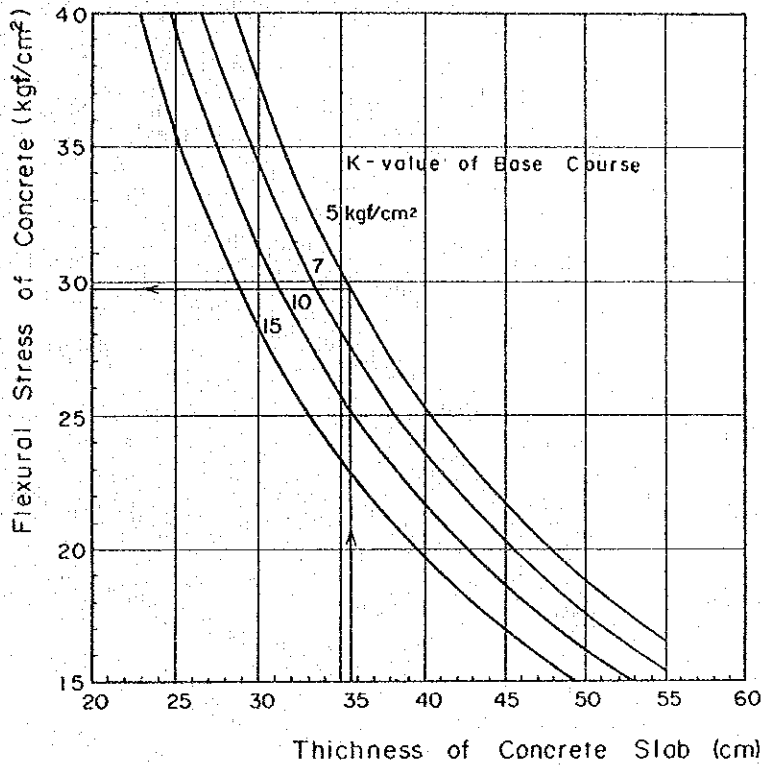
The existing taxiway has flexible pavement of Type T1 with the thickness of 99 cm and the CBR of 7%. C-6-2-1 indicates the design coverage of the taxiway pavement to be 1700 times. As in the case of the runway, this coverage is reached in 1992, and, therefore, the existing taxiway is considered to withstand safely the forecast aircraft load until the end of 1992.



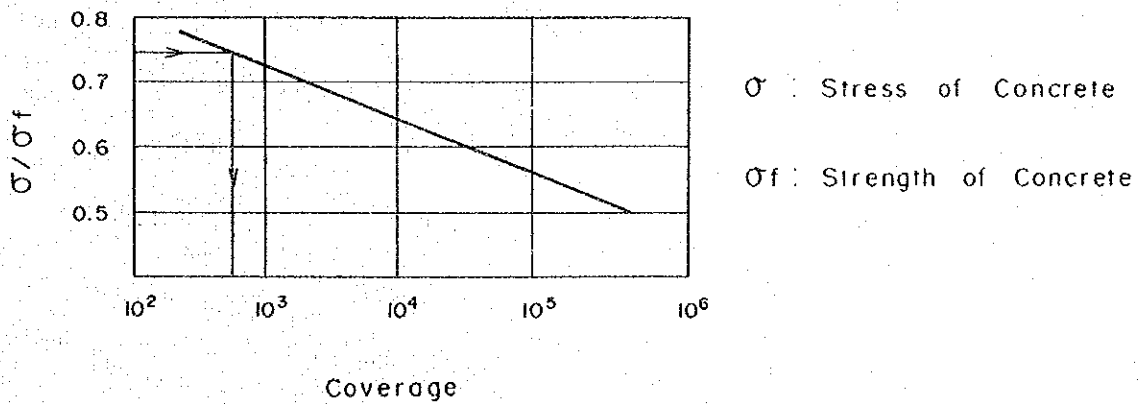
C-6-2-1 Design Curve of Flexible Pavement for B747

C-6-3 Apron

The existing apron has rigid pavement with the slab thickness of 35.6 cm, the K-value of 5 kgf/cu.cm and the flexural strength of concrete of 40 kgf/sq.cm. C-6-3-1 indicates the flexural stress of the concrete slab to be 29.8 kgf/sq.cm, and C-6-3-2 shows the design coverage of apron pavement to be 500 times. On the basis of air transport demand forecast, this coverage is reached between the end of 1987 and the end of 1988, and therefore, the existing apron is considered to withstand the forecast aircraft load safely until the middle of 1988.



C-6-3-1 Design Curve of Rigid Pavement for B747



C-6-3-2 Fatigue Curve of Concrete

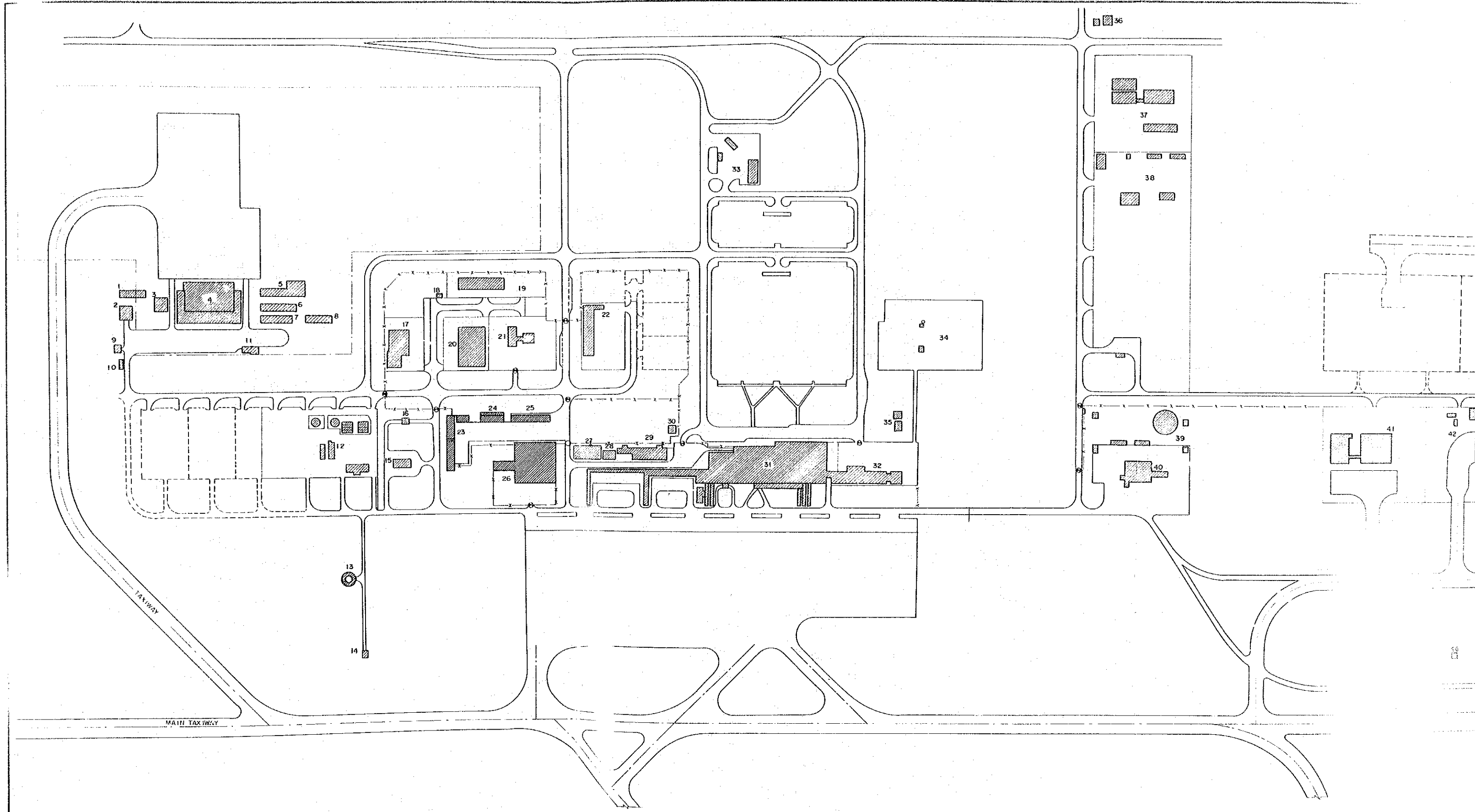
APPENDIX D

**SUPPLEMENTAL MATERIALS ON EXISTING
TERMINAL AREA FACILITIES (CHAPTER 3,
SUBCHAPTER 3-3**

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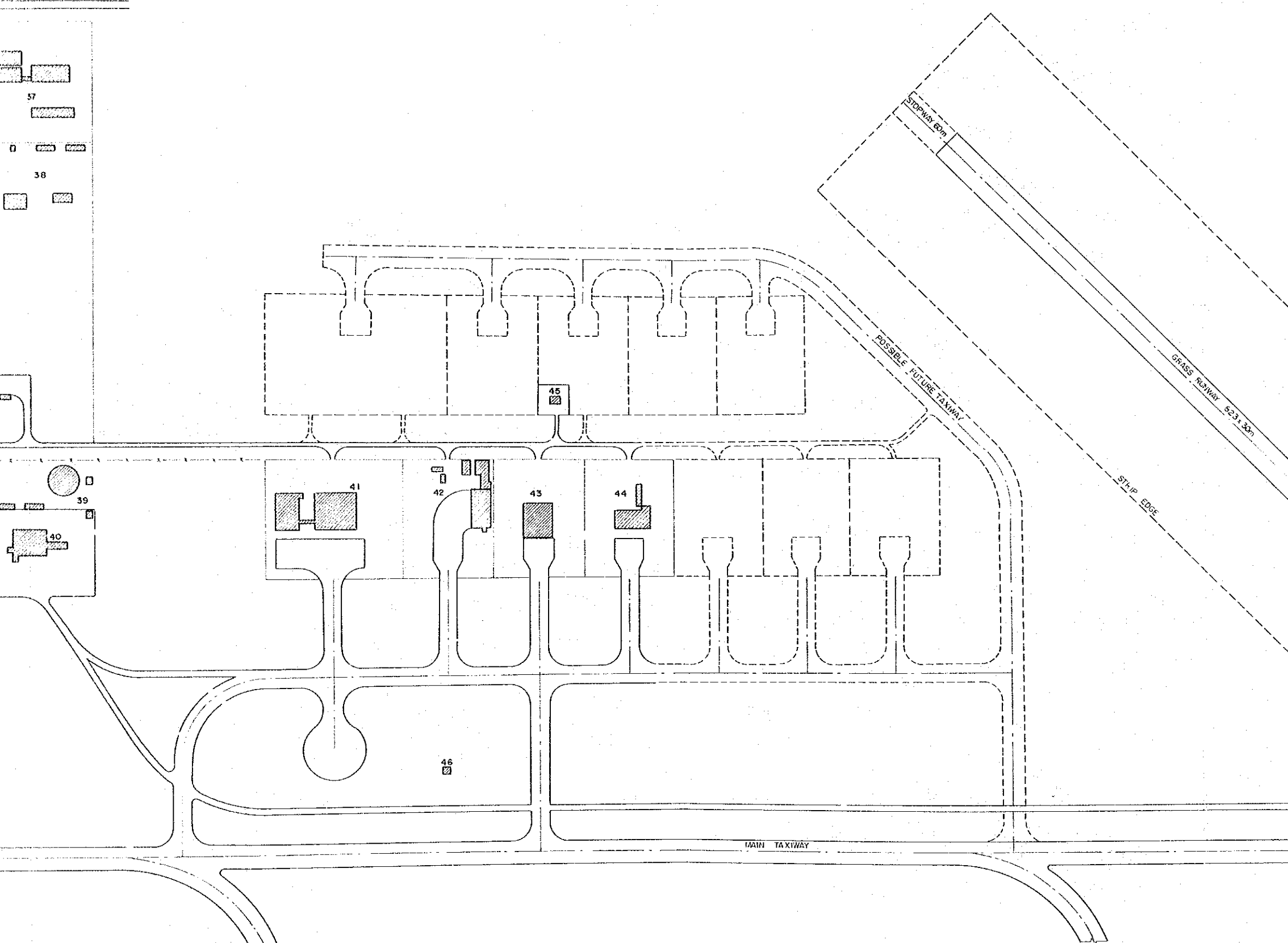
APPENDIX D SUPPLEMENTAL MATERIALS ON EXISTING TERMINAL AREA FACILITIES (CHAPTER 3, SUBCHAPTER 3-3)

D-1	Terminal Area	S-89
D-2	Passenger Terminal Building	S-91
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D-5-2	Capacity Analysis of Passenger Terminal Building	S-110



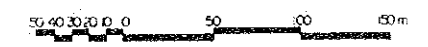
LUSAKA INTERNATIONAL AIRPORT DEVELOPMENT PROJECT
 REPUBLIC OF ZAMBIA

FEASIBILITY STUDY, 1985

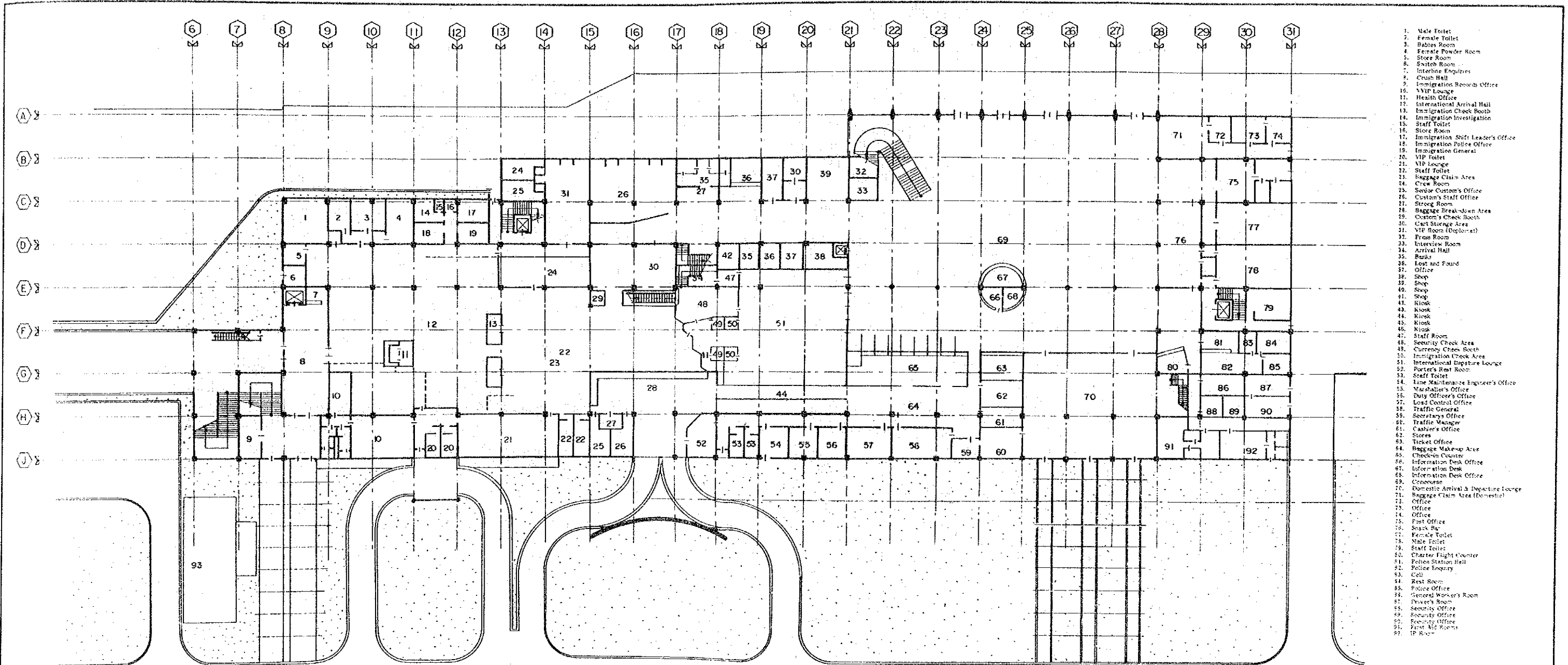


LEGEND

1. Spray Shop
2. Ramp Equipment Workshop
3. Carpenters Shop
4. Hangar
5. Workshop Block
6. Administration Block
7. Flight Crew Training Centre
8. Ground Engineering Training School
9. Substation NO. 10
10. Guard House
11. 500 KVA Sataion
12. Fuel Site
13. Radar Site
14. Substation NO. 11
15. Engineer's Workshop & Store
16. Sanitary Building
17. Freight Village Site (A.M.I.)
18. Freight Village Site (KARIBA Freight)
19. Freight Village Site (ZNCF)
20. Freight Village Site (Leopold Walford, Hill & Delamain)
21. Customs Building
22. Freight Village Site (Manica Freight Service)
23. Former Leopold Walford Freight Building
24. ZNCF Freight Building
25. ZNCF Freight Building
26. Freight Shed
27. Aircraft Services Store
28. Apron Stores (Catering)
29. Uplift Meals Kitchen
30. Substation NO. 6
31. Passenger Terminal Building
32. Control Building
33. Service Station
34. Meteorological Reserve
35. Substation NO. 5
36. Substation NO. 7
37. Telecommunications Reserve
38. P.W.D. Site
39. Water Reservoir
40. Fire Station
41. Government Flight Hangar
42. Operator Site (Mine Air Services)
43. Operator Site (Safari Air Services)
44. Operator Site (Jointair)
45. Operator Site (International Aeradio)
46. Substation NO. 4

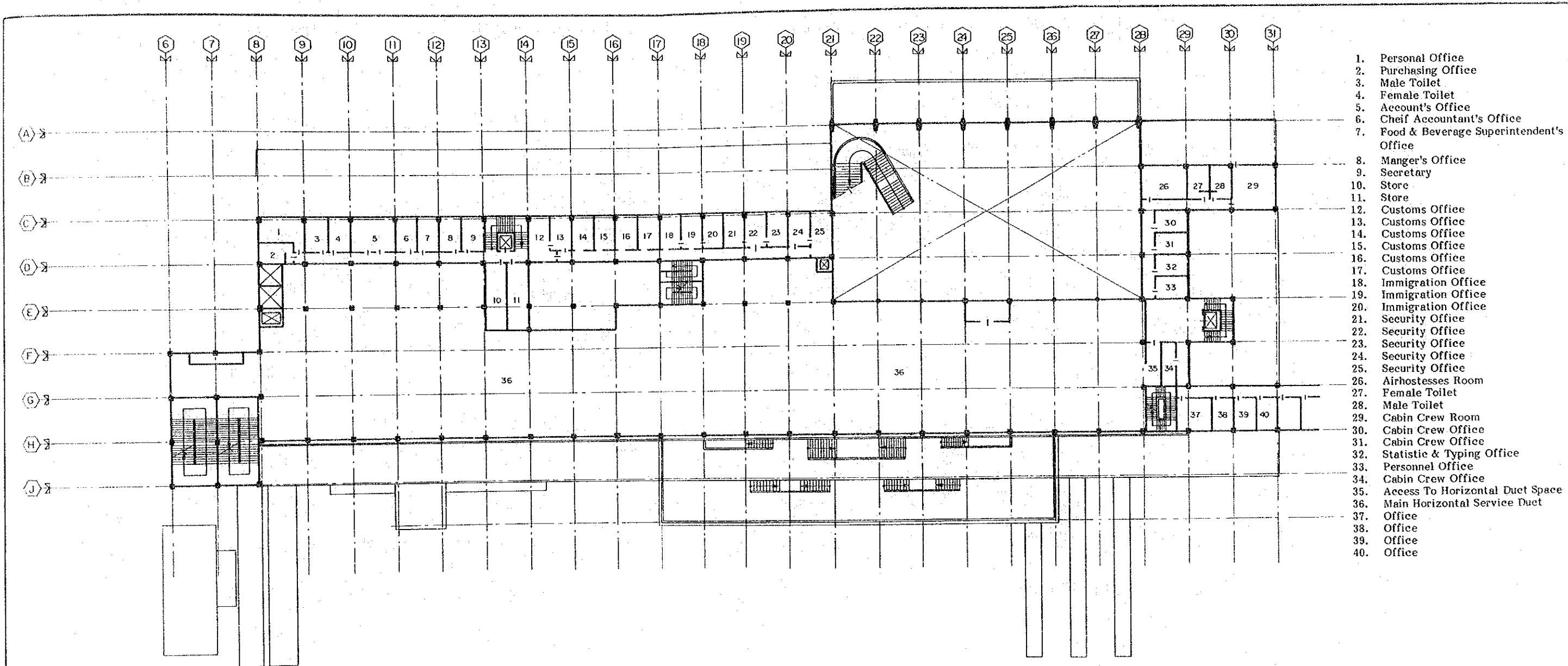


D - I JAPAN INTERNATIONAL COOPERATION AGENCY	TERMINAL AREA		DWG
	LAYOUT PLAN	EXISTING	NO.



GROUND FLOOR PLAN

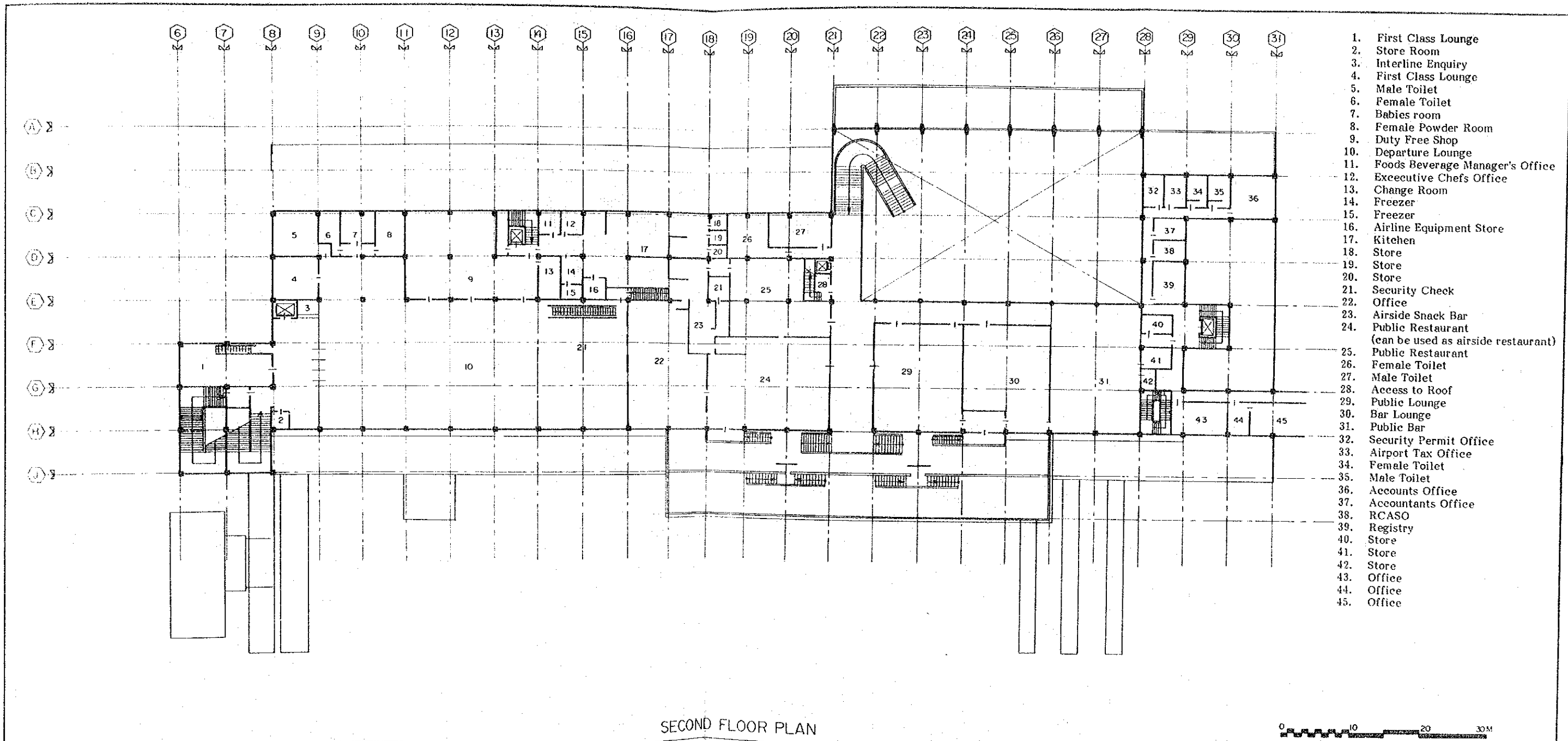
1. Male Toilet
2. Female Toilet
3. Baby Room
4. Female Powder Room
5. Store Room
6. Switch Room
7. Interline Enquiries
8. Crush Hall
9. Immigration Records Office
10. VIP Lounge
11. Health Office
12. International Arrival Hall
13. Immigration Check Booth
14. Immigration Investigation
15. Staff Toilet
16. Store Room
17. Immigration Shift Leader's Office
18. Immigration Police Office
19. Immigration General
20. VIP Toilet
21. VIP Lounge
22. Staff Toilet
23. Baggage Claim Area
24. Crew Room
25. Senior Custom's Office
26. Custom's Staff Office
27. Storage Room
28. Baggage Break-down Area
29. Custom's Check Booth
30. Cart Storage Area
31. VIP Room (Diplomat)
32. Press Room
33. Interview Room
34. Arrival Hall
35. Bank
36. Lost and Found
37. Office
38. Shop
39. Shop
40. Shop
41. Shop
42. Kiosk
43. Kiosk
44. Kiosk
45. Kiosk
46. Kiosk
47. Staff Room
48. Security Check Area
49. Currency Check Booth
50. Immigration Check Area
51. International Departure Lounge
52. Porter's Rest Room
53. Staff Toilet
54. Line Maintenance Engineer's Office
55. Marshal's Office
56. Duty Officer's Office
57. Load Control Office
58. Traffic General
59. Secretary's Office
60. Traffic Manager
61. Cashier's Office
62. Stores
63. Ticket Office
64. Baggage Make-up Area
65. Check-in Counter
66. Information Desk Office
67. Information Desk
68. Information Desk Office
69. Concessions
70. Domestic Arrival & Departure Lounge
71. Baggage Claim Area (Domestic)
72. Office
73. Office
74. Office
75. Post Office
76. Snack Bar
77. Female Toilet
78. Male Toilet
79. Staff Toilet
80. Charter Flight Counter
81. Police Station Hall
82. Police Enquiry
83. Cell
84. Rest Room
85. Police Office
86. General Worker's Room
87. Doctor's Room
88. Security Office
89. Security Office
90. Security Office
91. First Aid Room
92. IP Room
93. [Unlabeled]



- 1. Personal Office
- 2. Purchasing Office
- 3. Male Toilet
- 4. Female Toilet
- 5. Account's Office
- 6. Chief Accountant's Office
- 7. Food & Beverage Superintendent's Office
- 8. Manger's Office
- 9. Secretary
- 10. Store
- 11. Store
- 12. Customs Office
- 13. Customs Office
- 14. Customs Office
- 15. Customs Office
- 16. Customs Office
- 17. Customs Office
- 18. Immigration Office
- 19. Immigration Office
- 20. Immigration Office
- 21. Security Office
- 22. Security Office
- 23. Security Office
- 24. Security Office
- 25. Security Office
- 26. Airhostesses Room
- 27. Female Toilet
- 28. Male Toilet
- 29. Cabin Crew Room
- 30. Cabin Crew Office
- 31. Cabin Crew Office
- 32. Statistic & Typing Office
- 33. Personnel Office
- 34. Cabin Crew Office
- 35. Access To Horizontal Duct Space
- 36. Main Horizontal Service Duct Office
- 37. Office
- 38. Office
- 39. Office
- 40. Office

FIRST FLOOR PLAN



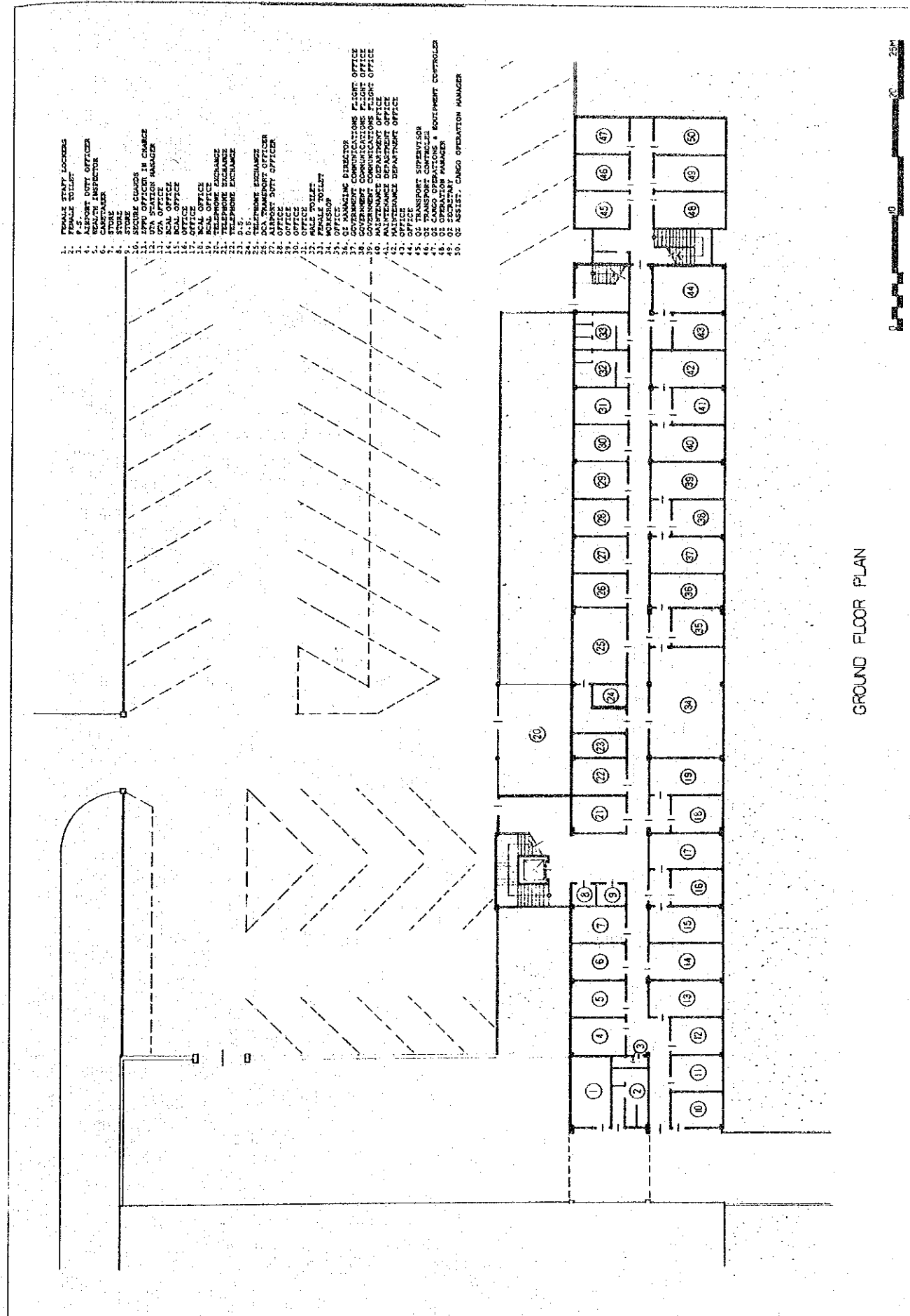


1. First Class Lounge
2. Store Room
3. Interline Enquiry
4. First Class Lounge
5. Male Toilet
6. Female Toilet
7. Babies room
8. Female Powder Room
9. Duty Free Shop
10. Departure Lounge
11. Foods Beverage Manager's Office
12. Executive Chef's Office
13. Change Room
14. Freezer
15. Freezer
16. Airline Equipment Store
17. Kitchen
18. Store
19. Store
20. Store
21. Security Check
22. Office
23. Airside Snack Bar
24. Public Restaurant (can be used as airside restaurant)
25. Public Restaurant
26. Female Toilet
27. Male Toilet
28. Access to Roof
29. Public Lounge
30. Bar Lounge
31. Public Bar
32. Security Permit Office
33. Airport Tax Office
34. Female Toilet
35. Male Toilet
36. Accounts Office
37. Accountants Office
38. RCASO
39. Registry
40. Store
41. Store
42. Store
43. Office
44. Office
45. Office

SECOND FLOOR PLAN

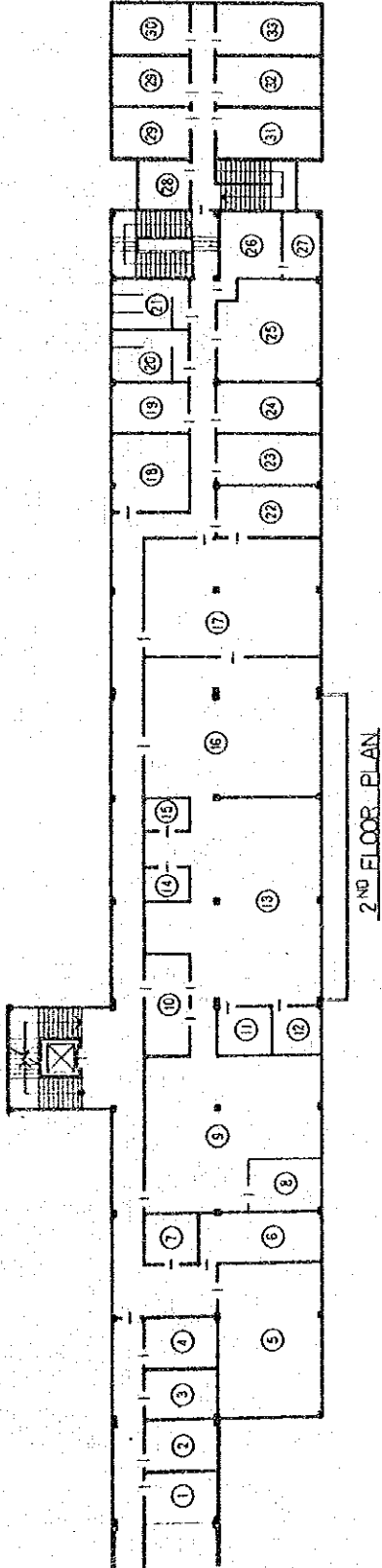


- 1. FEMALE STAFF LOCKERS
- 2. FEMALE TOILET
- 3. AIRPORT DUTY OFFICER
- 4. HEALTH INSPECTOR
- 5. CAPTAIN
- 6. STORE
- 7. STORE
- 8. STORE
- 9. STORE
- 10. STORE
- 11. STORE
- 12. STORE
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- 48. STORE
- 49. STORE
- 50. STORE



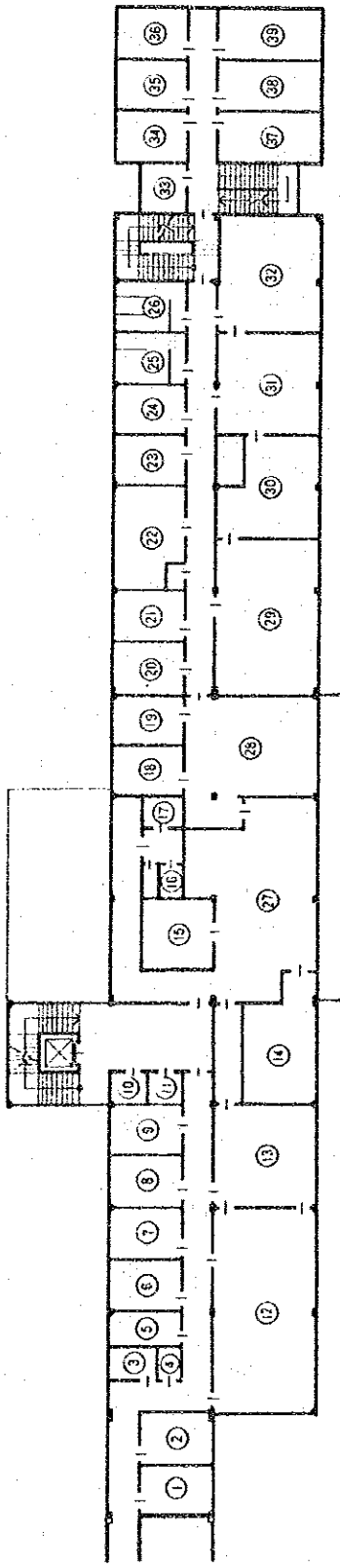
GROUND FLOOR PLAN

- 1. OFFICE
- 2. OFFICE
- 3. STORE
- 4. KITCHEN
- 5. RESCUE COORDINATION CENTER
- 6. OFFICE
- 7. STORE
- 8. OFFICE
- 9. INFORMATION CENTER
- 10. S. L. LOG STORE
- 11. OFFICE
- 12. WIRELESS TELEGRAPH ROOM
- 13. MEN
- 14. BOOT SPACE
- 15. CABLE SHAWT
- 16. MESSAGE SWITCHING CENTER
- 17. OFFICE
- 18. STORE
- 19. STORE
- 20. FEMALE TOILET
- 21. MALE TOILET
- 22. OFFICE
- 23. OFFICE
- 24. WORKSHOP
- 25. STORE
- 26. OFFICE
- 27. TOILET
- 28. INSTRUCTORS' ROOM
- 29. OFFICE
- 30. OFFICE
- 31. STUDENT'S ROOM
- 32. OFFICE
- 33. OFFICE

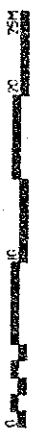


2ND FLOOR PLAN

- 1. OFFICE
- 2. OFFICE
- 3. KITCHEN
- 4. KITCHEN
- 5. STORE ROOM
- 6. OFFICE
- 7. OFFICE
- 8. OFFICE
- 9. STORE
- 10. STORE
- 11. STORE
- 12. OPERATIONS OFFICE
- 13. OPERATIONS OFFICE
- 14. OFFICE
- 15. BARRACK ROOM
- 16. BOOT SPACE
- 17. CABLE SHAWT
- 18. CABLE SHAWT
- 19. RADIO TELEPHONE
- 20. STORE
- 21. OFFICE
- 22. OFFICE
- 23. OFFICE
- 24. OFFICE
- 25. MALE TOILET
- 26. MALE TOILET
- 27. MET. BATHING ROOM
- 28. RADIO TELEPHONE ROOM
- 29. STORE
- 30. LECTURE ROOM/LIBRARY
- 31. TECHNICIANS WORKSHOP
- 32. STORE
- 33. OFFICE
- 34. OFFICE
- 35. OFFICE
- 36. OFFICE
- 37. OFFICE
- 38. OFFICE
- 39. OFFICE



1ST FLOOR PLAN

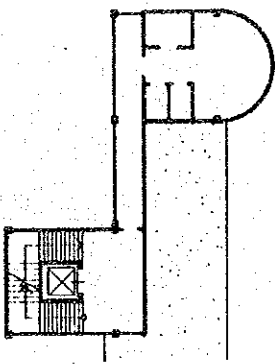


LUSAKA INTERNATIONAL AIRPORT DEVELOPMENT PROJECT
 FEASIBILITY STUDY, 1985
 REPUBLIC OF ZAMBIA

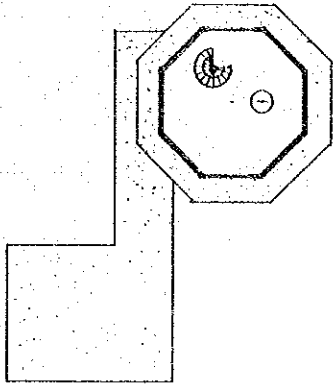
D-3-2

JAPAN INTERNATIONAL COOPERATION AGENCY
 CONTROL BUILDING
 1:1/2" FLOOR PLAN

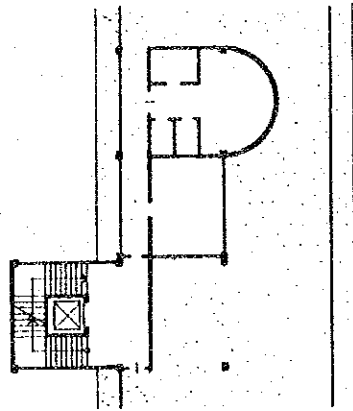
EXISTING



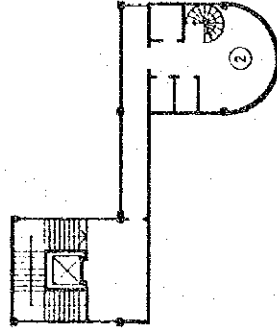
4TH FLOOR PLAN



6TH FLOOR PLAN



3RD FLOOR PLAN



5TH FLOOR PLAN

- 1. OFFICE ROOM
- 2. APPELLATE CONTROL ROOM

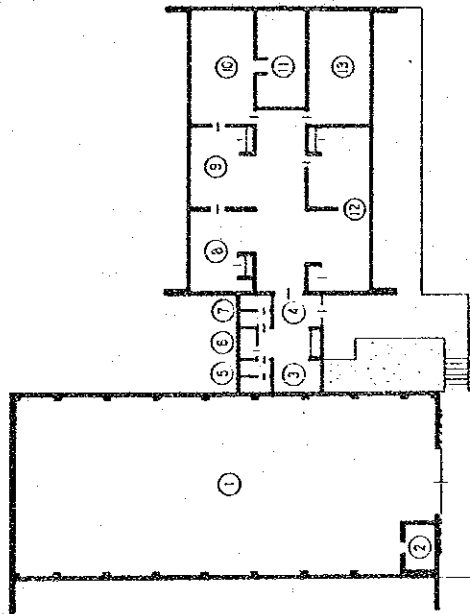
0 10 20 30 40 50 60 70 80 90 100

LUSAKA INTERNATIONAL AIRPORT DEVELOPMENT PROJECT
 FEASIBILITY STUDY, 1985
 REPUBLIC OF ZAMBIA

D-3-3
 JAPAN INTERNATIONAL COOPERATION AGENCY

CONTROL BUILDING
 3RD, 4TH, 5TH, 6TH FLOOR PLAN

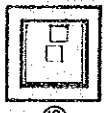
EXISTING



- 1. WARE HOUSE
- 2. STRONG ROOM
- 3. WAITING
- 4. ENTRANCE
- 5. WC
- 6. TEA
- 7. WC
- 8. CASH OFFICE
- 9. GENERAL OFFICE
- 10. SENIOR EXAMINING OFFICER
- 11. FILING
- 12. EXAMINING
- 13. BOARD ROOM

GROUND FLOOR PLAN

75M



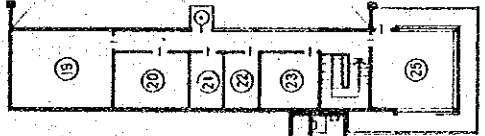
4TH FLOOR PLAN



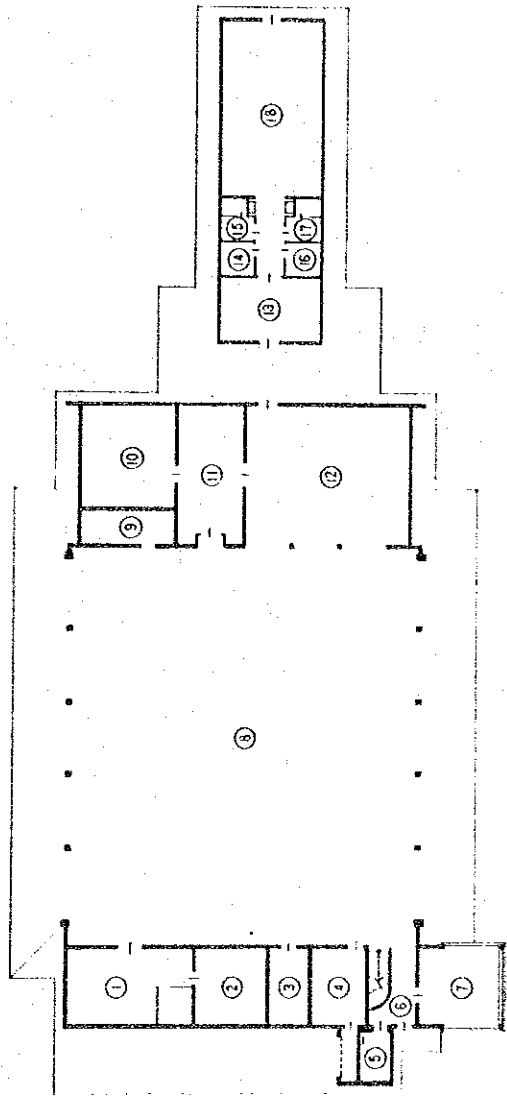
3RD FLOOR PLAN



2ND FLOOR PLAN



FIRST FLOOR PLAN

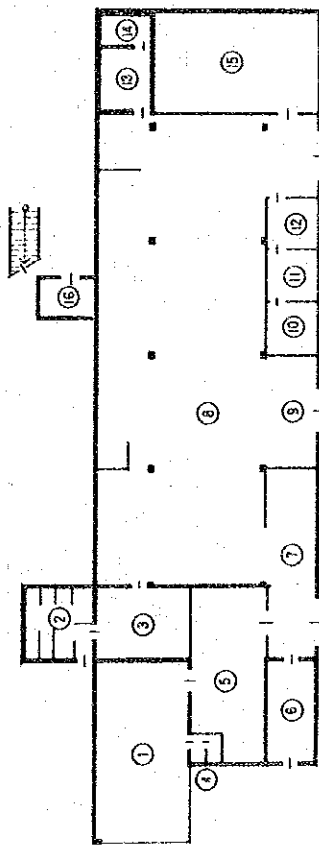


GROUND FLOOR PLAN

1. WORK SHOP
2. WORK SHOP
3. CLOTHING
4. HOSE REPAIRS
5. DRILL TOWER
6. ENTRANCE LOBBY
7. WATCH ROOM
8. APPLIANCE HALL
9. STORE
10. LAVATORY
11. CREW ROOM
12. MUSTER BAY & LOCKER BAY
13. DISPENSARY
14. BATH ROOM
15. LAVATORY
16. BATH ROOM
17. LAVATORY
18. CRASH AID BAY
19. FIRE OFFICER
20. DINING ROOM
21. KITCHEN
22. LAVATORY
23. TYPING ROOM
24. DRILL TOWER
25. SENIOR FIRE OFFICER
26. OBSERVATION ROOM



1. OPEN DRYING YARD
2. TOILET
3. STAFF
4. TOILET
5. LAUNDRY
6. GARAGE
7. HOLDING BAY
8. KITCHEN
9. DISPATCH BAY
10. SUPERVISOR
11. OFFICE
12. OFFICE
13. COLD ROOM
14. FREEZER
15. DRY GOODS STORE
16. SWITCH ROOM



GROUND FLOOR PLAN



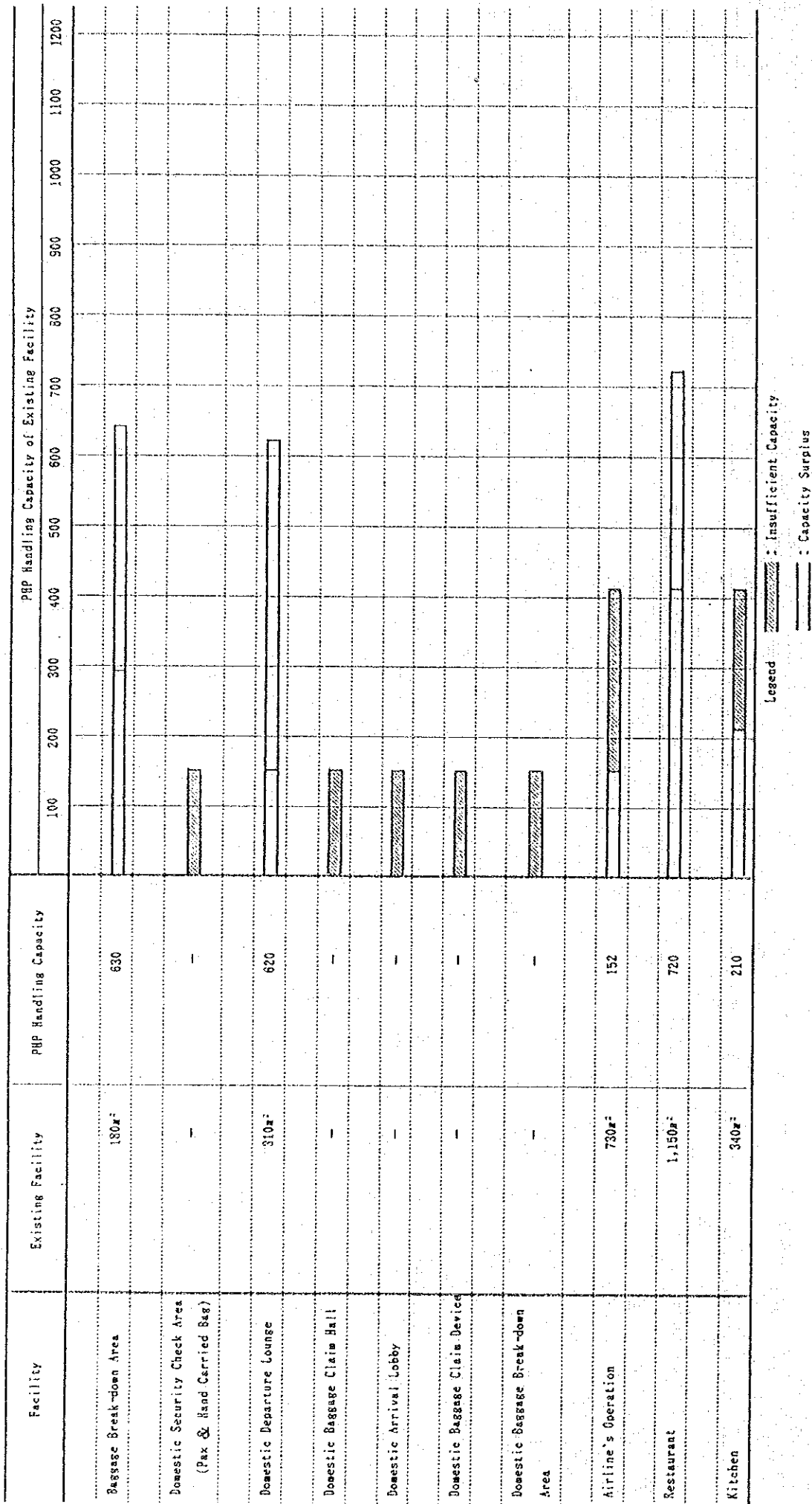
D-5 Capacity

D-5-1 Capacity of Major Terminal Area Facilities

Facility	A: Present Capacity	B: Required Capacity	A/B							Remarks				
			20	40	60	80	100	120	140		160	180	200%	
- PASSENGER TERMINAL BUILDING	Total Floor Area 12,600*	9,800*						129						There is ample space totally, but some processing areas have insufficient space.
- CARGO TERMINAL BUILDING	Total Floor Area 3,200*	3,800*				84								
- CONTROL BUILDING	Total Floor Area 4,000*	2,200*								174				Control building is not only for airport administration but also for airlines, meteorological central forecast office, etc.
- FIRE STATION	Fire Engine Water 28,000l CO ₂ 450kg D/P 140kg	Water 27,300l CO ₂ 450kg						103						Fire engines are not maintained well. Though they satisfy the requirements in terms of specifications, but not in effective capacity.
- CATERING FACILITY	Total Floor Area 880*	1,000*						68						
- CAR PARK	LOT 610	70											871	

* Required capacity is calculated based on the standard as shown in APPENDIX F-3.

D-5-2 Capacity Analysis of Passenger Terminal Building (Page 3 of 3)



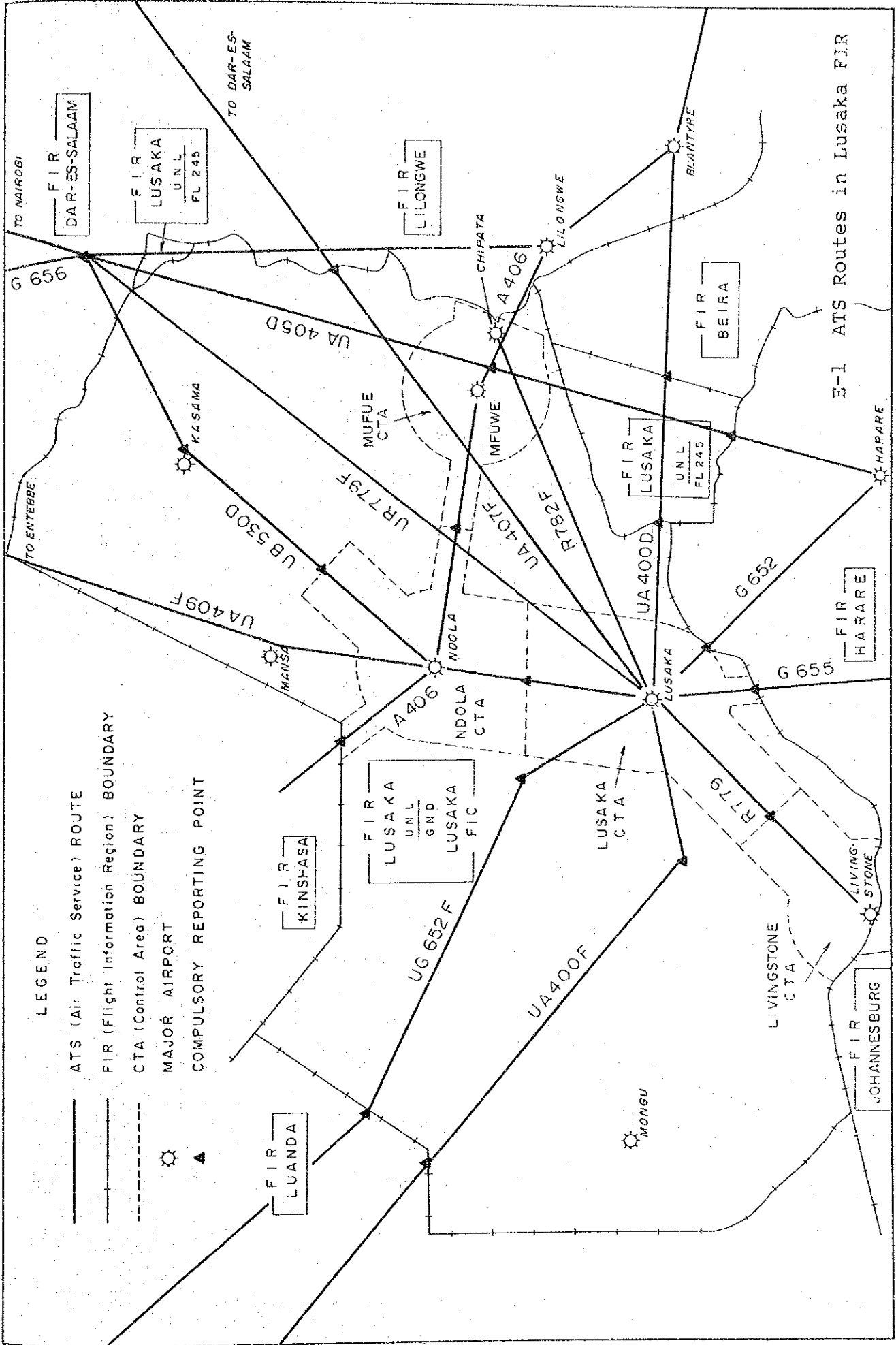
APPENDIX E

**SUPPLEMENTAL MATERIALS ON EXISTING
AIR NAVIGATION FACILITIES (CHAPTER 3,
SUBCHAPTER 3-4)**

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APPENDIX E SUPPLEMENTAL MATERIALS ON EXISTING AIR NAVIGATION FACILITIES (CHAPTER 3, SUBCHAPTER 3-4)

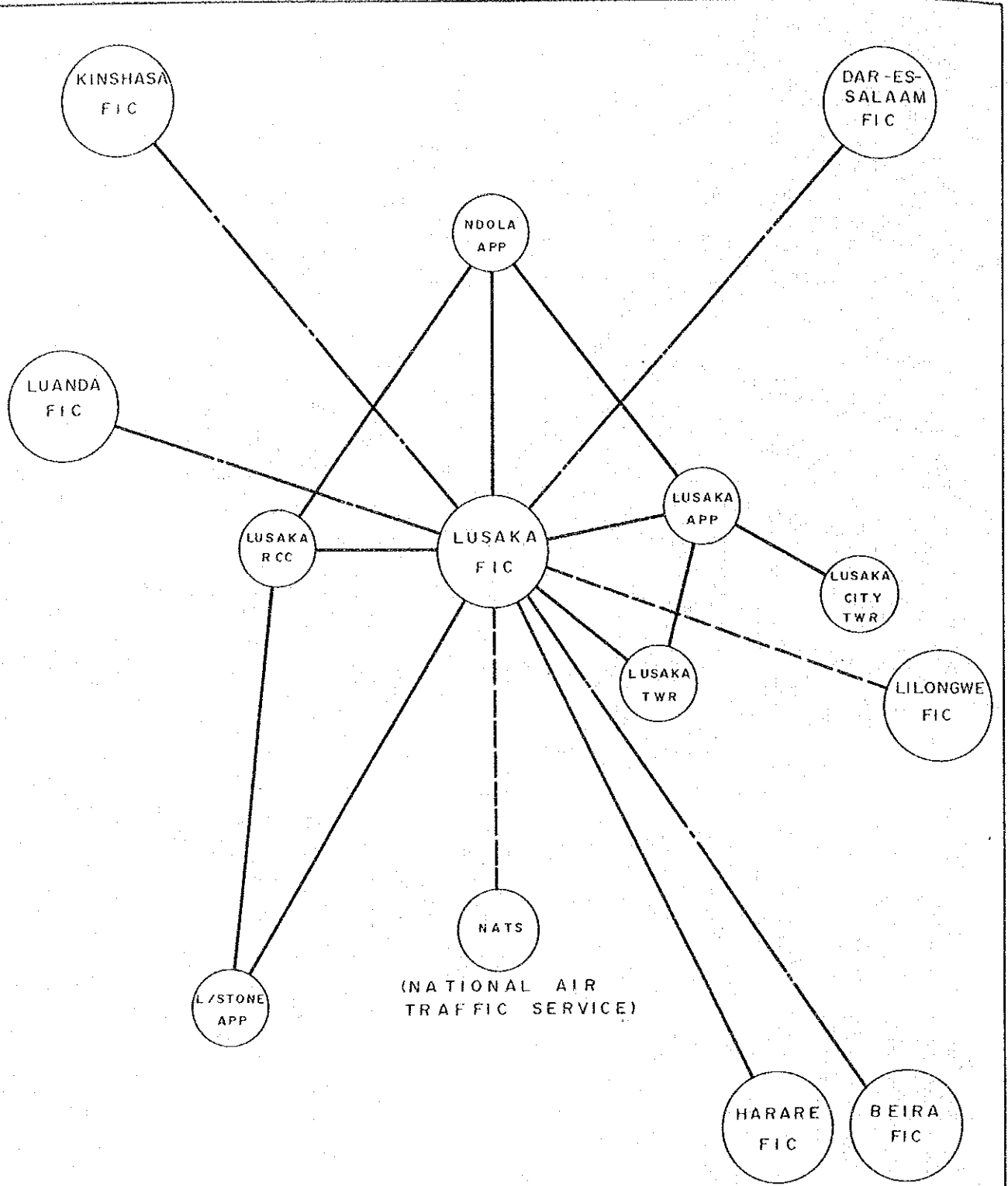
E-1	ATS Routes in Lusaka FIR	S-113
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E-3	FIC and Communication Centre Floor Layout	S-115
E-4	Meteorological Facilities	S-116
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LEGEND

- ATS (Air Traffic Service) ROUTE
- FIR (Flight Information Region) BOUNDARY
- - - CTA (Control Area) BOUNDARY
- ☼ MAJOR AIRPORT
- ▲ COMPULSORY REPORTING POINT

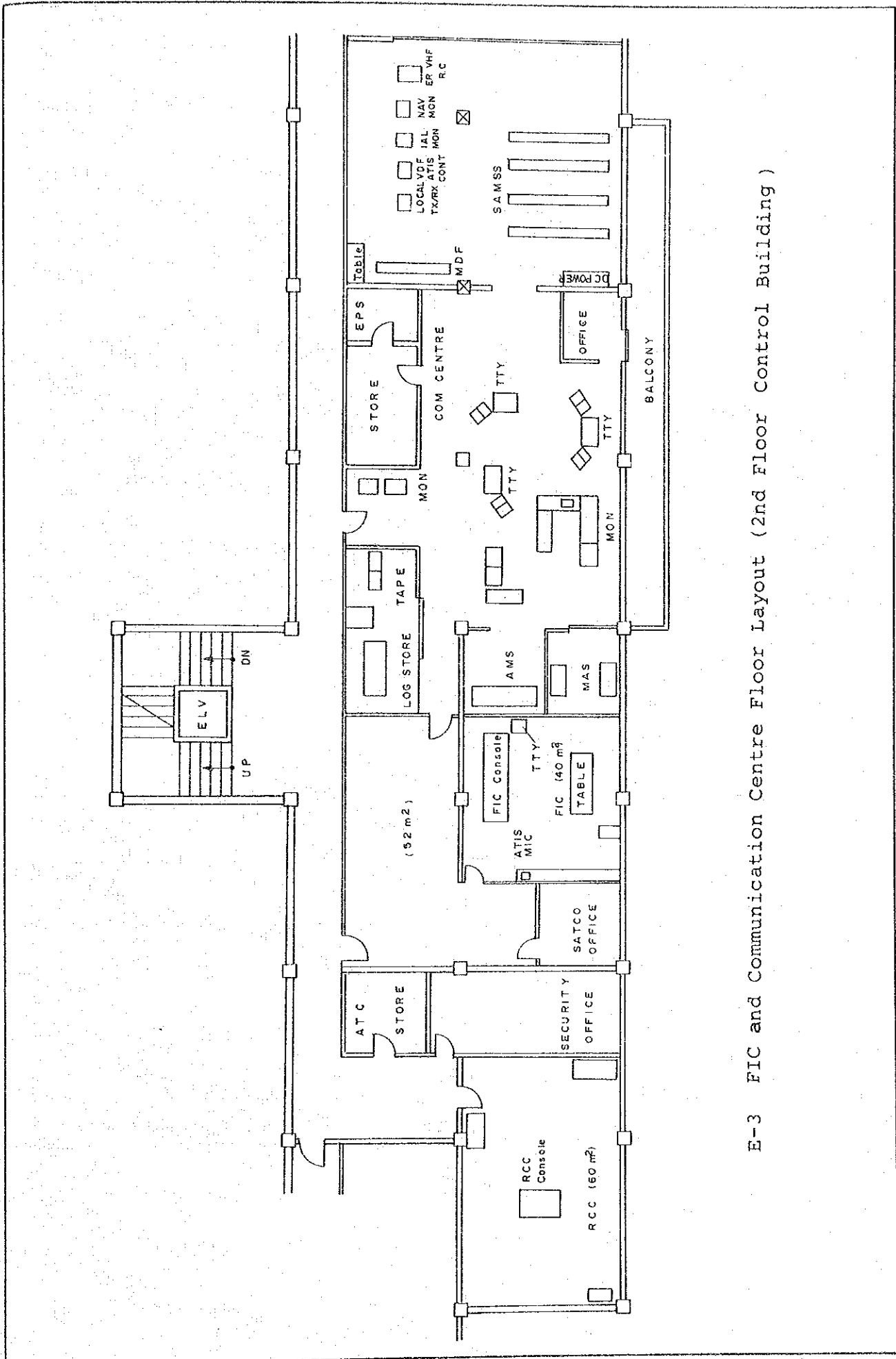
E-1 ATS Routes in Lusaka FIR



LEGEND

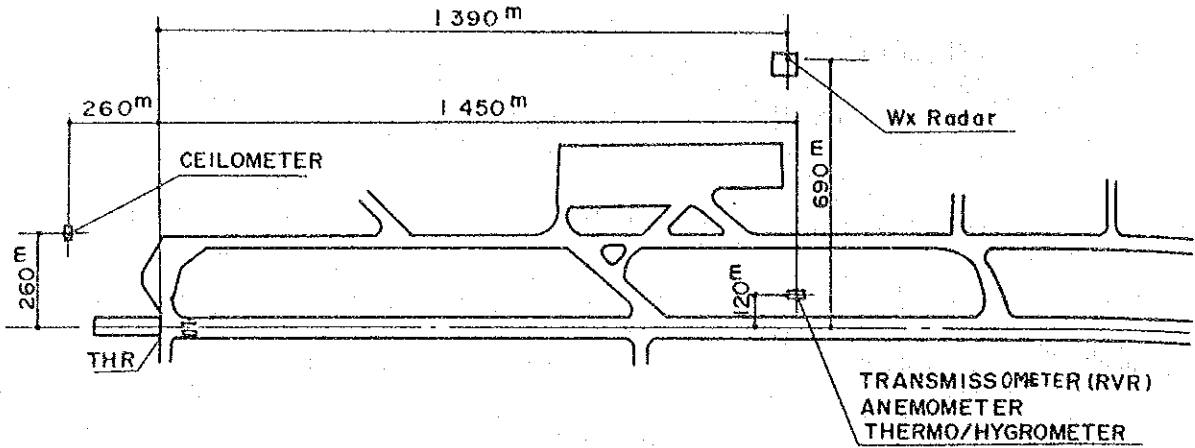
- LANDLINE TELEPHONY (LTF)
- - - - RADIO TELEPHONY (RTF)
- · - · ICAO RECOMMENDATION

E-2 ATS Direct Speech Circuits

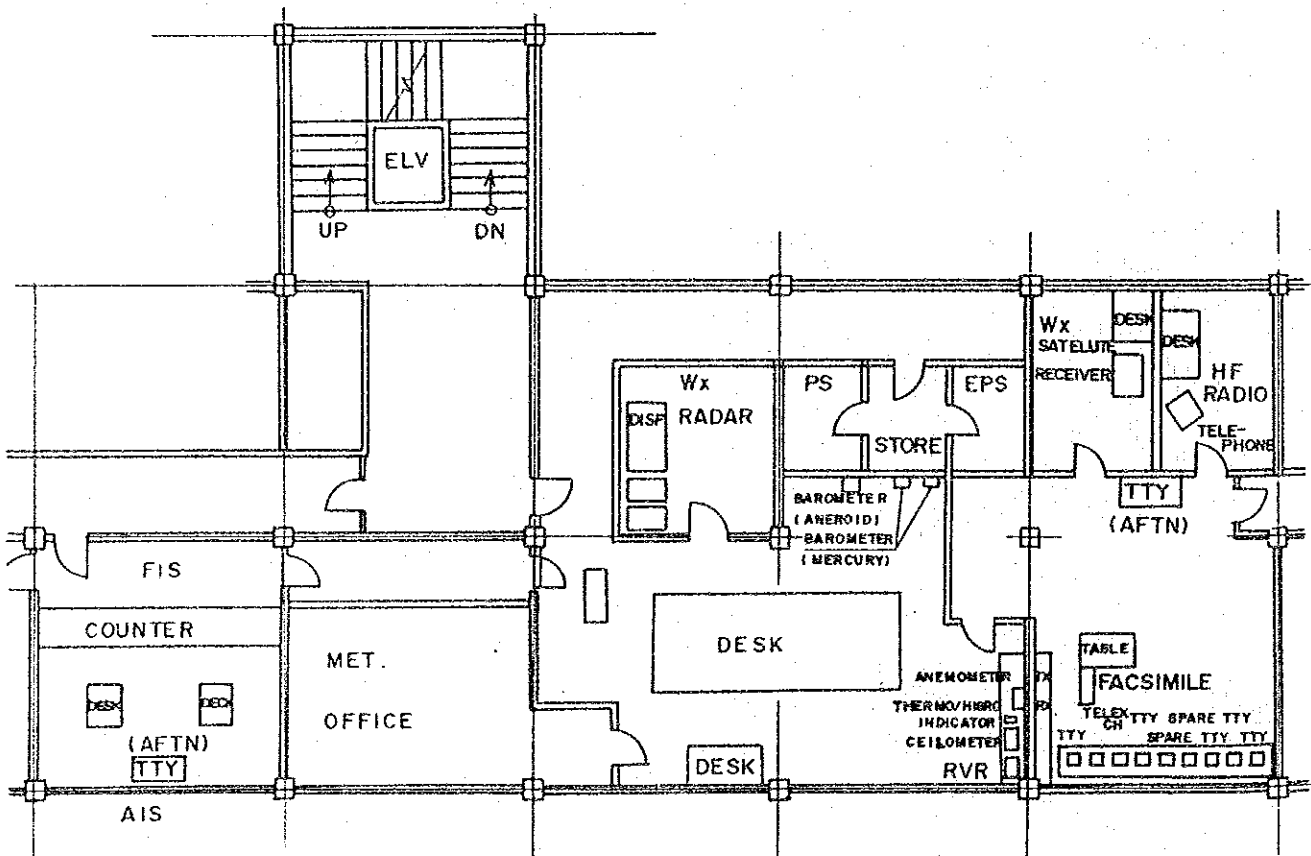


E-3 FIC and Communication Centre Floor Layout (2nd Floor Control Building)

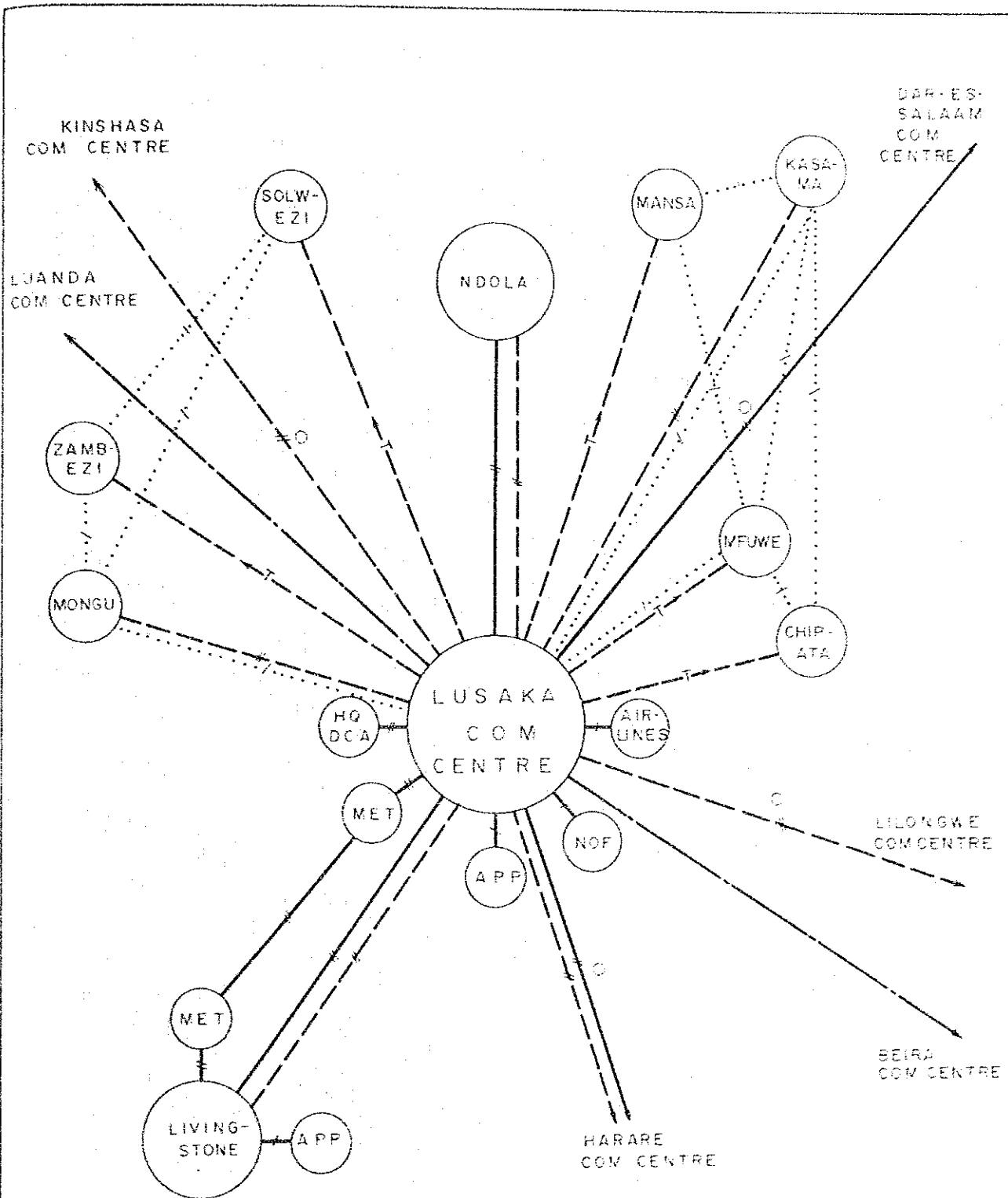
E-4 Meteorological Facilities



E-4-1 Meteorological Observation Site



E-4-2 Meteorological Office Layout (1st Floor) S=1/200



LEGEND

- LANDLINE TELETYPE (LTT) CIRCUIT
- RADIO TELETYPE (RTT) CIRCUIT
- MANUAL AI SIMPLEX (MAS)
- ICAO RECOMMENDATION
- / SIMPLEX CIRCUIT
- // DUPLEX CIRCUIT
- INTERNATIONAL CIRCUIT
- T → TX FROM LUSAKA ONLY

E-5 Aeronautical Fixed Telecommunications Network

