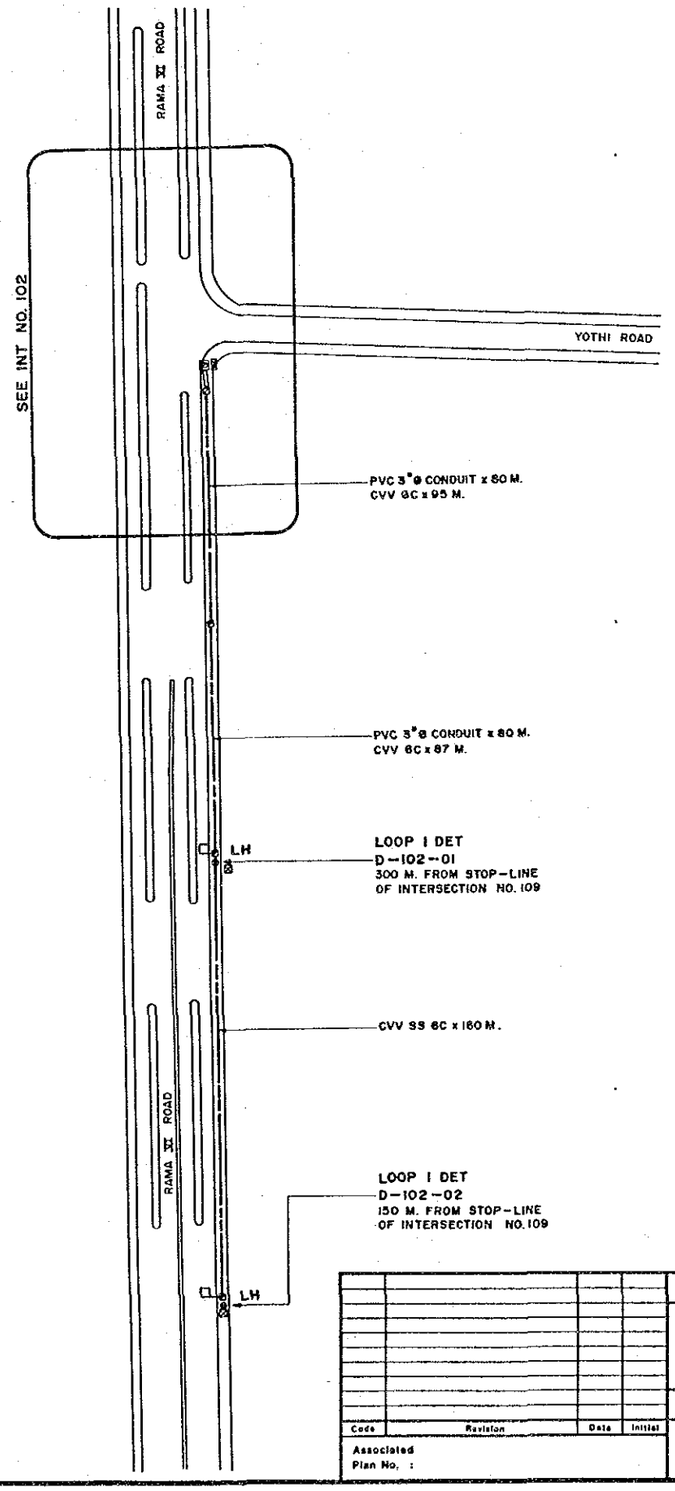
Detector Equipments List		
Drawing NO. 4102		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	–
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Fuse	–
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	–
8	Ultrasonic Detector Head	–
9	Ultrasonic Detector Feeder Cable	–
10	Supply Power Switch Box with Power Breaker	–
11	TOT Line Box	–
12	Type A Pole	–
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	–
15	Type C Pole with 8.5m Arm	–
16	Assembly for Installation on Pedestrian Overpass	–
17	Conduit PVC 3" or 70mm	160
18	Conduit Steel 3" or 70mm	–
19	Conduit Steel 39mm	–
20	Conduit Steel 28mm	–
21	Install Conduit under Asphalt Pavement	–
22	Install Conduit under Concrete Pavement or Sidewalk	160
23	Install Conduit on Pedestrian Overpass	–
24	Install Conduit on Riser Support pole	–
25	Handhole Type C	3
26	Aerial Cable Supporter	5
27	Detector Cable 6c	182
28	Detector Cable 8c	–
29	Detector Cable 12c	–
30	Detector Cable SS 6c	160
31	Detector Cable SS 8c	–
32	Detector Cable SS 12c	–
33	Power Cable	–
34	TOT line (CPV, 0.65mm, 1P)	–
35	Grounding Rod	2
36	Grounding Cable	10



Code	Revision	Date	Initial

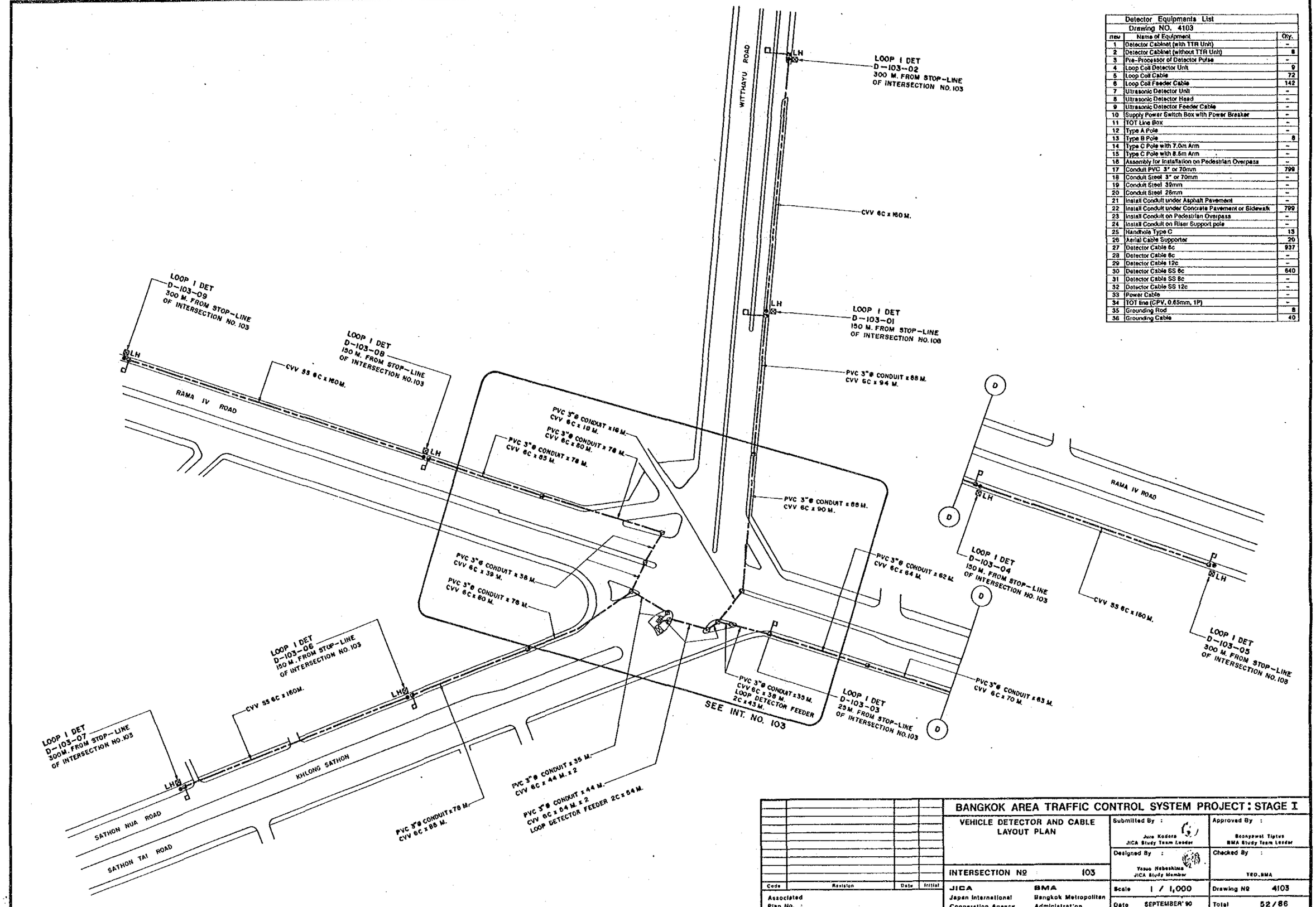
Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO. 102

Submitted By : Jun Kadera, JICA Study Team Leader	Approved By : Boonyawat Tiptus, BMA Study Team Leader
Designed By : Yasuo Kobashiwa, JICA Study Member	Checked By : TED, BMA
JICA Japan International Cooperation Agency / BMA Bangkok Metropolitan Administration	Scale 1 / 1,000
Date SEPTEMBER '90	Drawing NO. 4102
	Total 51 / 86



Detector Equipments List		
Drawing NO. 4103		
nos	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	8
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	9
5	Loop Coil Cable	72
6	Loop Coil Feeder Cable	142
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	8
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	799
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 32mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	799
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	13
26	Aerial Cable Supporter	20
27	Detector Cable 6c	937
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	640
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT Ene (CPV, 0.65mm, 1P)	-
35	Grounding Rod	8
36	Grounding Cable	40

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 103

Submitted By : Jure Kodera, JICA Study Team Leader

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Designed By : Yasuo Hebeshima, JICA Study Member

Checked By : YEO., BMA

JICA Japan International Cooperation Agency

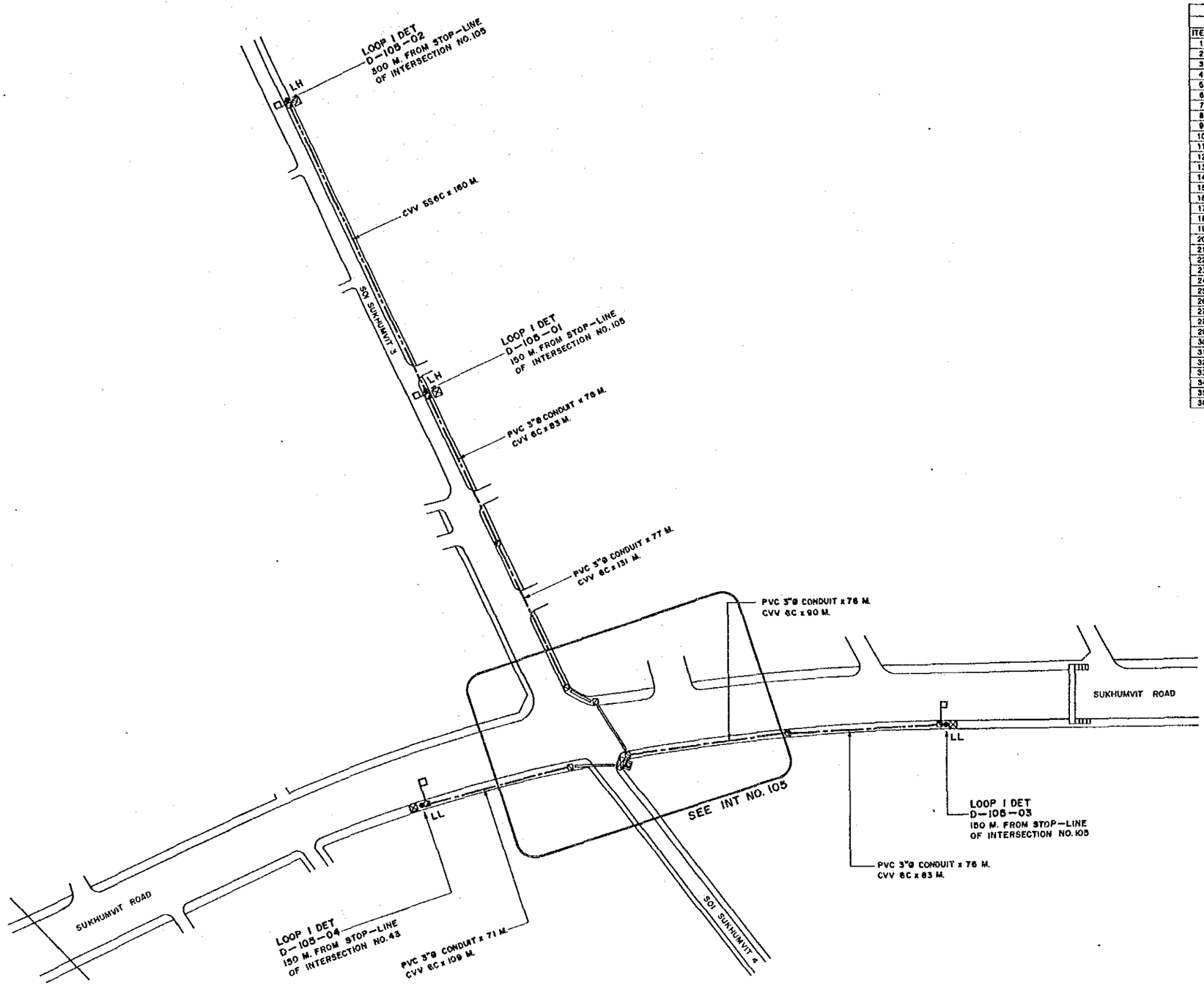
BMA Bangkok Metropolitan Administration

Scale 1 / 1,000

Drawing Nº 4103

Date SEPTEMBER '90

Total 52 / 86



Detector Equipments List

Drawing NO. 4105

ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	4
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	4
5	Loop Coil Cable	32
6	Loop Coil Feeder Cable	20
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	376
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	376
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	8
26	Aerial Cable Supportor	5
27	Detector Cable 6c	496
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	160
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	4
36	Grounding Cable	20

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 105

Submitted By : Jure Kedera, JICA Study Team Leader

Approved By : Boonyawat Tipiee, BMA Study Team Leader

Designed By : Yewe Nobeshima, JICA Study Member

Checked By : TEO, BMA

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

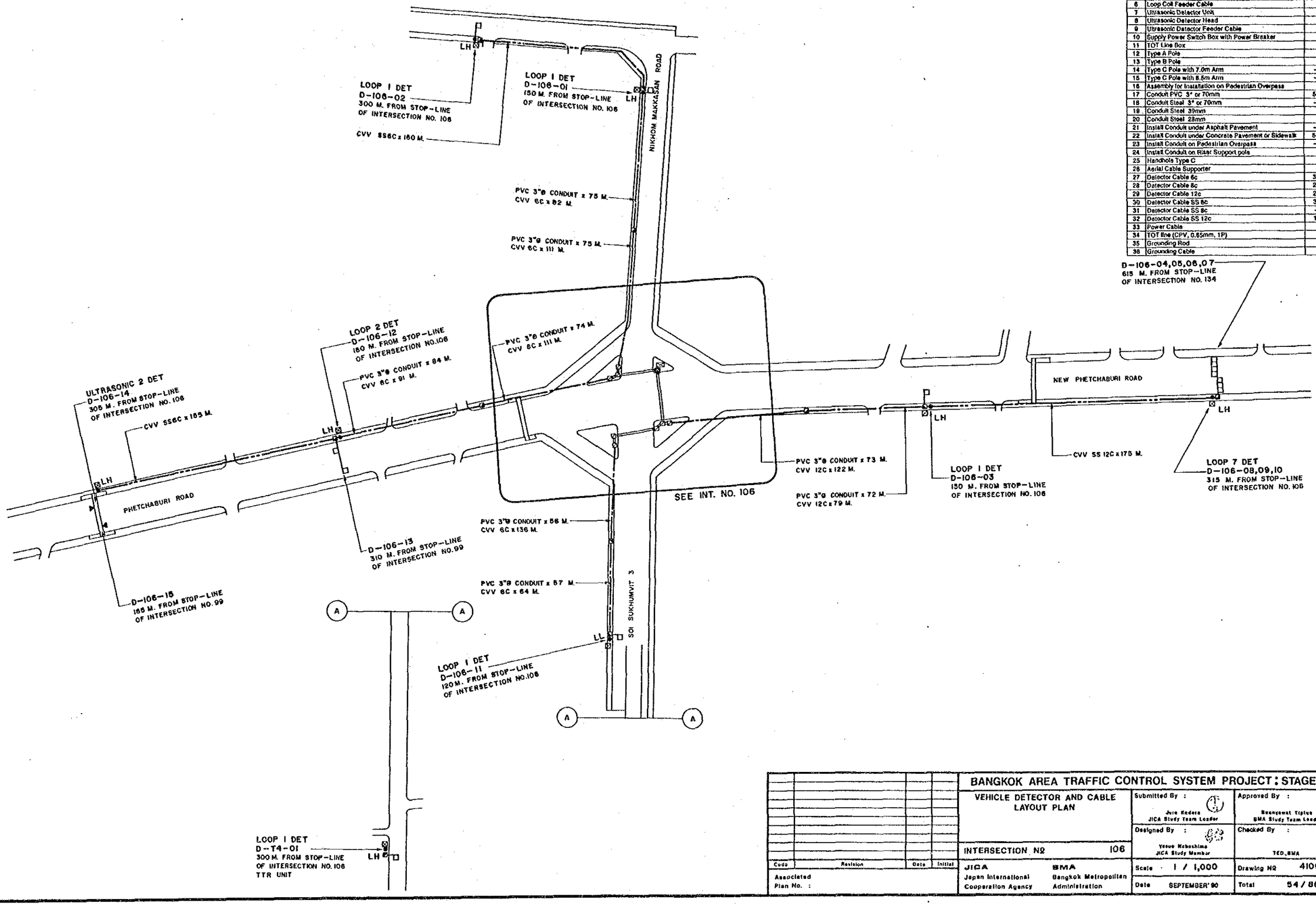
Scale 1 / 1,000

Drawing Nº 4105

Date SEPTEMBER '80

Total 53 / 86

Detector Equipments List		
Drawing NO. 4106		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	7
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	14
5	Loop Coil Cable	112
6	Loop Coil Feeder Cable	70
7	Ultrasonic Detector Unit	2
8	Ultrasonic Detector Head	2
9	Ultrasonic Detector Feeder Cable	40
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	1
13	Type B Pole	7
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	2
17	Conduit PVC 3" or 70mm	566
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	5
20	Conduit Steel 28mm	5
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	566
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	5
25	Handhole Type C	12
26	Aerial Cable Supporter	15
27	Detector Cable 6c	393
28	Detector Cable 8c	202
29	Detector Cable 12c	201
30	Detector Cable SS 6c	315
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	170
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	8
36	Grounding Cable	40



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 106

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipton, BMA Study Team Leader

Designed By : Yasuo Kobashima, JICA Study Member

Checked By : TED, BMA

JICA Japan International Cooperation Agency

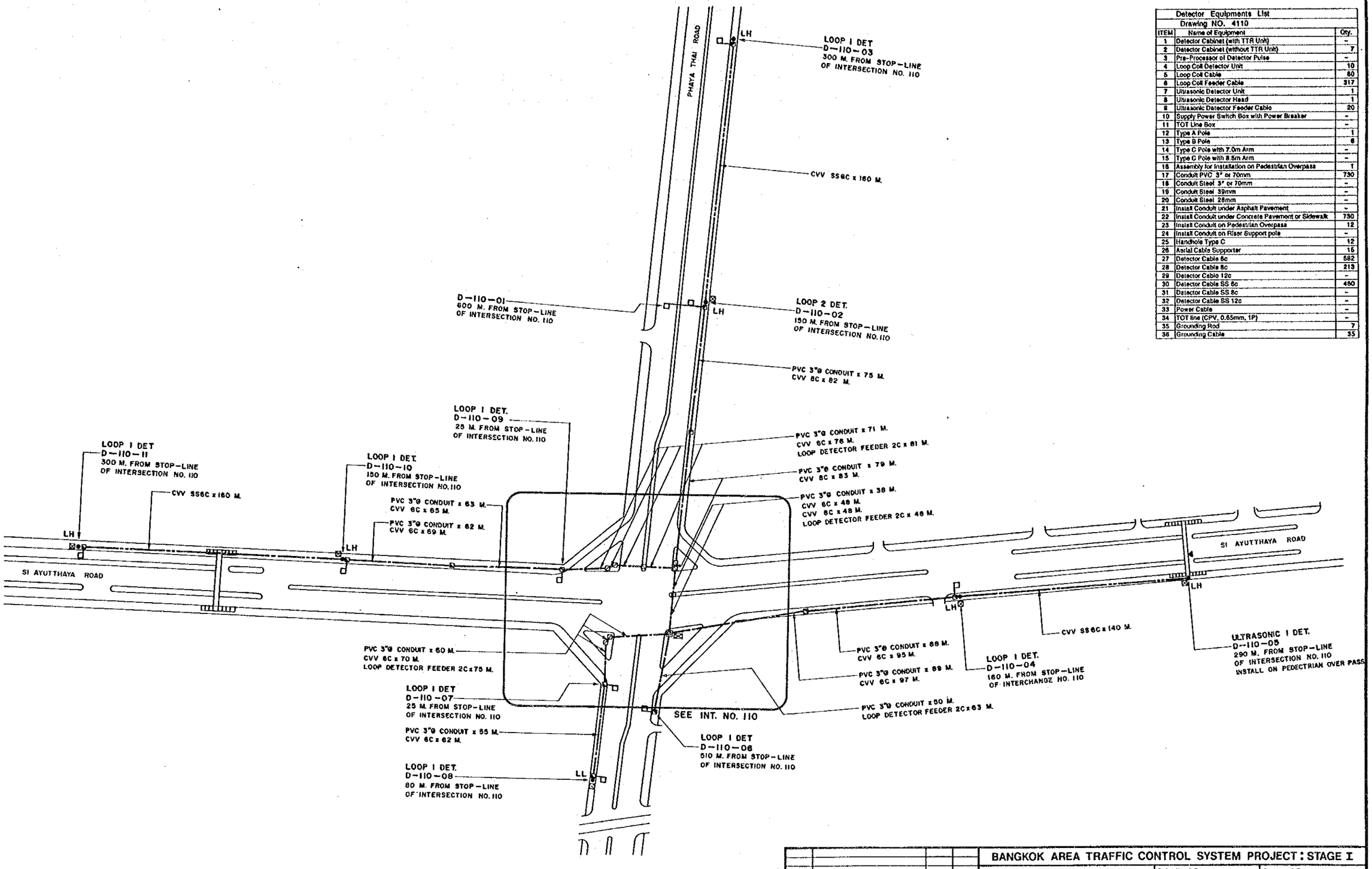
BMA Bangkok Metropolitan Administration

Scale 1 / 1,000

Date SEPTEMBER '90

Drawing NO 4106

Total 54 / 86



Detector Equipments List		
Drawing NO. 4110		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	7
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	10
5	Loop Coil Cable	60
6	Loop Coil Feeder Cable	317
7	Ultrasonic Detector Unit	1
8	Ultrasonic Detector Head	1
9	Ultrasonic Detector Feeder Cable	20
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	6
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	1
17	Conduit PVC 3" or 70mm	730
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	730
23	Install Conduit on Pedestrian Overpass	12
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	12
26	Aerial Cable Supporter	15
27	Detector Cable 6c	582
28	Detector Cable 8c	219
29	Detector Cable 12c	-
30	Detector Cable SS 6c	460
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	7
36	Grounding Cable	35

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 110

Submitted By : Jiro Kodera, JICA Study Team Leader

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Designed By : Yasuo Nobeshima, JICA Study Member

Checked By : TED, BMA

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

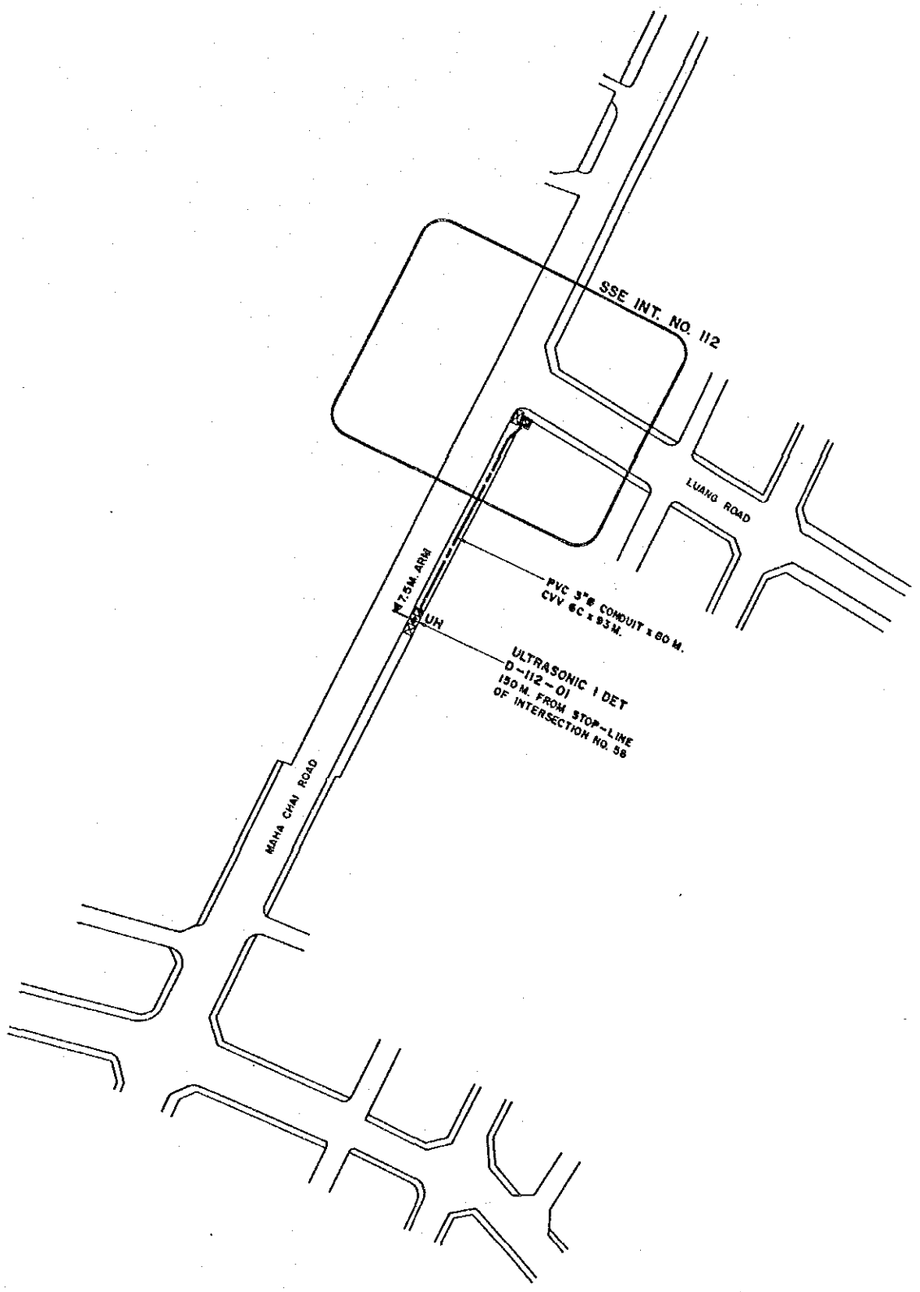
Scale 1 / 1,000

Drawing Nº 4110

Date SEPTEMBER '90

Total 55 / 86

Detector Equipments List		
Drawing NO. 4112		
nos	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	-
5	Loop Coil Cable	-
6	Loop Coil Feeder Cable	-
7	Ultrasonic Detector Unit	1
8	Ultrasonic Detector Head	1
9	Ultrasonic Detector Feeder Cable	8
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	1
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	80
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	80
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	1
26	Aerial Cable Supporter	-
27	Detector Cable 6c	93
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	1
36	Grounding Cable	5



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 112

Submitted By : Juro Kodera, JICA Study Team Leader

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Designed By : Yasuo Nobeshima, JICA Study Member

Checked By : TED., BMA

JICA Japan International Cooperation Agency

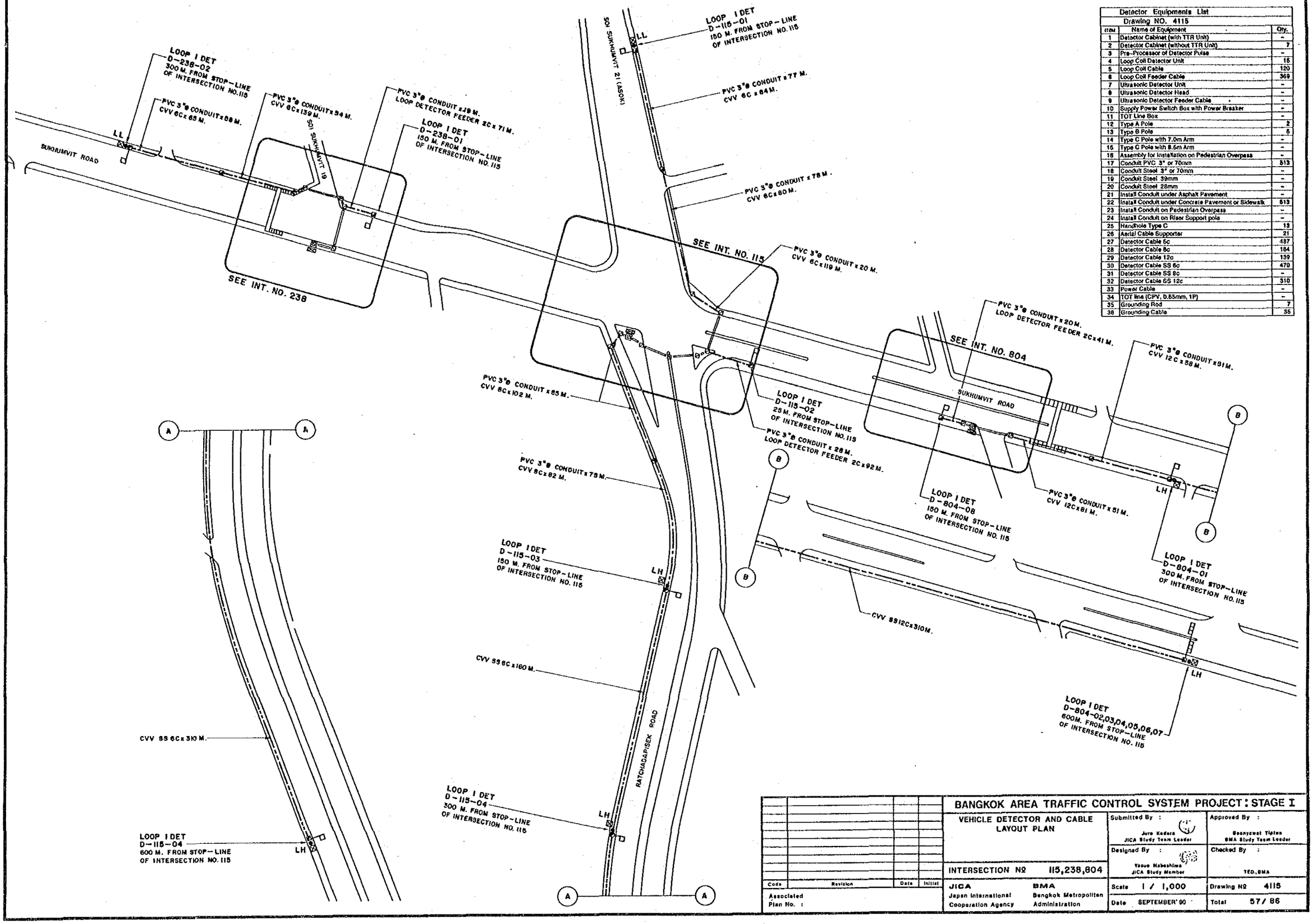
BMA Bangkok Metropolitan Administration

Scale 1 / 1,000

Drawing Nº 4112

Date SEPTEMBER '90

Total 56 / 86



Detector Equipments List		
Drawing NO. 4115		
Item	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	7
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	15
5	Loop Coil Cable	120
6	Loop Coil Feeder Cable	369
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	5
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	513
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	513
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	13
26	Aerial Cable Supporter	21
27	Detector Cable 6c	487
28	Detector Cable 8c	184
29	Detector Cable 12c	139
30	Detector Cable SS 6c	470
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	310
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	7
36	Grounding Cable	35

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 115,238,804

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipton, BMA Study Team Leader

Designed By : Yasue Nakashima, JICA Study Member

Checked By : TED., BMA

JICA Japan International Cooperation Agency

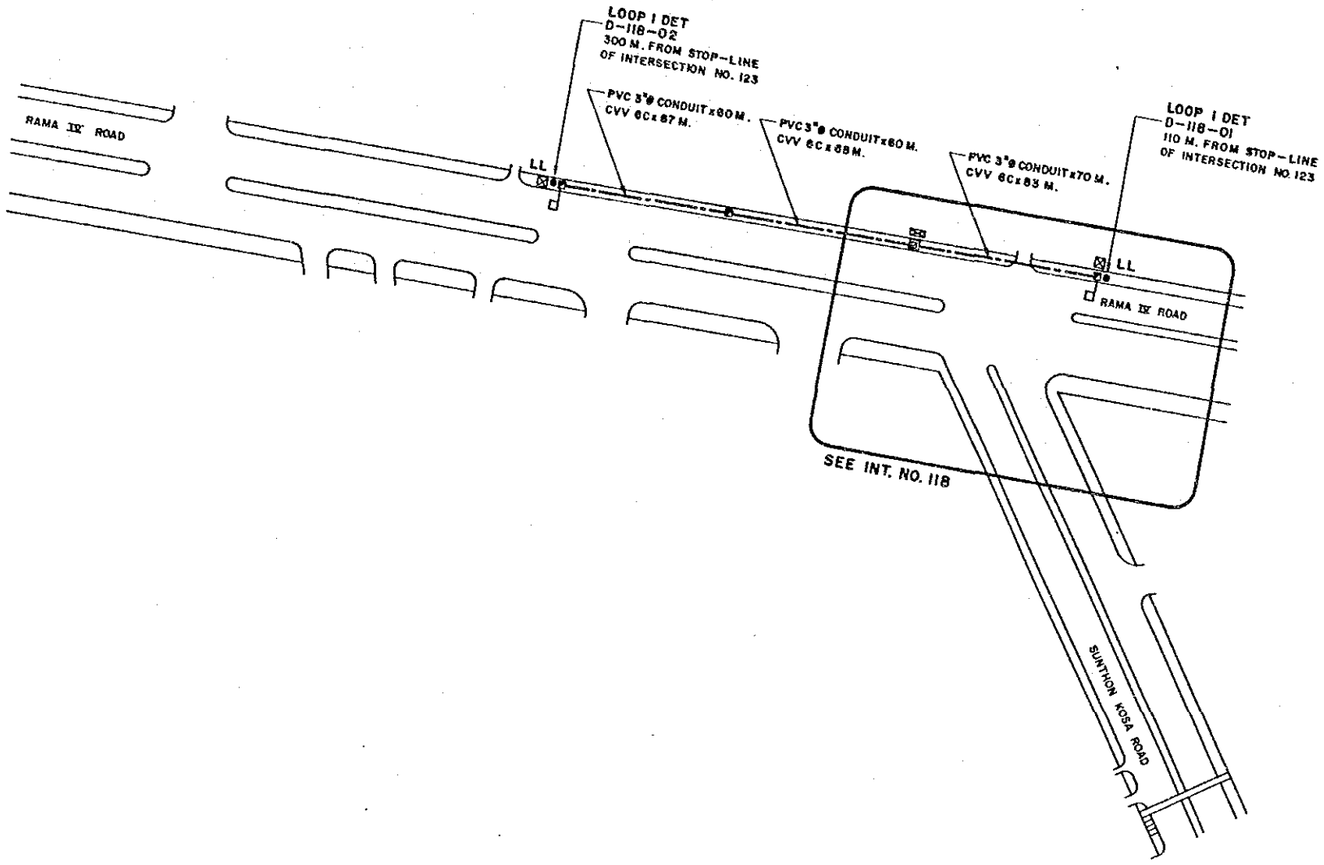
BMA Bangkok Metropolitan Administration

Scale 1 / 1,000

Drawing Nº 4115

Date SEPTEMBER '90

Total 57 / 86



Detector Equipments List		
Drawing NO. 4118		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.6m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	190
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	190
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	3
26	Aerial Cable Supporter	-
27	Detector Cable 6c	218
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10

Code	Revision	Date	Initial

Associated
Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

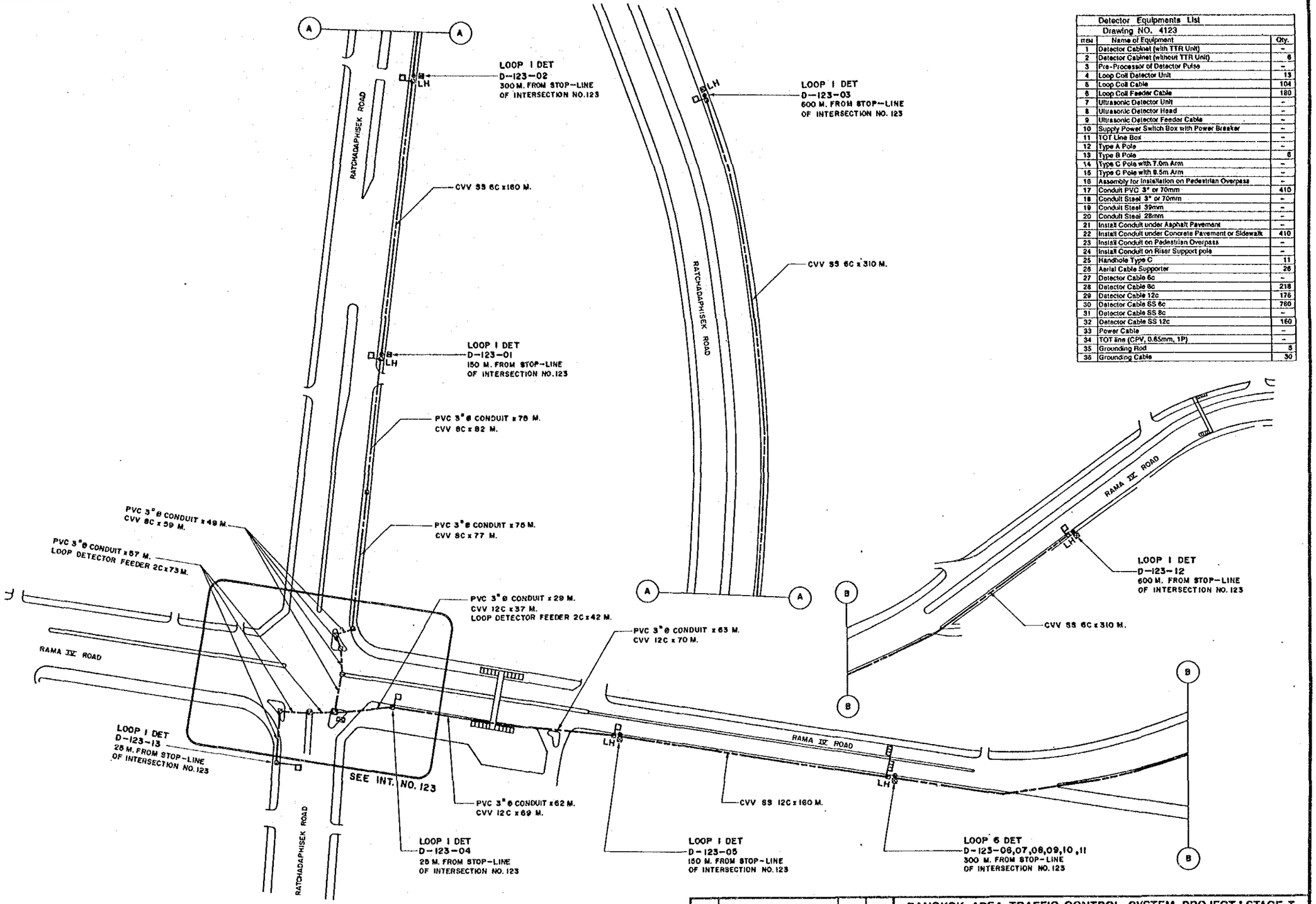
VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 118

JICA Japan International Cooperation Agency
BMA Bangkok Metropolitan Administration

Submitted By : Jun Kadera, JICA Study Team Leader
Designed By : Yasuo Nakashima, JICA Study Member
Approved By : Boonyawat Tipkas, BMA Study Team Leader
Checked By : YED_BMA

Scale 1 / 1,000
Date SEPTEMBER' 90
Drawing Nº 4118
Total 58 / 86



Detector Equipments List		
Drawing NO. 4123		
Item	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	6
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	13
5	Loop Coil Cable	104
6	Loop Coil Feeder Cable	180
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	6
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	410
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	410
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	11
26	Aerial Cable Supporter	26
27	Detector Cable 6c	-
28	Detector Cable 8c	218
29	Detector Cable 12c	176
30	Detector Cable SS 6c	760
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	160
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	5
36	Grounding Cable	30

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Designed By : Yasuo Habashima, JICA Study Member

Checked By : TED, BMA

INTERSECTION NO 123

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

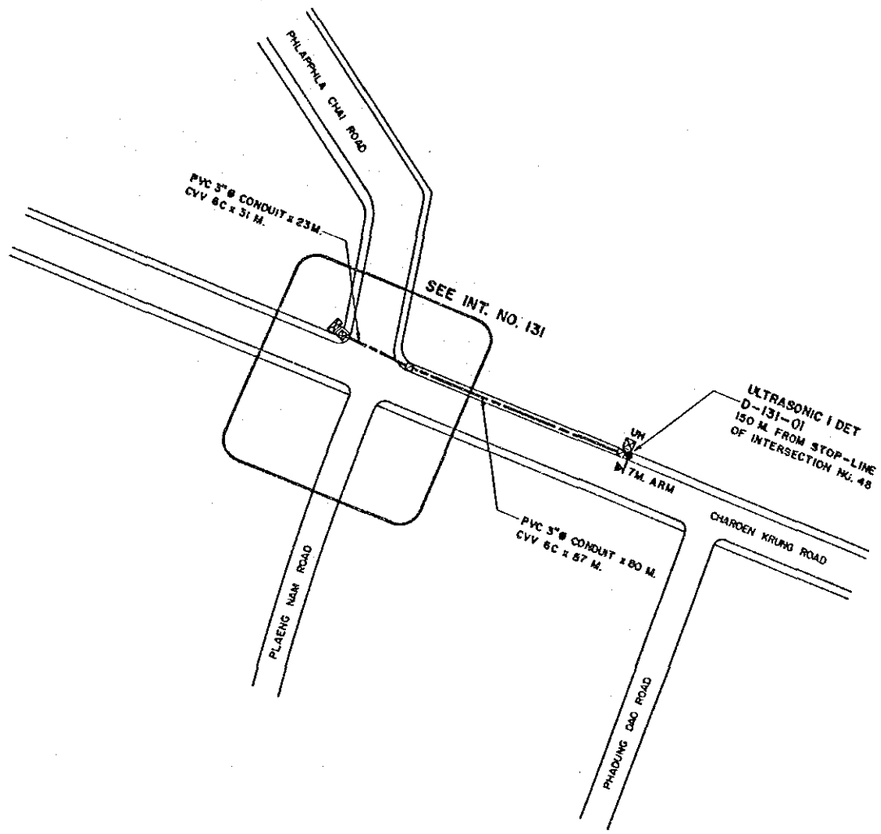
Scale 1 / 1,000

Drawing NO 4123

Date SEPTEMBER '90

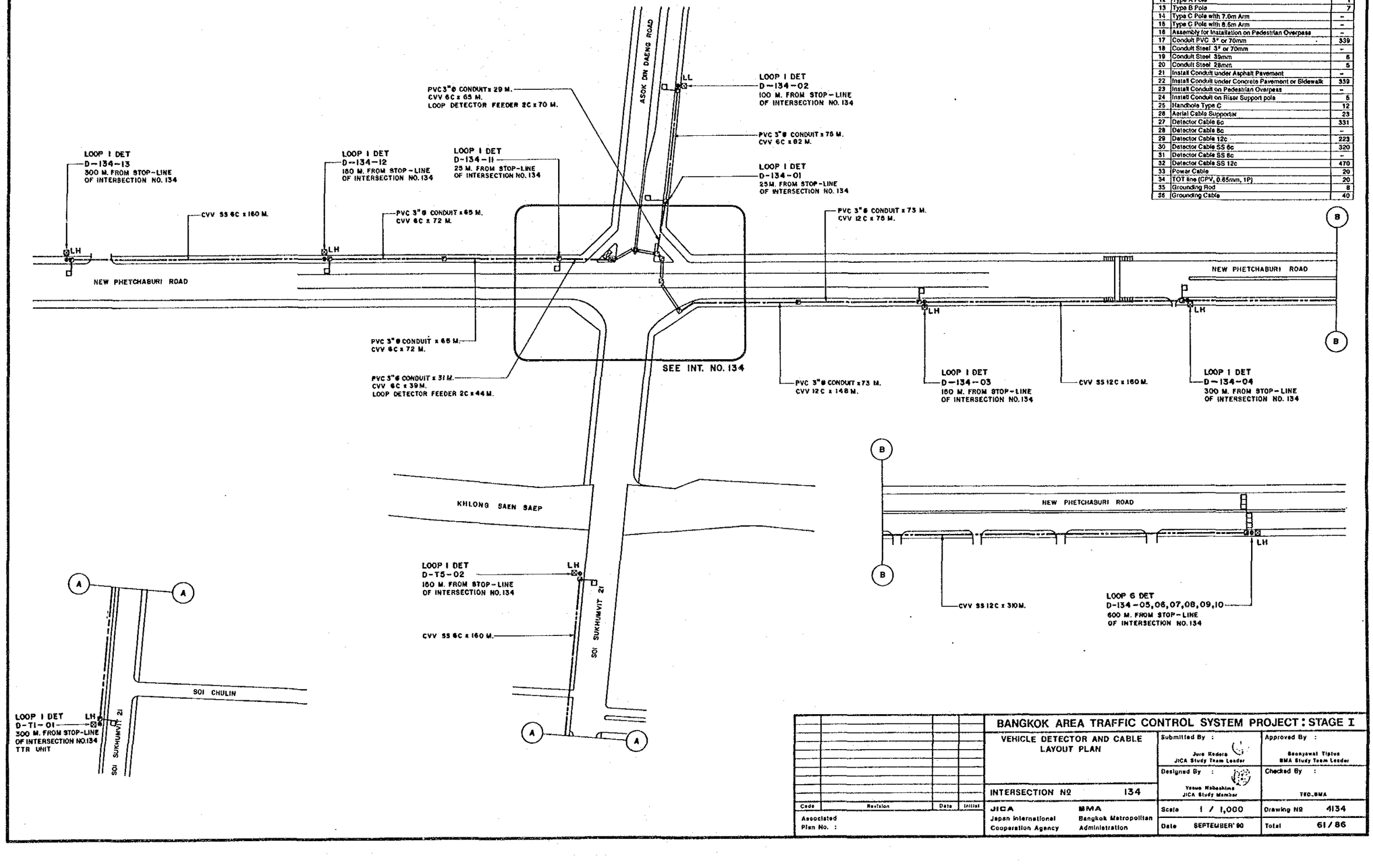
Total 59 / 86

Detector Equipments List		
Drawing NO. 4131		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	–
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	–
4	Loop Coil Detector Unit	–
5	Loop Coil Cable	–
6	Loop Coil Feeder Cable	–
7	Ultrasonic Detector Unit	1
8	Ultrasonic Detector Head	1
9	Ultrasonic Detector Feeder Cable	8
10	Supply Power Switch Box with Power Breaker	–
11	TOT Line Box	–
12	Type A Pole	–
13	Type B Pole	–
14	Type C Pole with 7.0m Arm	1
15	Type C Pole with 8.5m Arm	–
16	Assembly for Installation on Pedestrian Overpass	–
17	Conduit PVC 3" or 70mm	103
18	Conduit Steel 3" or 70mm	–
19	Conduit Steel 39mm	–
20	Conduit Steel 28mm	–
21	Install Conduit under Asphalt Pavement	16
22	Install Conduit under Concrete Pavement or Sidewalk	87
23	Install Conduit on Pedestrian Overpass	–
24	Install Conduit on Riser Support pole	–
25	Handhole Type C	2
26	Aerial Cable Supporter	0
27	Detector Cable 6c	128
28	Detector Cable 8c	–
29	Detector Cable 12c	–
30	Detector Cable SS 6c	–
31	Detector Cable SS 8c	–
32	Detector Cable SS 12c	–
33	Power Cable	–
34	TOT line (CPV, 0.65mm, 1P)	–
35	Grounding Rod	1
36	Grounding Cable	5



				BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I	
				VEHICLE DETECTOR AND CABLE LAYOUT PLAN	Submitted By : Jure Kodera, JICA Study Team Leader
					Approved By : Boonyawat Tipsuo, BMA Study Team Leader
					Designed By : Yasuo Nabeshima, JICA Study Member
					Checked By : TED, BMA
Code	Revision	Date	Initial	INTERSECTION NO 131	
Associated Plan No. :				JICA Japan International Cooperation Agency / BMA Bangkok Metropolitan Administration	Scale 1 / 1,000
					Drawing NO 4131
					Date SEPTEMBER'90
					Total 60 / 86

Detector Equipments List Drawing NO. 4134		
mm	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	7
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	15
5	Loop Coil Cable	120
6	Loop Coil Feeder Cable	189
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	1
13	Type B Pole	7
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	339
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	5
20	Conduit Steel 28mm	5
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	339
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	5
25	Handhole Type C	12
26	Aerial Cable Supporter	23
27	Detector Cable 6c	331
28	Detector Cable 8c	-
29	Detector Cable 12c	223
30	Detector Cable SS 6c	320
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	470
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	8
36	Grounding Cable	40



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 134

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jure Rodera, JICA Study Team Leader

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Designed By : Yasuo Nobeshima, JICA Study Member

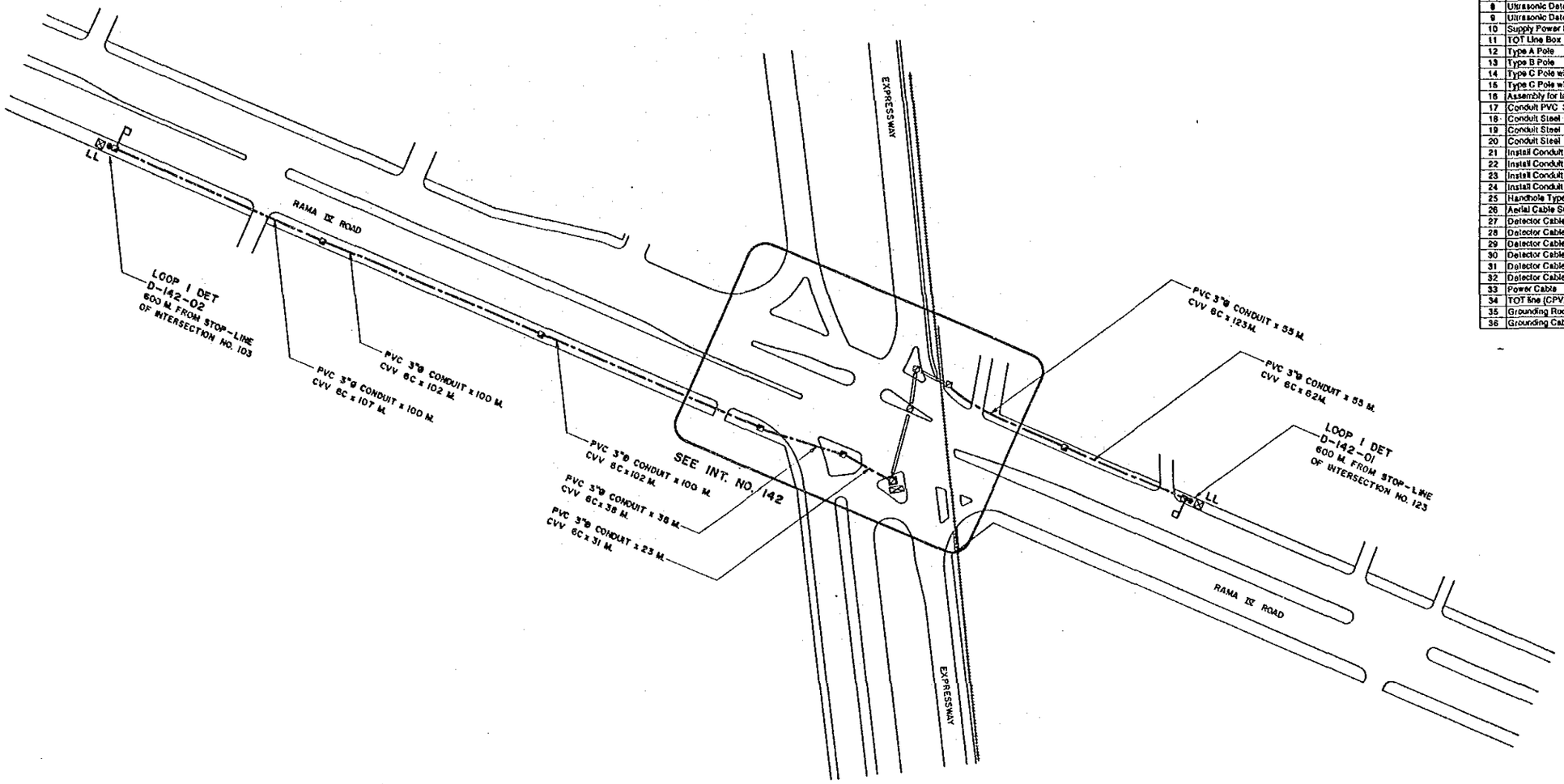
Checked By : TEO., BMA

Scale 1 / 1,000

Drawing Nº 4134

Date SEPTEMBER '90

Total 61 / 86



Detector Equipments List Drawing NO. 4142		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	459
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	459
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	7
26	Aerial Cable Supporter	-
27	Detector Cable 6c	585
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 142

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipiya, BMA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Checked By : TEO., BMA

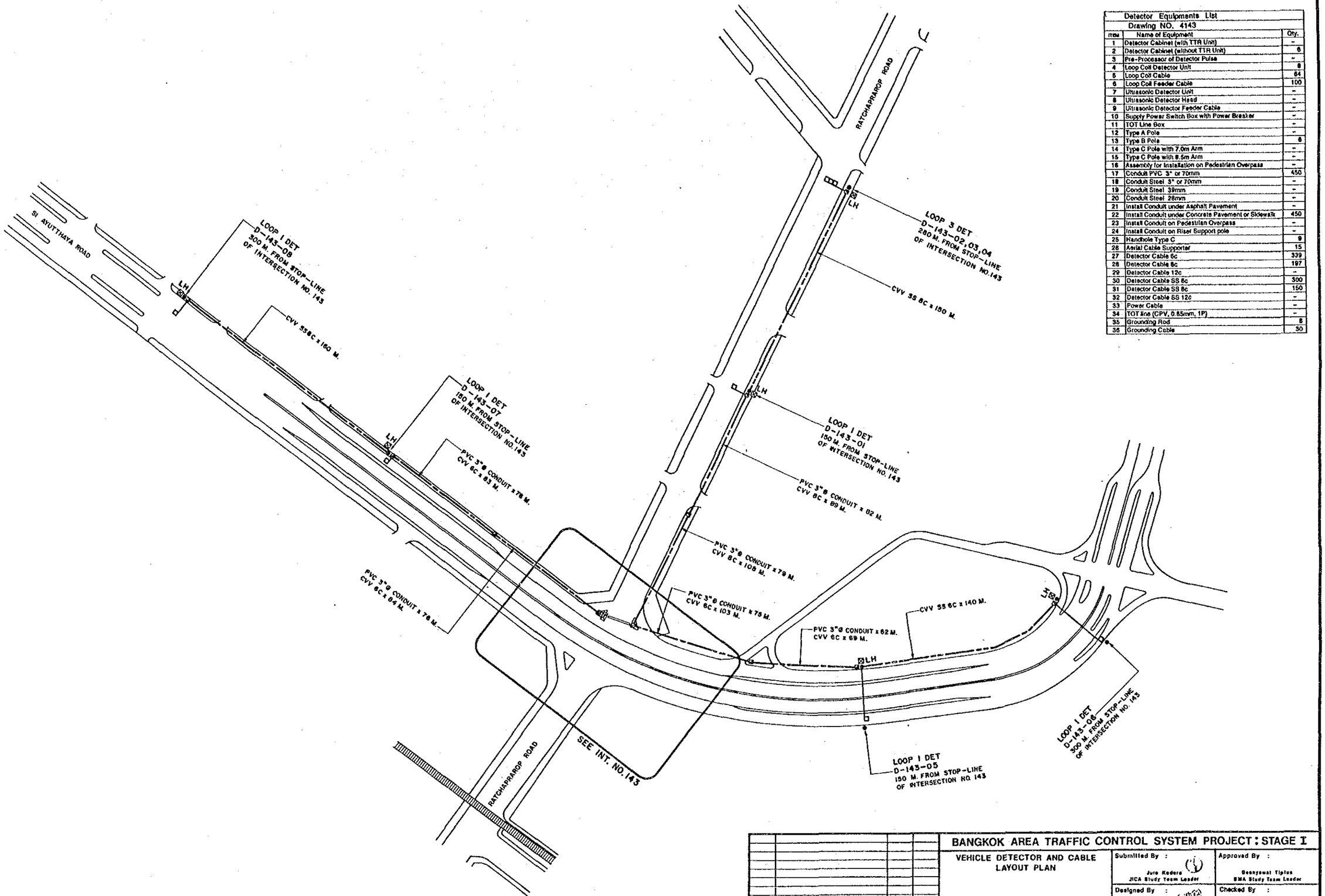
Scale 1 / 1,000

Drawing NO 4142

Date SEPTEMBER '90

Total 62 / 86

Detector Equipments List		
Drawing NO. 4143		
Item	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	6
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	8
5	Loop Coil Cable	64
6	Loop Coil Feeder Cable	100
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	8
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	450
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	450
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	9
26	Aerial Cable Supporter	15
27	Detector Cable 6c	339
28	Detector Cable 8c	197
29	Detector Cable 12c	-
30	Detector Cable SS 6c	300
31	Detector Cable SS 8c	150
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	6
36	Grounding Cable	30



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

Submitted By : Jun Kadera, JICA Study Team Leader

Approved By : Boonyanut Tipiya, BMA Study Team Leader

Designed By : Yasuo Hchoshima, JICA Study Member

Checked By : TED, BMA

INTERSECTION NO 143

JICA Japan International Cooperation Agency

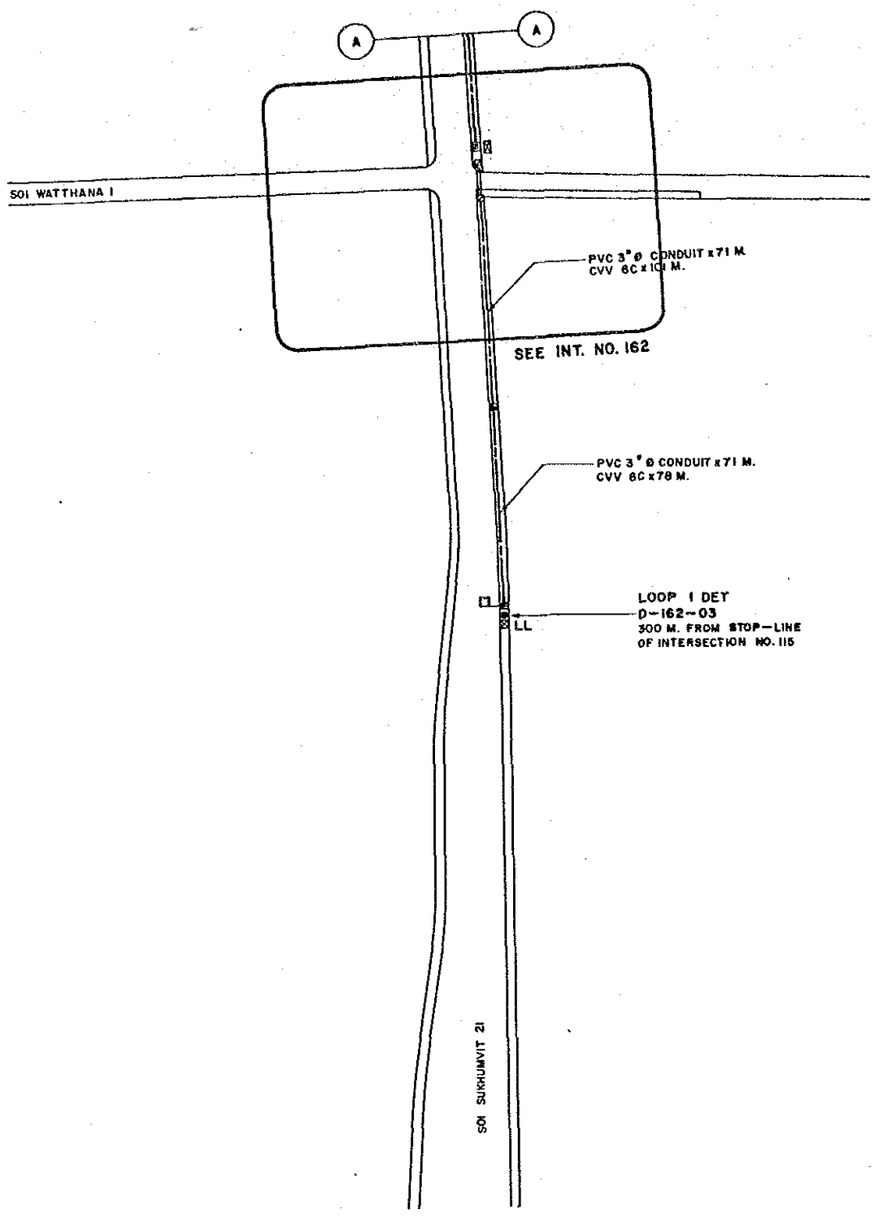
BMA Bangkok Metropolitan Administration

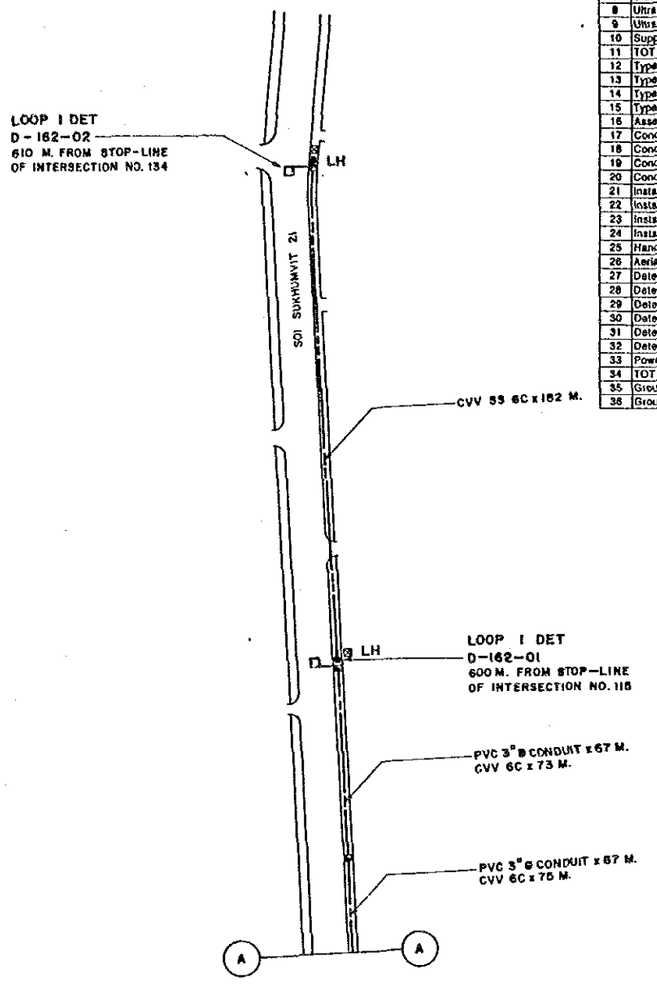
Scale 1 / 1,000

Drawing NO 4143

Date SEPTEMBER '90

Total . 63 / 86





Detector Equipments List
Drawing NO. 4162

ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	3
5	Loop Coil Cable	24
6	Loop Coil Feeder Cable	15
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	276
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	276
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	4
26	Aerial Cable Supporter	2
27	Detector Cable 6c	327
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	182
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	3
36	Grounding Cable	15

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipiua, BMA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Checked By : YED.,BMA

INTERSECTION NO 162

JICA Japan International Cooperation Agency

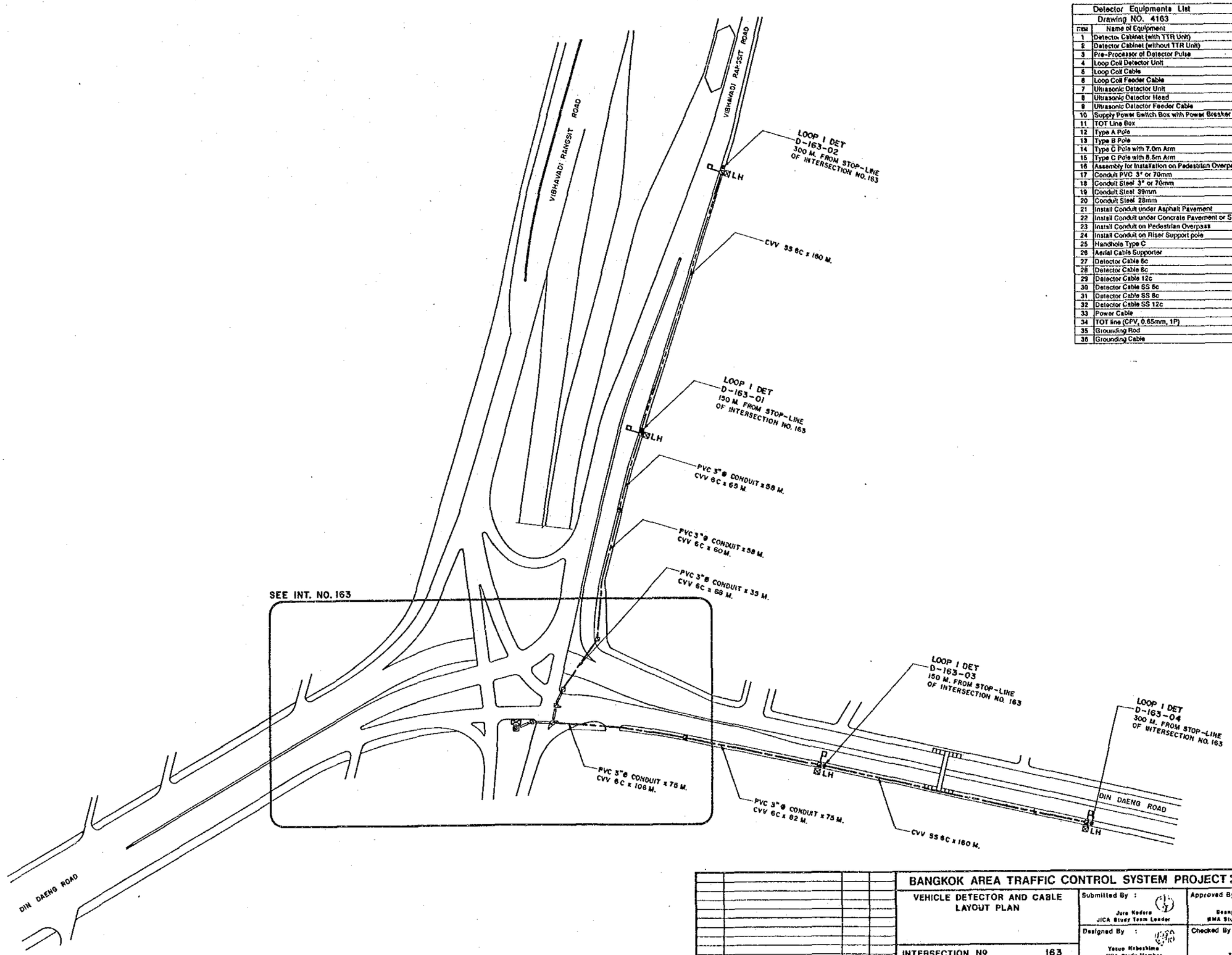
BMA Bangkok Metropolitan Administration

Scale 1 / 1,000

Drawing NO 4162

Date SEPTEMBER '90

Total 64 / 86



Detector Equipments List		
Drawing NO. 4163		
no.	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	4
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	4
5	Loop Coil Cable	32
6	Loop Coil Feeder Cable	20
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	4
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 76mm	300
18	Conduit Steel 3" or 76mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	300
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	7
26	Aerial Cable Supporter	10
27	Detector Cable 6c	401
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	320
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	4
36	Grounding Cable	20

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 163

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipton, BMA Study Team Leader

Designed By : Yasuo Nobeshima, JICA Study Member

Checked By : TED_BMA

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

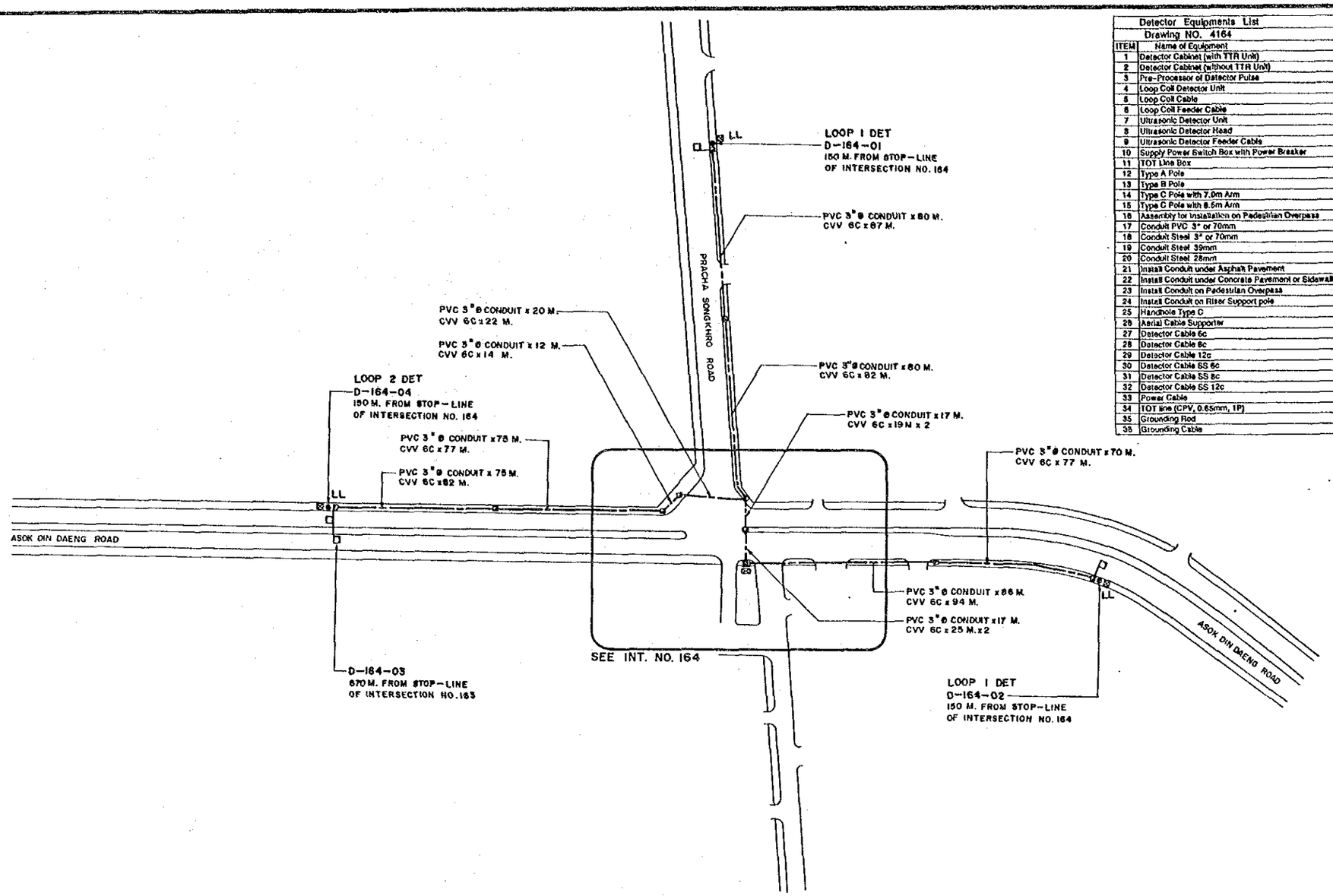
Scale 1 / 1,000

Drawing Nº 4163

Date SEPTEMBER '90

Total 65 / 86

Detector Equipments List Drawing NO. 4164		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	4
5	Loop Coil Cable	32
6	Loop Coil Feeder Cable	20
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	3
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	532
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	532
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	10
26	Aerial Cable Supporter	-
27	Detector Cable 6c	623
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	3
36	Grounding Cable	15



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 164

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Approved By : Boonyanet Tiptus, BMA Study Team Leader

Checked By : TED, BMA

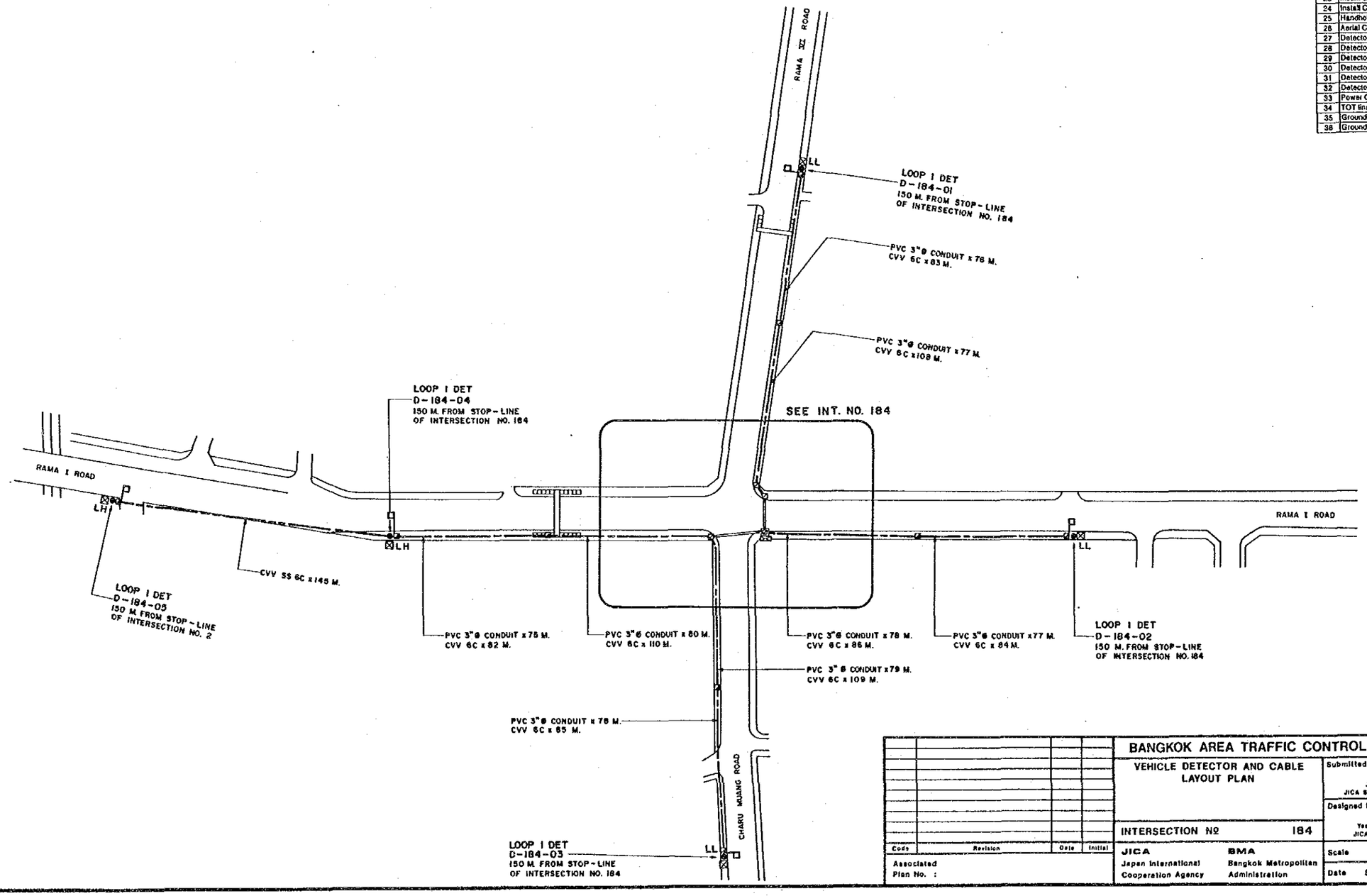
Scale 1 / 1,000

Date SEPTEMBER '90

Drawing Nº 4164

Total 66 / 86

Detector Equipments List		
Drawing NO. 4184		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	5
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	5
5	Loop Coil Cable	40
6	Loop Coil Feeder Cable	25
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	3
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	620
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	620
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	9
26	Aerial Cable Supporter	10
27	Detector Cable 6c	747
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	145
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	5
36	Grounding Cable	25



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 184

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jyro Kodera, JICA Study Team Leader

Approved By : Banyawat Tipkas, BMA Study Team Leader

Designed By : Yasuo Nakashima, JICA Study Member

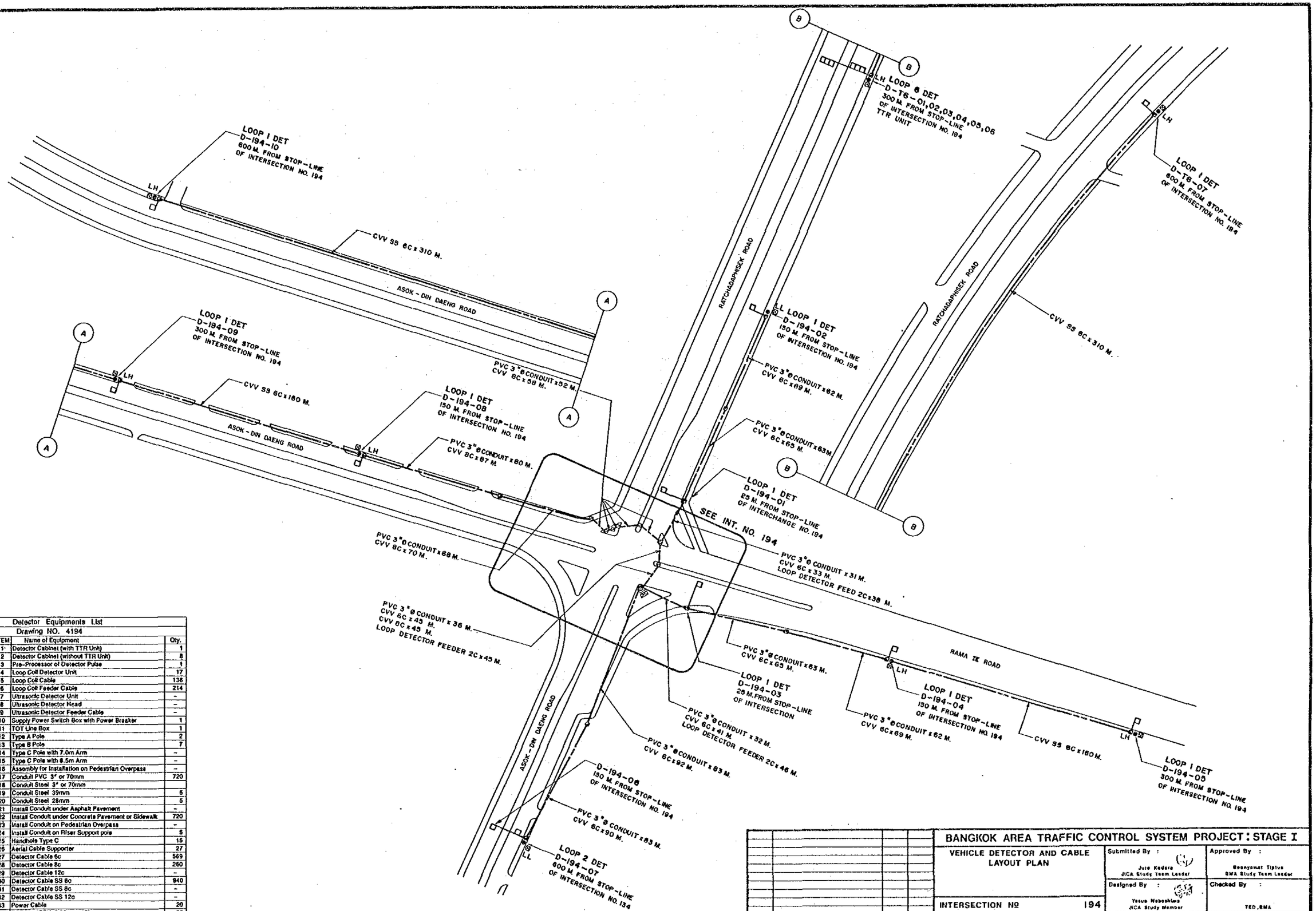
Checked By : YEO, BMA

Scale 1 / 1,000

Date SEPTEMBER '90

Drawing Nº 4184

Total 67 / 86



Detector Equipments List		
Drawing NO. 4194		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	8
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	17
5	Loop Coil Cable	138
6	Loop Coil Feeder Cable	214
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	2
13	Type B Pole	7
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	720
18	Conduit Steel 3" or 70mm	
19	Conduit Steel 39mm	5
20	Conduit Steel 28mm	5
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	720
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	5
25	Handhole Type C	15
26	Aerial Cable Supporter	27
27	Detector Cable 6c	569
28	Detector Cable 8c	260
29	Detector Cable 12c	-
30	Detector Cable SS 6c	940
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	9
36	Grounding Cable	45

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

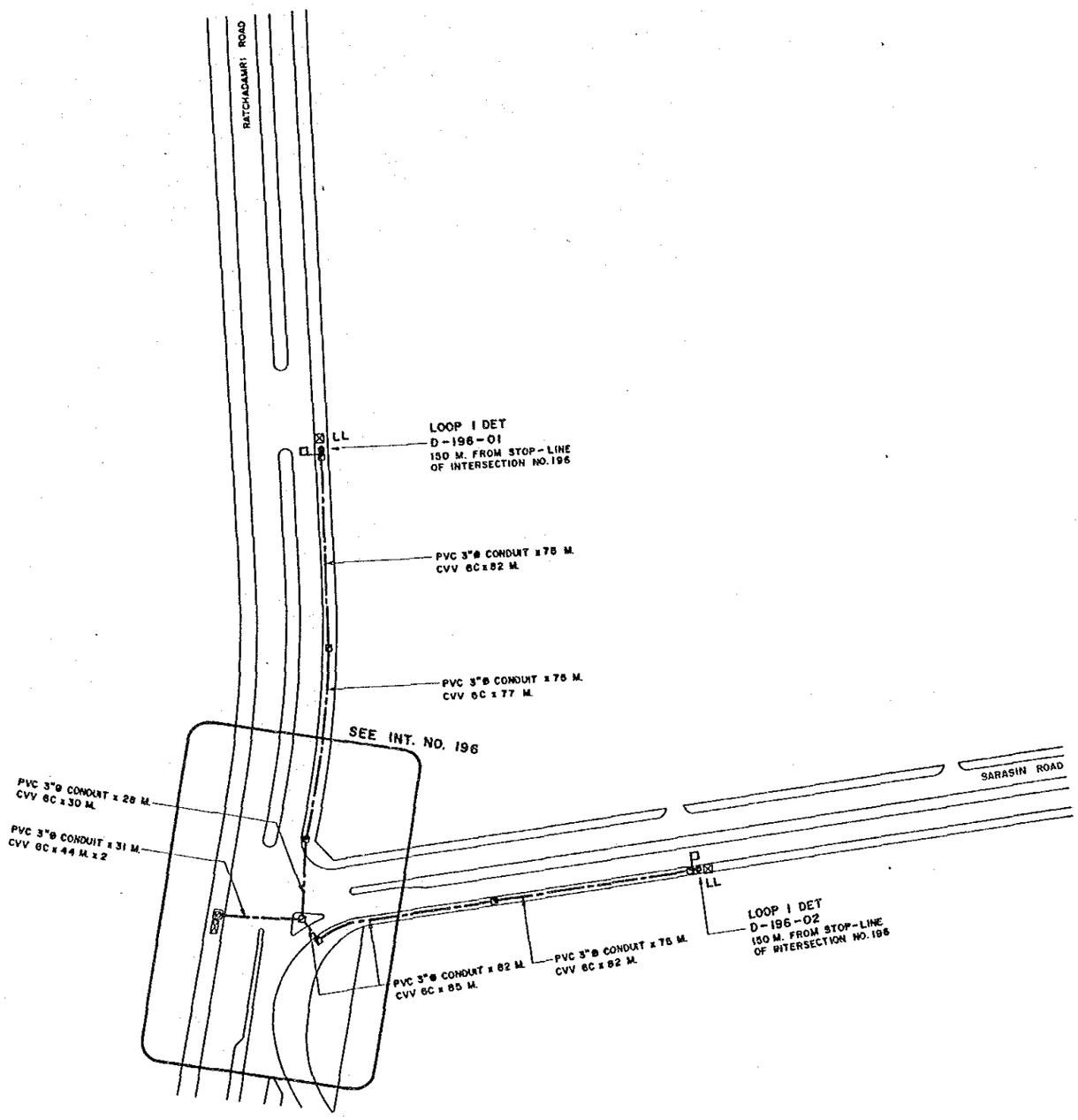
VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 194

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jure Kedera, JICA Study Team Leader	Approved By : Seeyamat Tipiya, BMA Study Team Leader
Designed By : Yasuo Nobeshima, JICA Study Member	Checked By : TED, BMA
Scale 1 / 1,000	Drawing Nº 4194
Date SEPTEMBER '90	Total 66 / 86



Detector Equipments List Drawing NO. 4196		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	18
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	368
18	Conduit Steel 3" or 70mm	
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	368
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	5
26	Aerial Cable Supporter	-
27	Detector Cable 6c	444
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable 6S 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.85mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 196

Submitted By : Jura Kadera, JICA Study Team Leader

Approved By : Boonyawat Tipsuo, BMA Study Team Leader

Designed By : Yasuo Kobashima, JICA Study Member

Checked By : TED, BMA

JICA Japan International Cooperation Agency

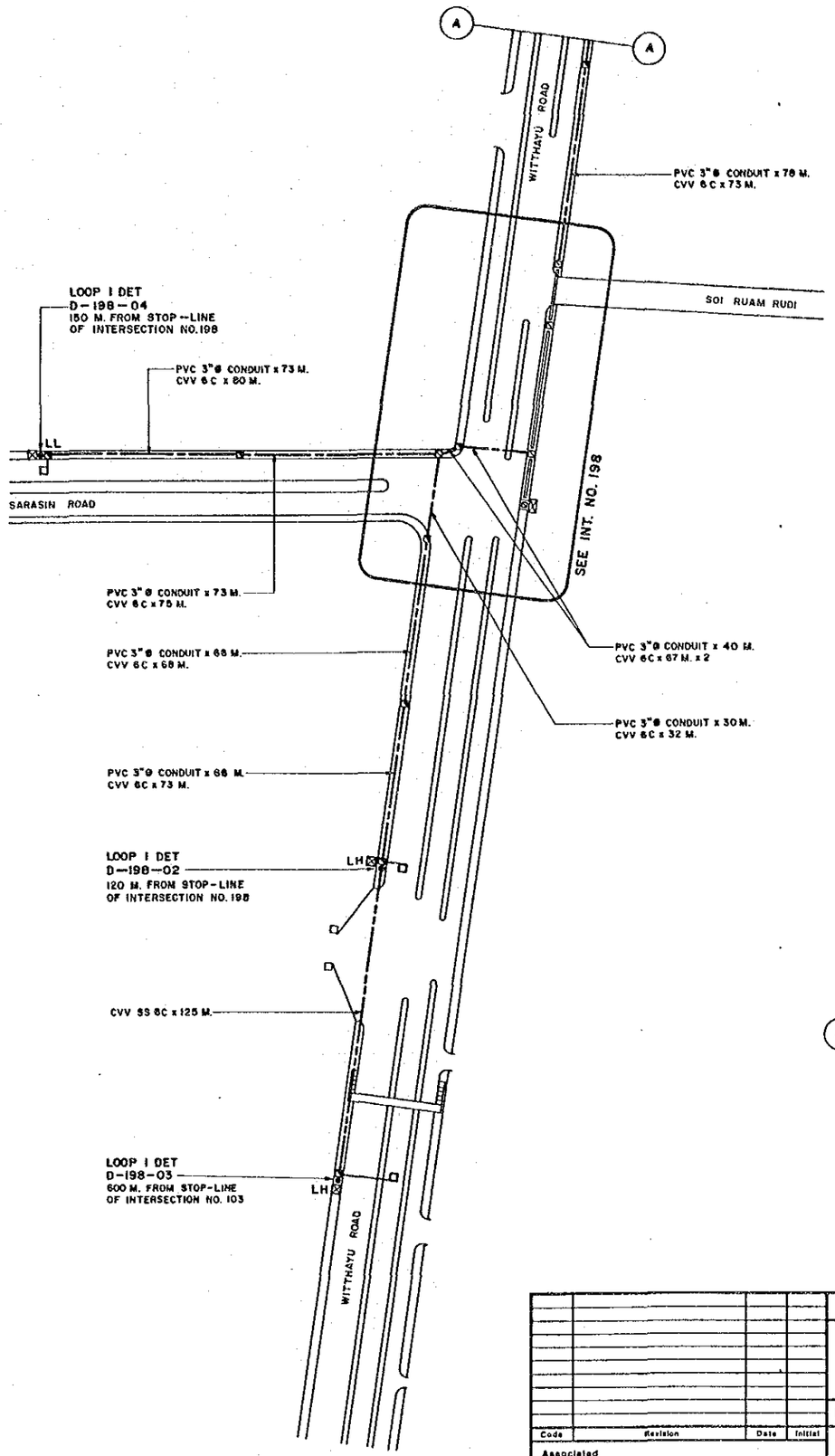
BMA Bangkok Metropolitan Administration

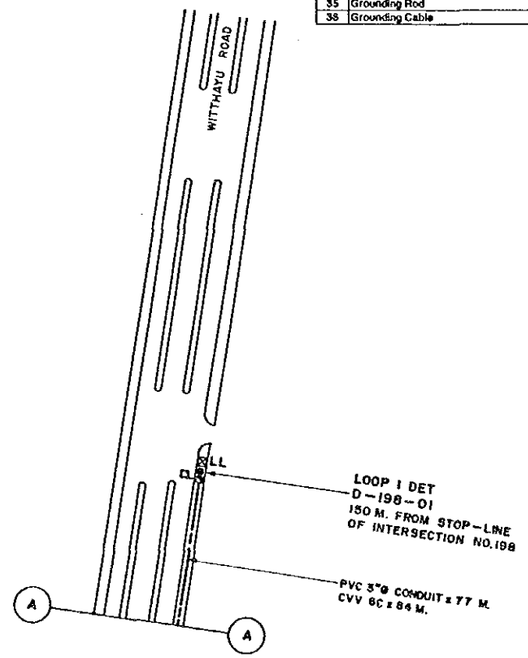
Scale 1 / 1,000

Date SEPTEMBER '90

Drawing NO. 4196

Total 69 / 86





Detector Equipments List Drawing NO. 4198		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	–
2	Detector Cabinet (without TTR Unit)	4
3	Pre-Processor of Detector Pulse	–
4	Loop Coil Detector Unit	4
5	Loop Coil Cable	32
6	Loop Coil Feeder Cable	35
7	Ultrasonic Detector Unit	–
8	Ultrasonic Detector Head	–
9	Ultrasonic Detector Feeder Cable	–
10	Supply Power Switch Box with Power Breaker	–
11	TOT Line Box	–
12	Type A Pole	2
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	–
15	Type C Pole with 8.5m Arm	–
16	Assembly for Installation on Pedestrian Overpass	–
17	Conduit PVC 3" or 70mm	628
18	Conduit Steel 3" or 70mm	–
19	Conduit Steel 39mm	–
20	Conduit Steel 28mm	–
21	Install Conduit under Asphalt Pavement	–
22	Install Conduit under Concrete Pavement or Sidewalk	628
23	Install Conduit on Pedestrian Overpass	–
24	Install Conduit on Riser Support pole	–
25	Handhole Type C	9
26	Aerial Cable Supporter	25
27	Detector Cable 6c	719
28	Detector Cable 8c	–
29	Detector Cable 12c	–
30	Detector Cable SS 6c	125
31	Detector Cable SS 8c	–
32	Detector Cable SS 12c	–
33	Power Cable	–
34	TOT line (CPV, 0.65mm, 1P)	–
35	Grounding Rod	4
36	Grounding Cable	20

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 198

Submitted By : Jure Kodors, JICA Study Team Leader

Approved By : Boonyawat Tipsuo, BMA Study Team Leader

Designed By : Yasuo Nobeshima, JICA Study Member

Checked By : TED., BMA

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

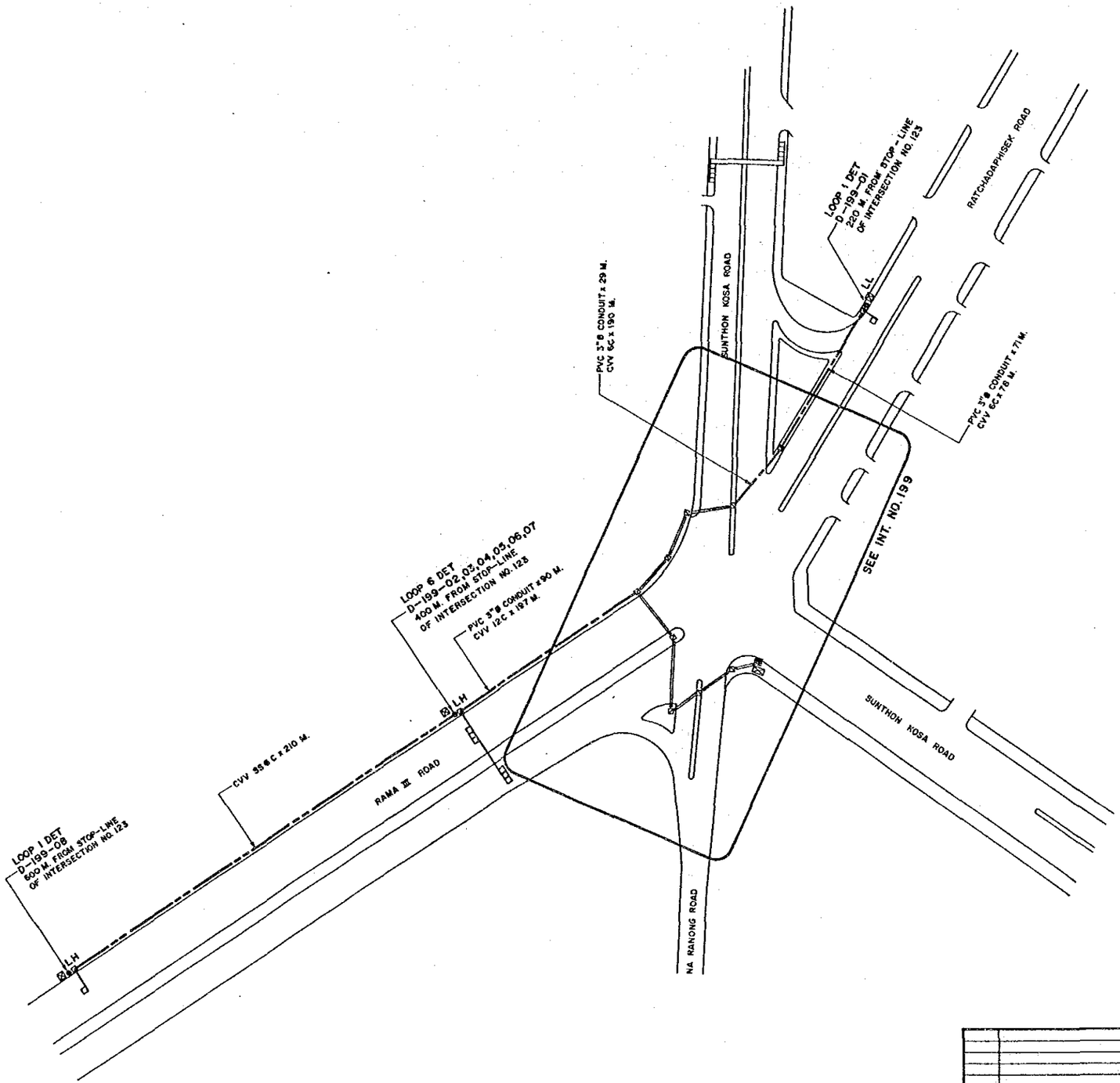
Scale 1 / 1,000

Drawing Nº 4198

Date SEPTEMBER' 90

Total 70 / 86

Detector Equipments List		
Drawing NO. 4199		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	6
5	Loop Coil Cable	64
6	Loop Coil Feeder Cable	40
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feedor Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	190
18	Conduit Steel 3" or 70mm	
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	190
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	4
26	Aerial Cable Supporter	6
27	Detector Cable 6c	190
28	Detector Cable 8c	-
29	Detector Cable 12c	197
30	Detector Cable SS 6c	210
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	3
36	Grounding Cable	15



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

Submitted By :
Juro Kodera
JICA Study Team Leader

Approved By :
Seonyawat Tiptus
BMA Study Team Leader

Designed By :
Yasuo Mabeshima
JICA Study Member

Checked By :
TEO, BMA

INTERSECTION Nº 199

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

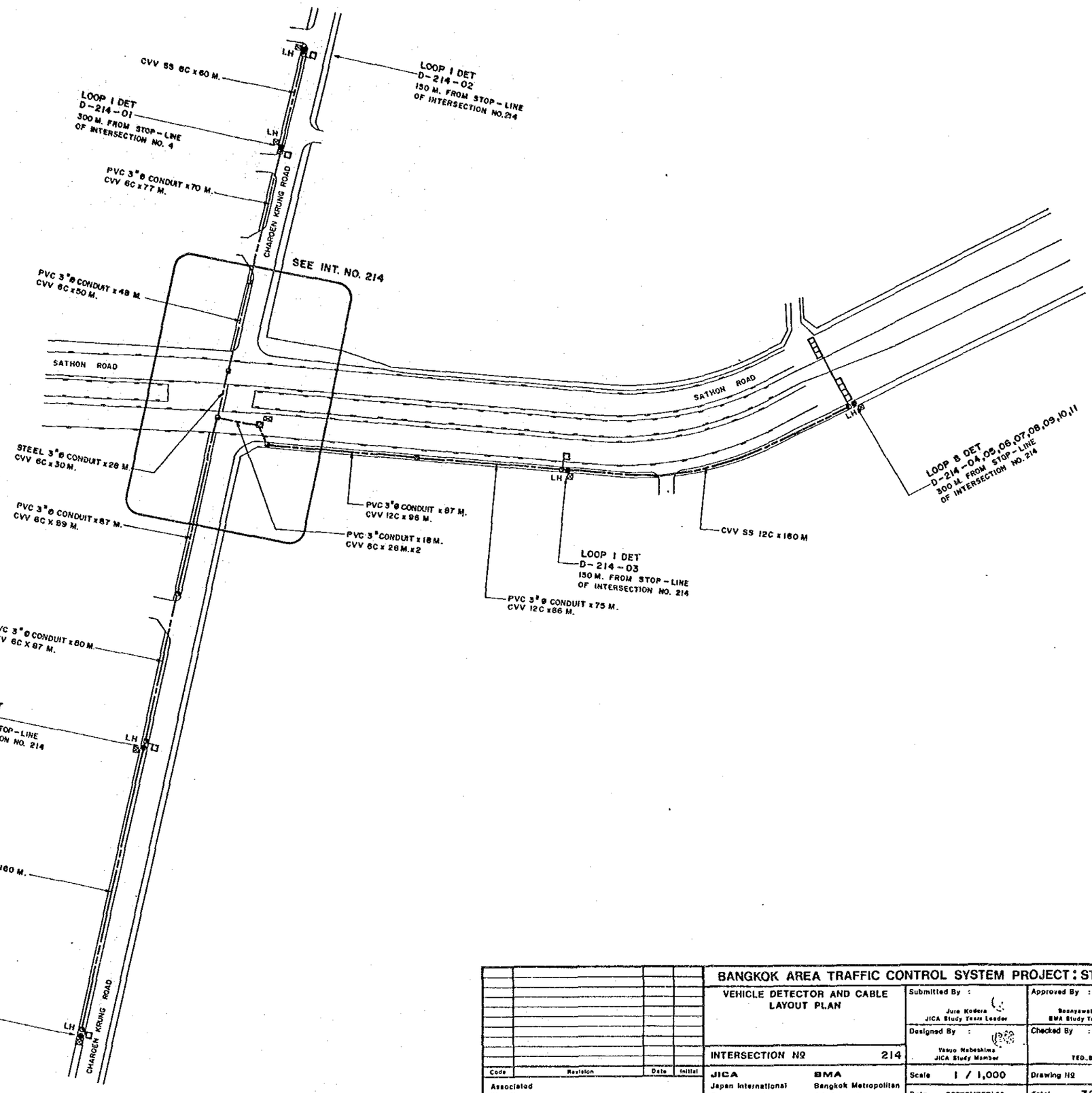
Scale 1 / 1,000

Drawing Nº 4199

Date SEPTEMBER '90

Total 71 / 86

Detector Equipments List		
Drawing NO. 4214		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	8
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	13
5	Loop Coil Cable	104
6	Loop Coil Feeder Cable	225
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	6
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 6.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	465
18	Conduit Steel 3" or 70mm	28
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	465
23	Install Conduit on Pedestrian Overpass	28
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	12
26	Aerial Cable Supporter	13
27	Detector Cable 6c	385
28	Detector Cable 8c	-
29	Detector Cable 12c	182
30	Detector Cable SS 6c	220
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	160
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	6
36	Grounding Cable	30



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 214

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Approved By : Boonyawat Tiptus, BMA Study Team Leader

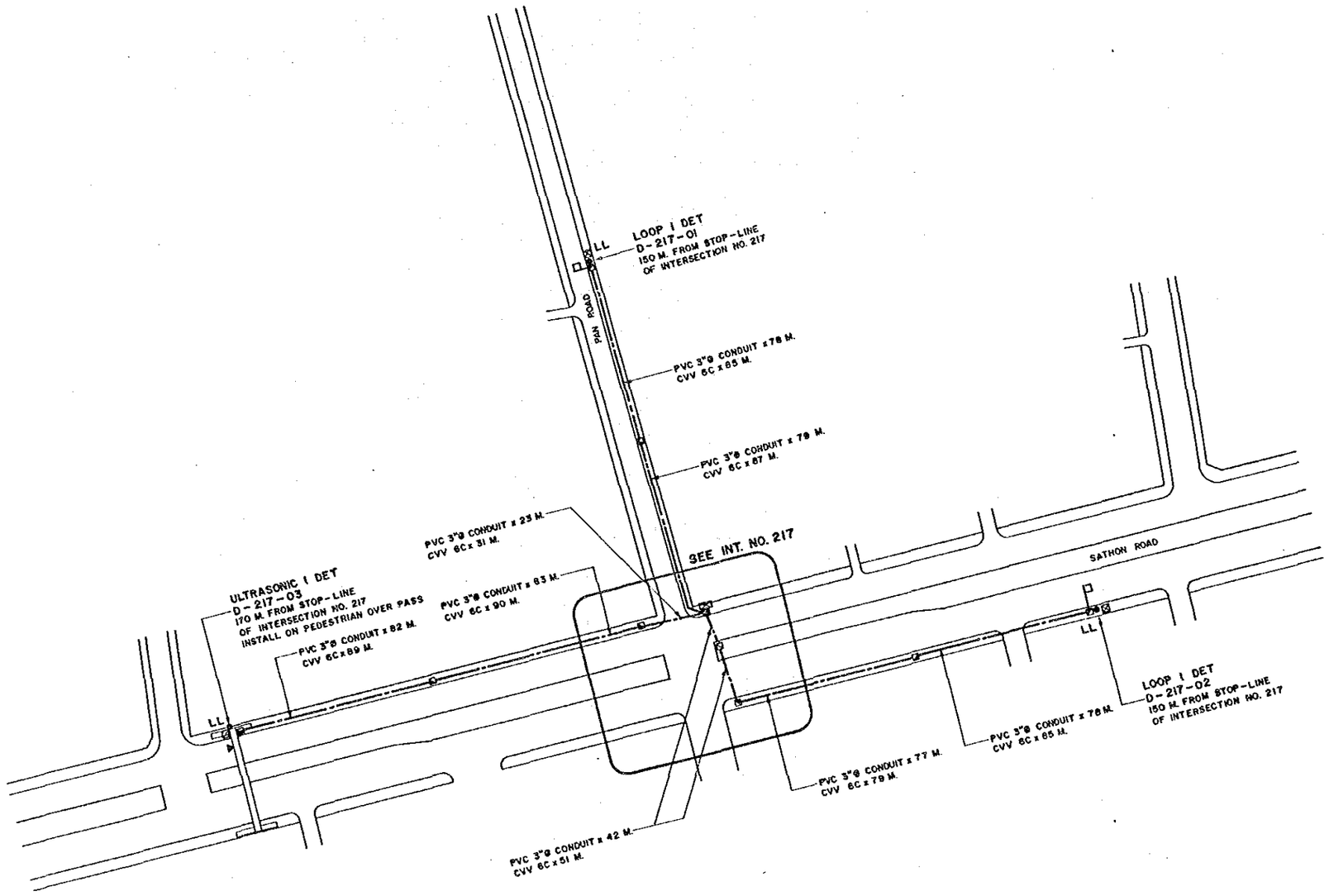
Checked By : TED., BMA

Scale 1 / 1,000

Date SEPTEMBER '90

Drawing NO 4214

Total 72 / 86



Detector Equipments List		
Drawing NO. 4217		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	1
8	Ultrasonic Detector Head	1
9	Ultrasonic Detector Feeder Cable	8
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	5
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	1
17	Conduit PVC 3" or 70mm	544
18	Conduit Steel 3" or 70mm	
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	20
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	544
23	Install Conduit on Pedestrian Overpass	20
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	7
26	Aerial Cable Supporter	-
27	Detector Cable 6c	597
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	3
36	Grounding Cable	15

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 217

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jure Kadota, JICA Study Team Leader

Approved By : Boonyarat Tipsa, BMA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Checked By : TEO, BMA

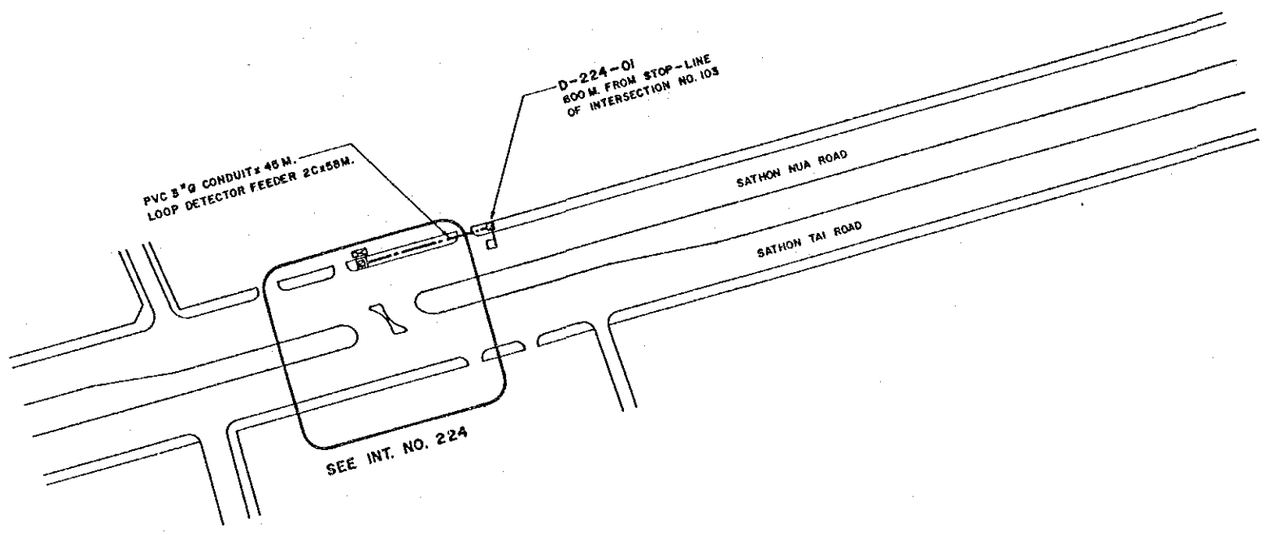
Scale 1 / 1,000

Drawing Nº 4217

Date SEPTEMBER '90

Total 73 / 86

Detector Equipments List		
Drawing NO. 4224		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	-
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	1
5	Loop Coil Cable	8
6	Loop Coil Feeder Cable	63
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	45
18	Conduit Steel 3" or 70mm	
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	45
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	1
26	Aerial Cable Supporter	-
27	Detector Cable 6c	-
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	1
36	Grounding Cable	5



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 224

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Designed By : Yasuo Hobashima, JICA Study Member

Approved By : Boonyawat Tipluo, BMA Study Team Leader

Checked By : TED, BMA

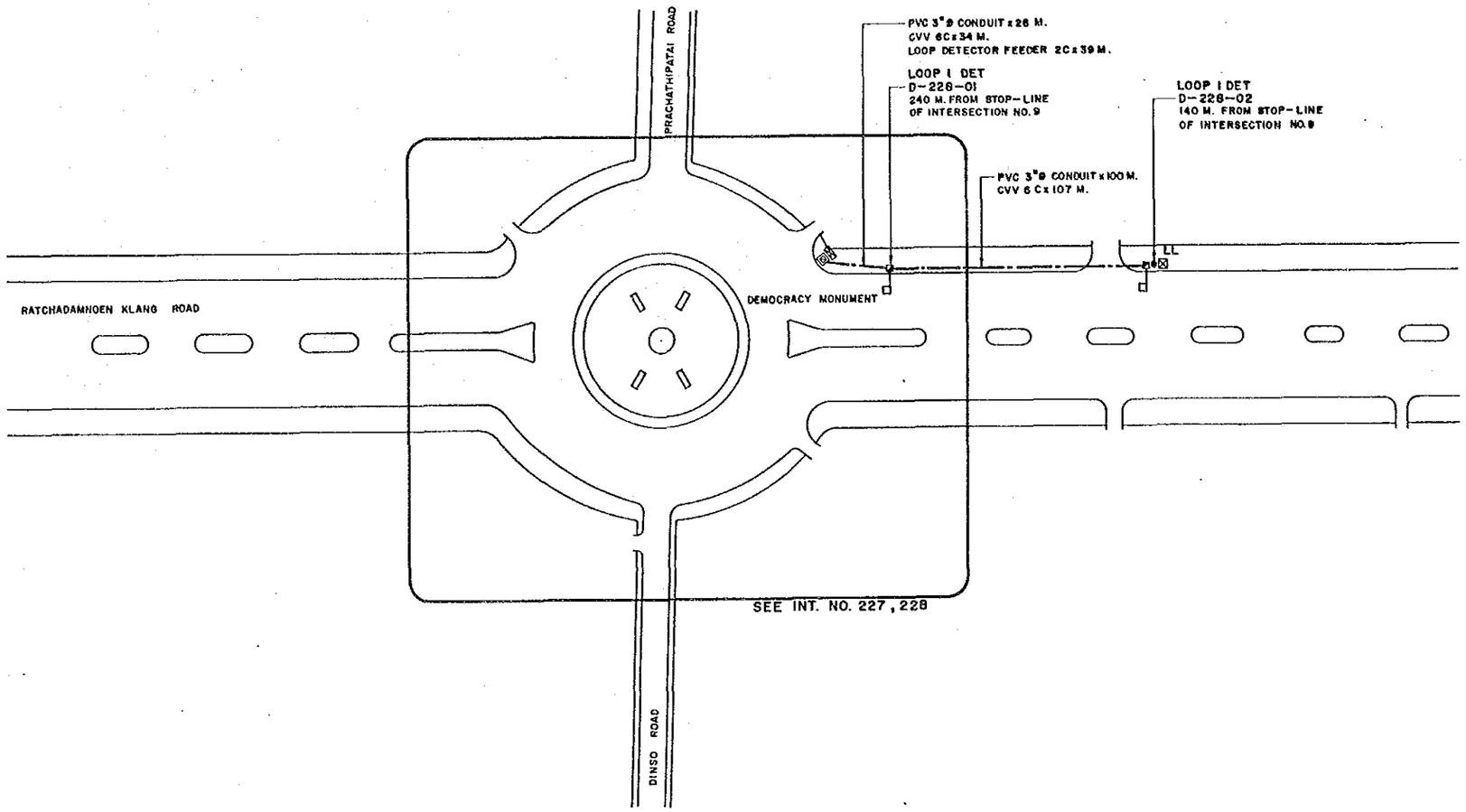
Scale 1 / 1,000

Drawing Nº 4224

Date SEPTEMBER '90

Total 74 / 86

Detector Equipments List		
Drawing NO. 4228		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	49
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	126
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	126
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	2
26	Aerial Cable Supporter	-
27	Detector Cable 6c	141
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	1
36	Grounding Cable	5



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 228

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

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Approved By : Boonyawat Tiptus, BMA Study Team Leader

Checked By : TED, BMA

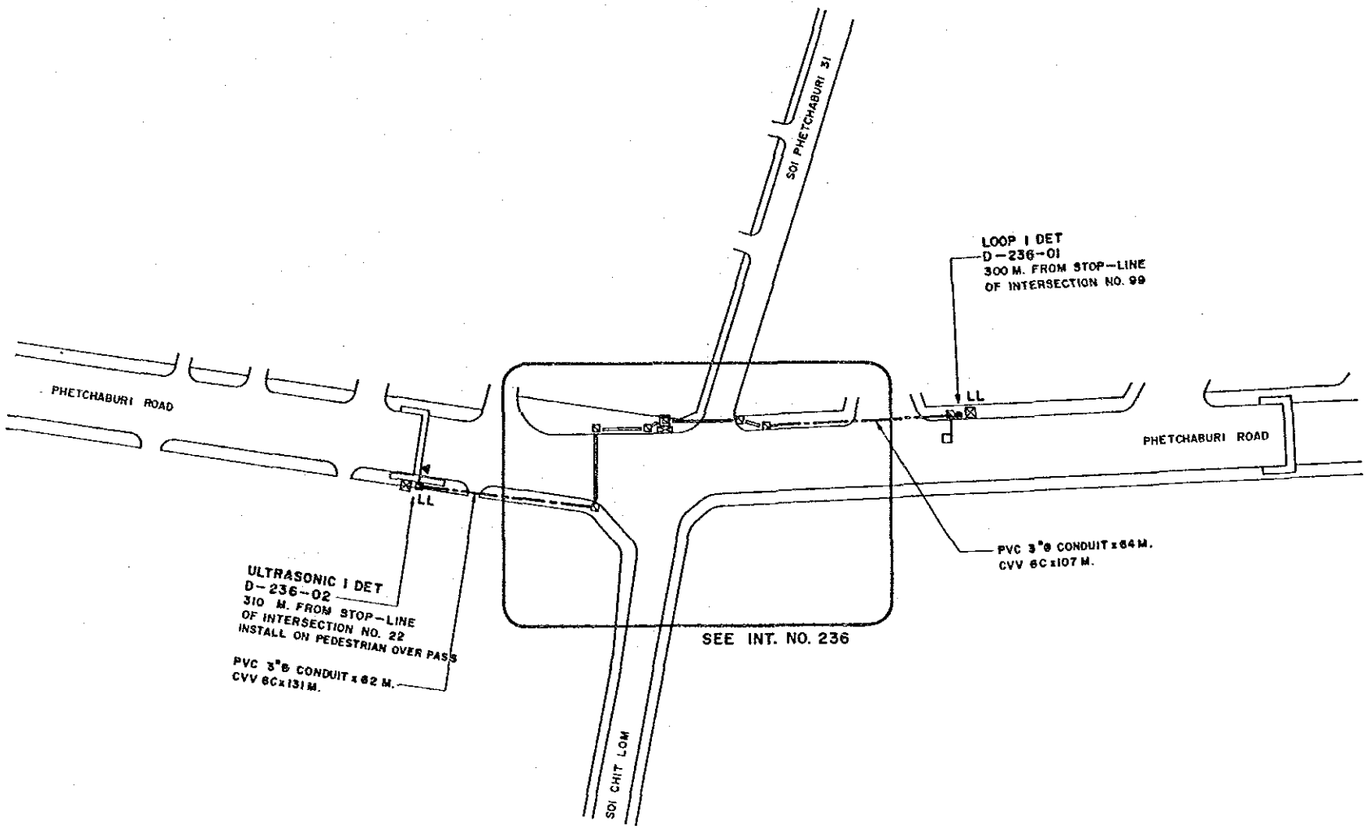
Scale 1 / 1,000

Date SEPTEMBER '90

Drawing NO 4228

Total 75 / 86

Detector Equipments List		
Drawing NO. 4236		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	1
5	Loop Coil Cable	8
6	Loop Coil Feeder Cable	5
7	Ultrasonic Detector Unit	1
8	Ultrasonic Detector Head	1
9	Ultrasonic Detector Feeder Cable	18
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	1
17	Conduit PVC 3" or 70mm	126
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	126
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	2
26	Aerial Cable Supporter	-
27	Detector Cable 6c	238
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 236

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipsua, BMA Study Team Leader

Designed By : Yasuo Nakashima, JICA Study Member

Checked By : TED, BMA

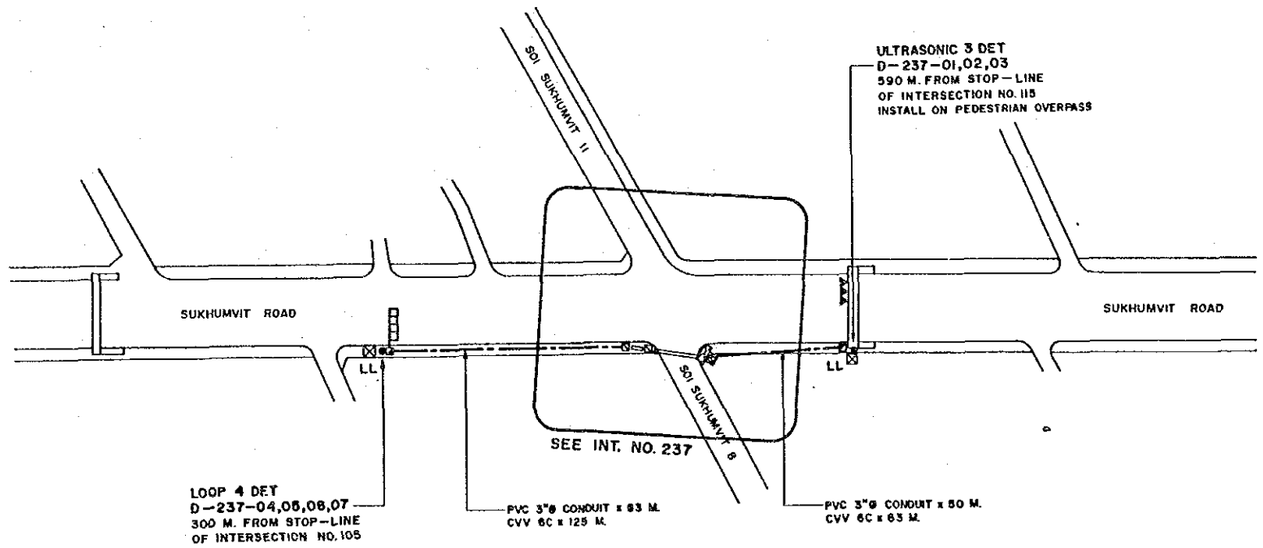
Scale 1 / 1,000

Drawing Nº 4236

Date SEPTEMBER '90

Total 76 / 86

Detector Equipments List		
Drawing NO. 4237		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	4
5	Loop Coil Cable	32
6	Loop Coil Feeder Cable	48
7	Ultrasonic Detector Unit	3
8	Ultrasonic Detector Head	3
9	Ultrasonic Detector Feeder Cable	78
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	2
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	3
17	Conduit PVC 3" or 70mm	133
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	25
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	133
23	Install Conduit on Pedestrian Overpass	25
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	2
26	Aerial Cable Supporter	-
27	Detector Cable 6c	168
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 237

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jure Kodera, JICA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Approved By : Boonyawat Tipsu, BMA Study Team Leader

Checked By : TED, BMA

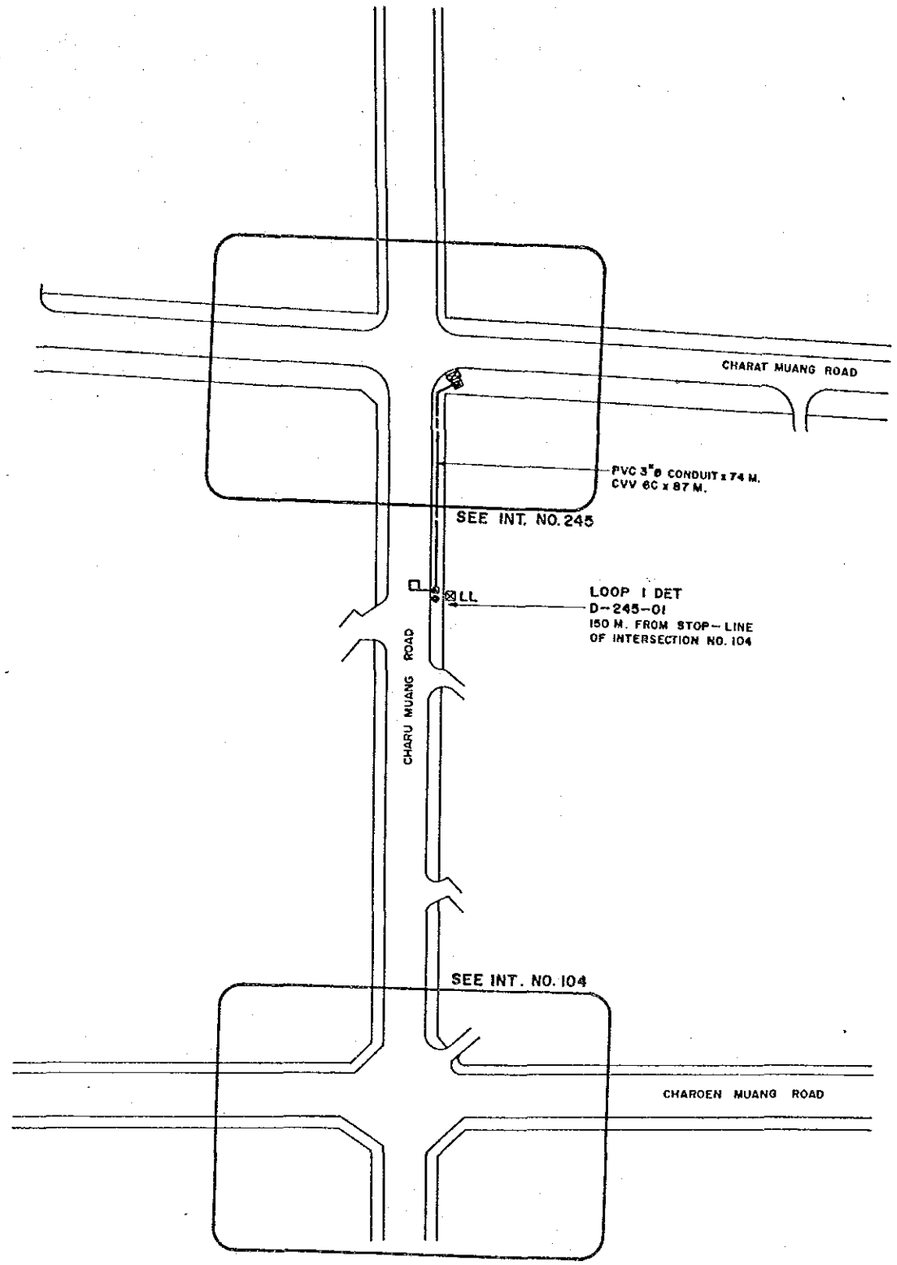
Scale 1 / 1,000

Date SEPTEMBER '90

Drawing Nº 4237

Total 77 / 86

Detector Equipments List		
Drawing NO. 4245		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	1
5	Loop Coil Cable	8
6	Loop Coil Feeder Cable	5
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	74
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	74
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	1
26	Aerial Cable Supporter	-
27	Detector Cable 6c	87
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	1
36	Grounding Cable	6



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 245

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipkas, BMA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

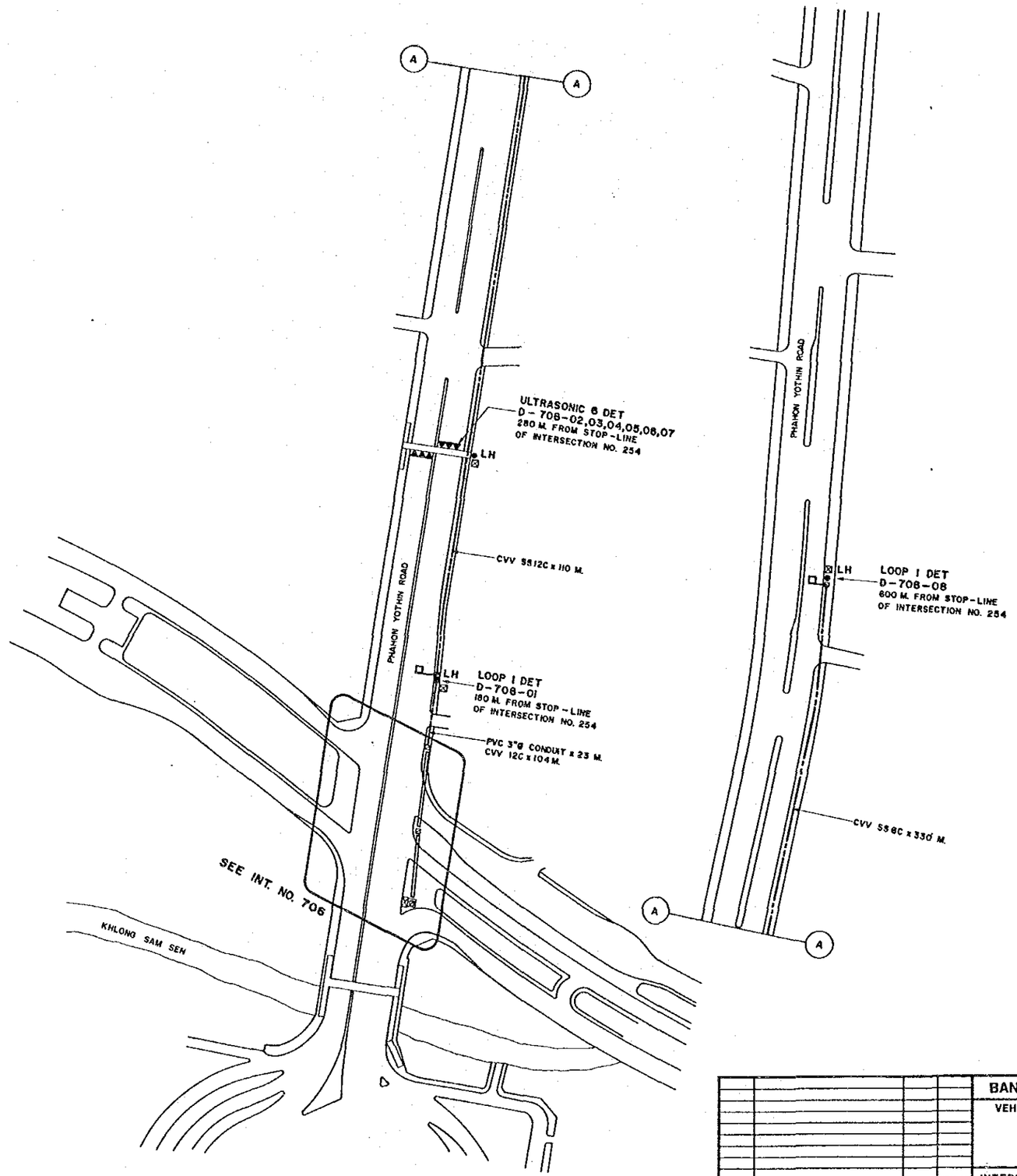
Checked By : TED, BMA

Scale 1 / 1,000

Drawing Nº 4245

Date SEPTEMBER '90

Total 78 / 86



Detector Equipments List		
Drawing NO. 4706		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	6
8	Ultrasonic Detector Head	6
9	Ultrasonic Detector Feeder Cable	172
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	3
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	6
17	Conduit PVC 3" or 70mm	23
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	301
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	23
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	2
25	Handhole Type C	12
26	Aerial Cable Supporter	104
27	Detector Cable 6c	-
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	330
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	110
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	3
36	Grounding Cable	15

Code	Revision	Date	Initial

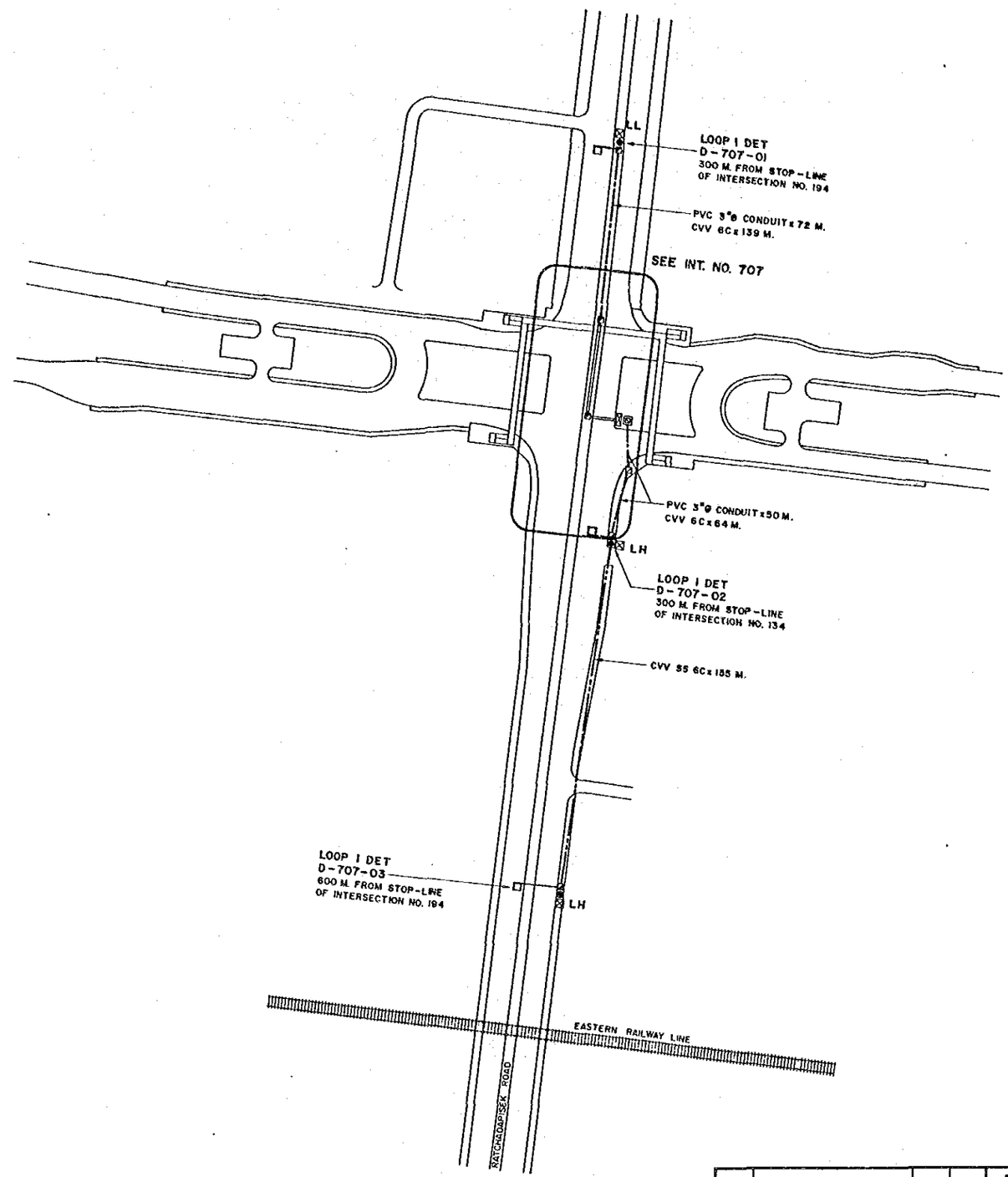
Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO 706

Submitted By : Jure Kodera, JICA Study Team Leader	Approved By : Boonyawat Tipsa, BMA Study Team Leader
Designed By : Yasuo Nakashima, JICA Study Member	Checked By : TED., BMA
JICA: Japan International Cooperation Agency / BMA: Bangkok Metropolitan Administration	Scale 1 / 1,000
Date SEPTEMBER '90	Drawing NO 4706
	Total 79/86



Detector Equipments List		
Drawing NO. 4707		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	3
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	3
5	Loop Coil Cable	24
6	Loop Coil Feeder Cable	35
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	122
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	72
22	Install Conduit under Concrete Pavement or Sidewalk	50
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	3
26	Aerial Cable Supporter	2
27	Detector Cable 6c	169
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	155
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 707

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jura Kodera, JICA Study Team Leader

Approved By : Boonyawat Tipsuo, BMA Study Team Leader

Designed By : Yasuo Nakashima, JICA Study Member

Checked By : TED, BMA

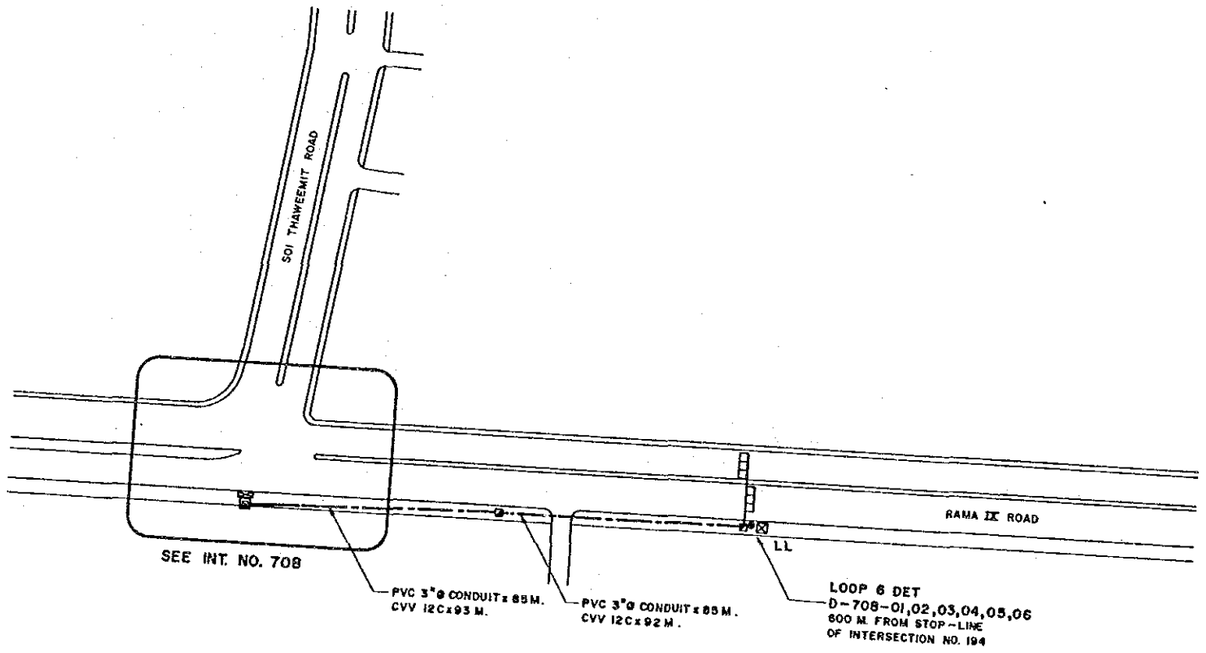
Scale 1 / 1,000

Drawing Nº 4707

Date SEPTEMBER '90

Total 80 / 86

Detector Equipments List		
Drawing NO. 4708		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	6
5	Loop Coil Cable	48
6	Loop Coil Feeder Cable	72
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	1
13	Type B Pole	-
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	170
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	170
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	2
26	Aerial Cable Supporter	-
27	Detector Cable 6c	-
28	Detector Cable 8c	-
29	Detector Cable 12c	185
30	Detector Cable SS 6c	-
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	1
36	Grounding Cable	5



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 708

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kadara, JICA Study Team Leader

Designed By : Yasuo Nabeshima, JICA Study Member

Approved By : Boonyawat Tiptus, BMA Study Team Leader

Checked By : TED-BMA

Scale 1 / 1,000

Drawing Nº 4708

Date SEPTEMBER '90

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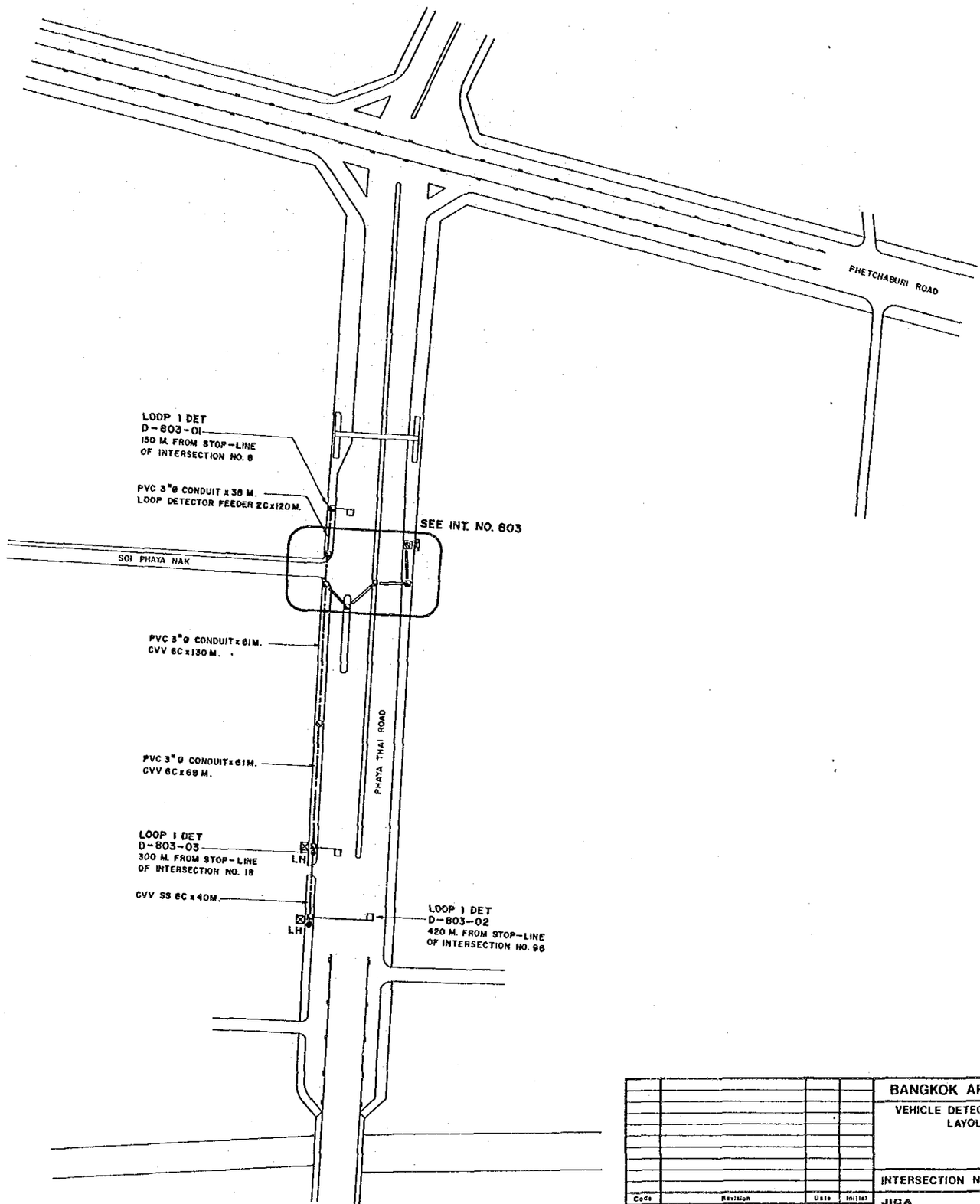


Detector Equipments List Drawing NO. 4803		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	3
5	Loop Coil Cable	24
6	Loop Coil Feeder Cable	135
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	160
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	160
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	3
26	Aerial Cable Supporter	5
27	Detector Cable 6c	198
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	40
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10

Code	Revision	Date	Initial

Associated Plan No. :

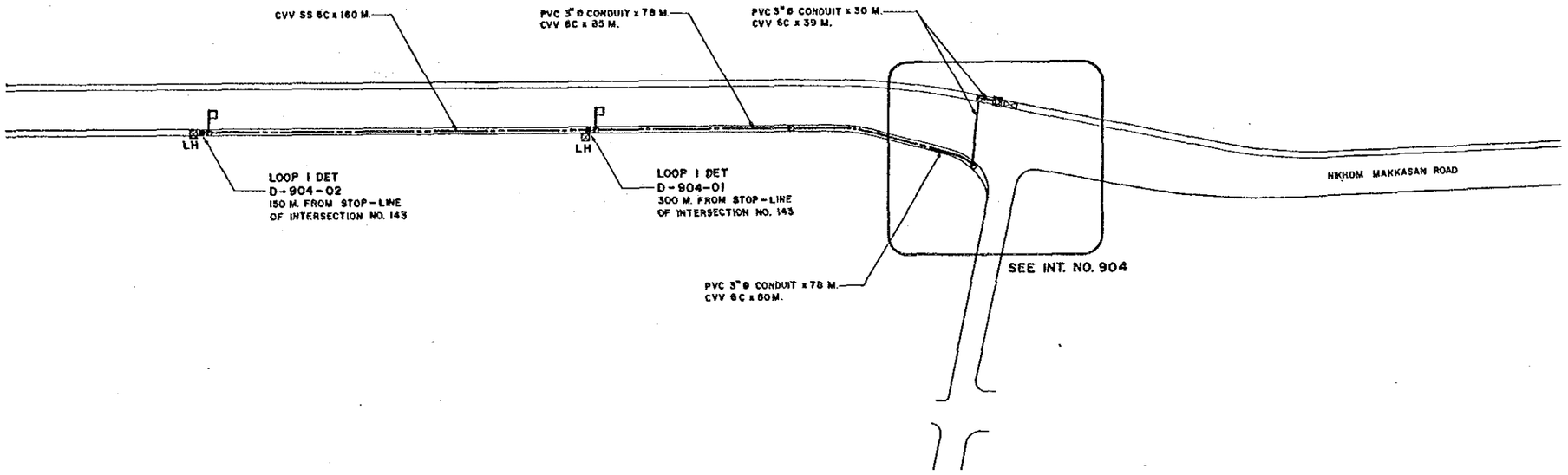
BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 803

Submitted By : Jun Kodera, JICA Study Team Leader	Approved By : Boonyawat Tiptus, BMA Study Team Leader
Designed By : Yasuo Nabeshima, JICA Study Member	Checked By : TED, BMA
JICA Japan International Cooperation Agency / BMA Bangkok Metropolitan Administration	Scale 1 / 1,000
Date SEPTEMBER '90	Drawing Nº 4803
	Total 82 / 86

Detector Equipments List Drawing NO. 4904		
mbl	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	-
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	-
4	Loop Coil Detector Unit	2
5	Loop Coil Cable	16
6	Loop Coil Feeder Cable	10
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	-
11	TOT Line Box	-
12	Type A Pole	-
13	Type B Pole	2
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	166
18	Conduit Steel 3" or 70mm	-
19	Conduit Steel 39mm	-
20	Conduit Steel 28mm	-
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	166
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	-
25	Handhole Type C	3
26	Aerial Cable Suoporter	5
27	Detector Cable 6c	204
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	160
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	-
34	TOT line (CPV, 0.65mm, 1P)	-
35	Grounding Rod	2
36	Grounding Cable	10



Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº 904

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

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Checked By : TED., BMA

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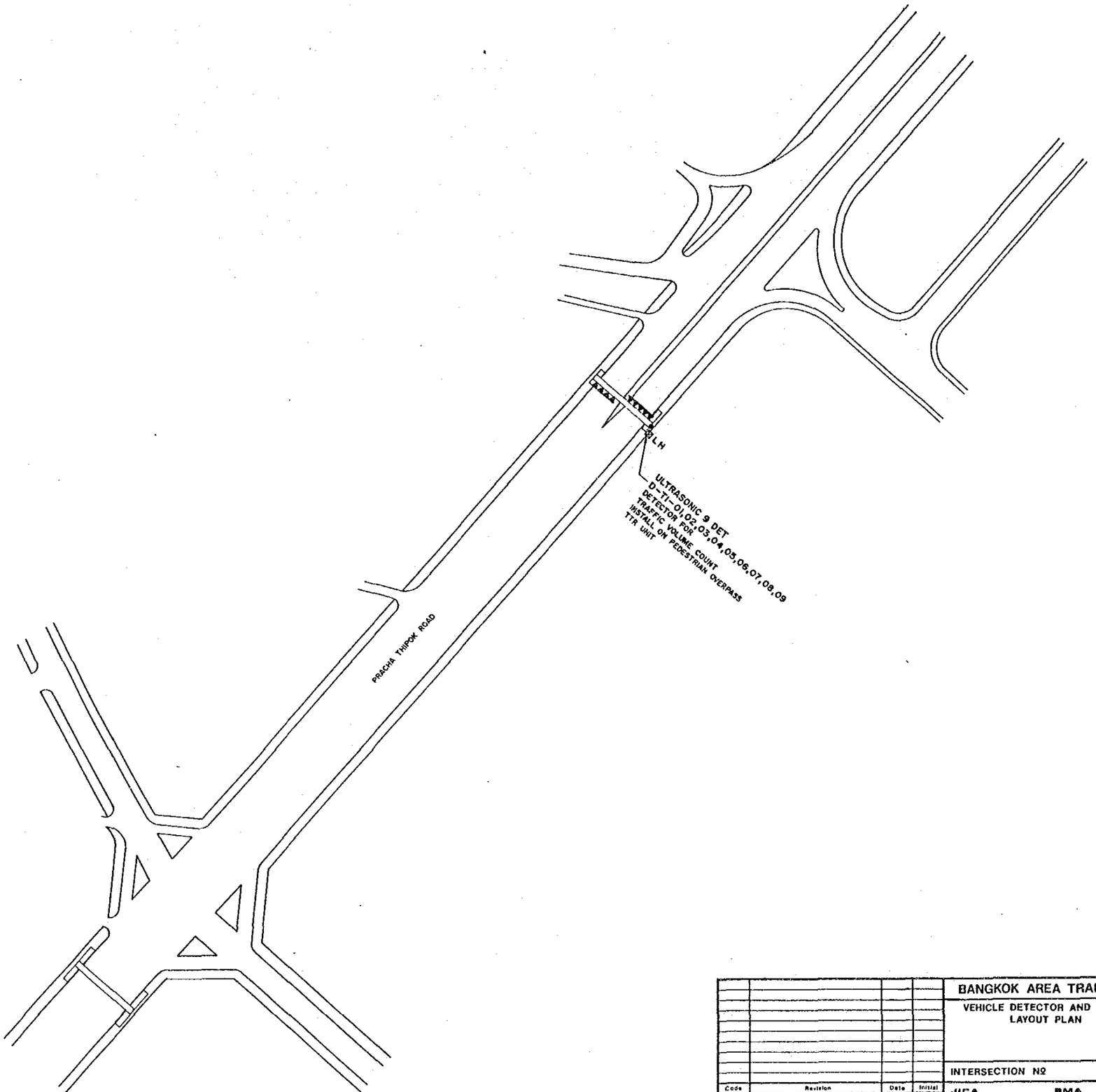
Drawing Nº 4904

Date SEPTEMBER '90

Total 83 / 86



Detector Equipments List		
Drawing NO. 4991		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	–
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	–
5	Loop Coil Cable	–
6	Loop Coil Feeder Cable	–
7	Ultrasonic Detector Unit	9
8	Ultrasonic Detector Head	9
9	Ultrasonic Detector Feeder Cable	172
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	–
13	Type B Pole	1
14	Type C Pole with 7.0m Arm	–
15	Type C Pole with 8.5m Arm	–
16	Assembly for Installation on Pedestrian Overpass	9
17	Conduit PVC 3" or 70mm	–
18	Conduit Steel 3" or 70mm	–
19	Conduit Steel 39mm	5
20	Conduit Steel 28mm	35
21	Install Conduit under Asphalt Pavement	–
22	Install Conduit under Concrete Pavement or Sidewalk	–
23	Install Conduit on Pedestrian Overpass	30
24	Install Conduit on Riser Support pole	5
25	Handhole Type C	–
26	Aerial Cable Supporter	–
27	Detector Cable 6c	–
28	Detector Cable 8c	–
29	Detector Cable 12c	–
30	Detector Cable SS 6c	–
31	Detector Cable SS 8c	–
32	Detector Cable SS 12c	–
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	1
36	Grounding Cable	5

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº2

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JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

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Drawing Nº2 4991

Date SEPTEMBER '90

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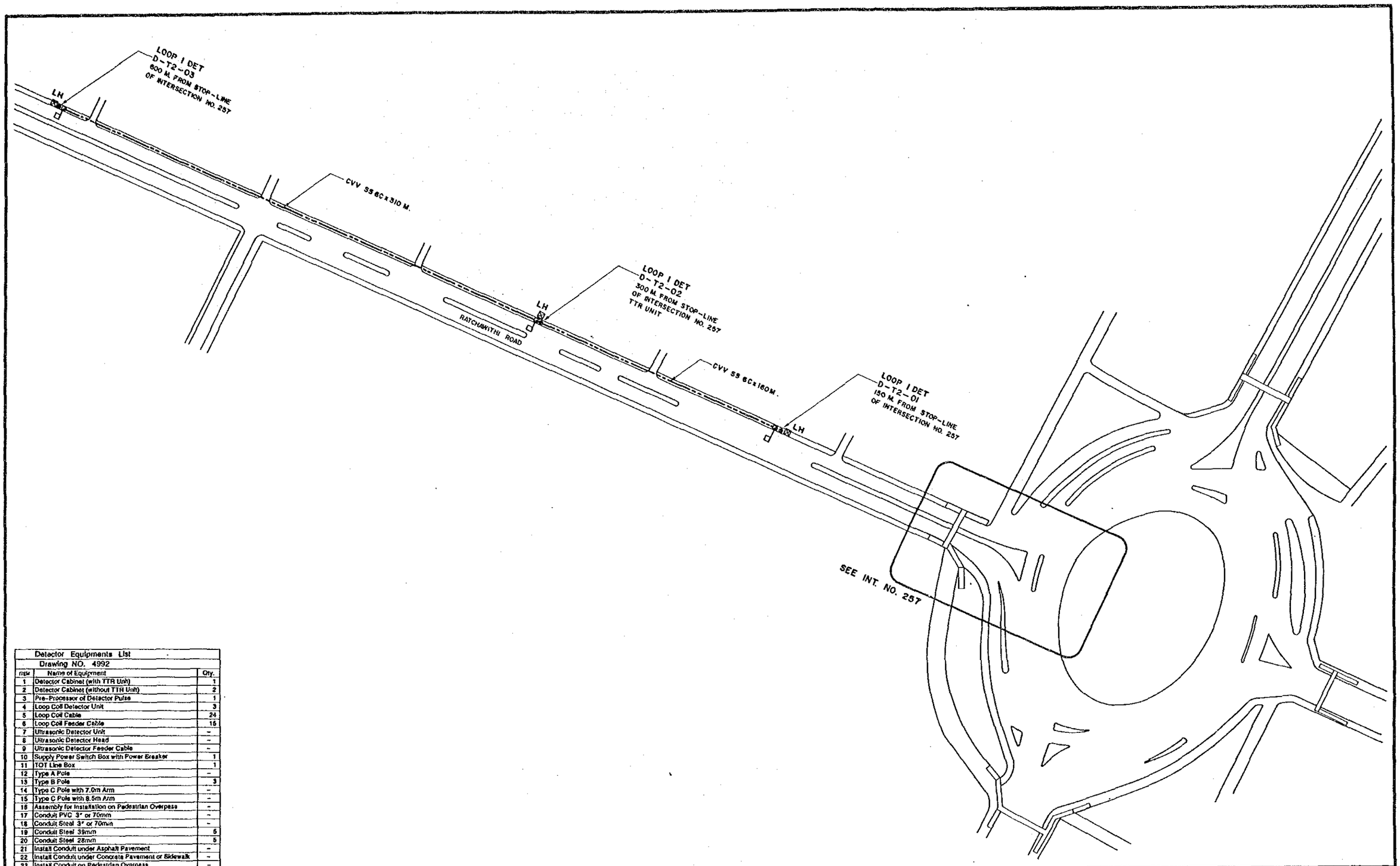

Detector Equipments List		
Drawing NO. 4992		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	2
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	3
5	Loop Coil Cable	24
6	Loop Coil Feeder Cable	15
7	Ultrasonic Detector Unit	-
8	Ultrasonic Detector Head	-
9	Ultrasonic Detector Feeder Cable	-
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	-
13	Type B Pole	3
14	Type C Pole with 7.0m Arm	-
15	Type C Pole with 8.5m Arm	-
16	Assembly for Installation on Pedestrian Overpass	-
17	Conduit PVC 3" or 70mm	-
18	Conduit Steal 3" or 70mm	-
19	Conduit Steel 39mm	5
20	Conduit Steel 28mm	5
21	Install Conduit under Asphalt Pavement	-
22	Install Conduit under Concrete Pavement or Sidewalk	-
23	Install Conduit on Pedestrian Overpass	-
24	Install Conduit on Riser Support pole	5
25	Handhole Type C	3
26	Aerial Cable Supporter	13
27	Detector Cable 6c	-
28	Detector Cable 8c	-
29	Detector Cable 12c	-
30	Detector Cable SS 6c	470
31	Detector Cable SS 8c	-
32	Detector Cable SS 12c	-
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	3
36	Grounding Cable	15

Code	Revision	Date	Initial

Associated Plan No. :

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION Nº

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

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Approved By : Boonyawat Tiptus, BMA Study Team Leader

Checked By : TEO., BMA

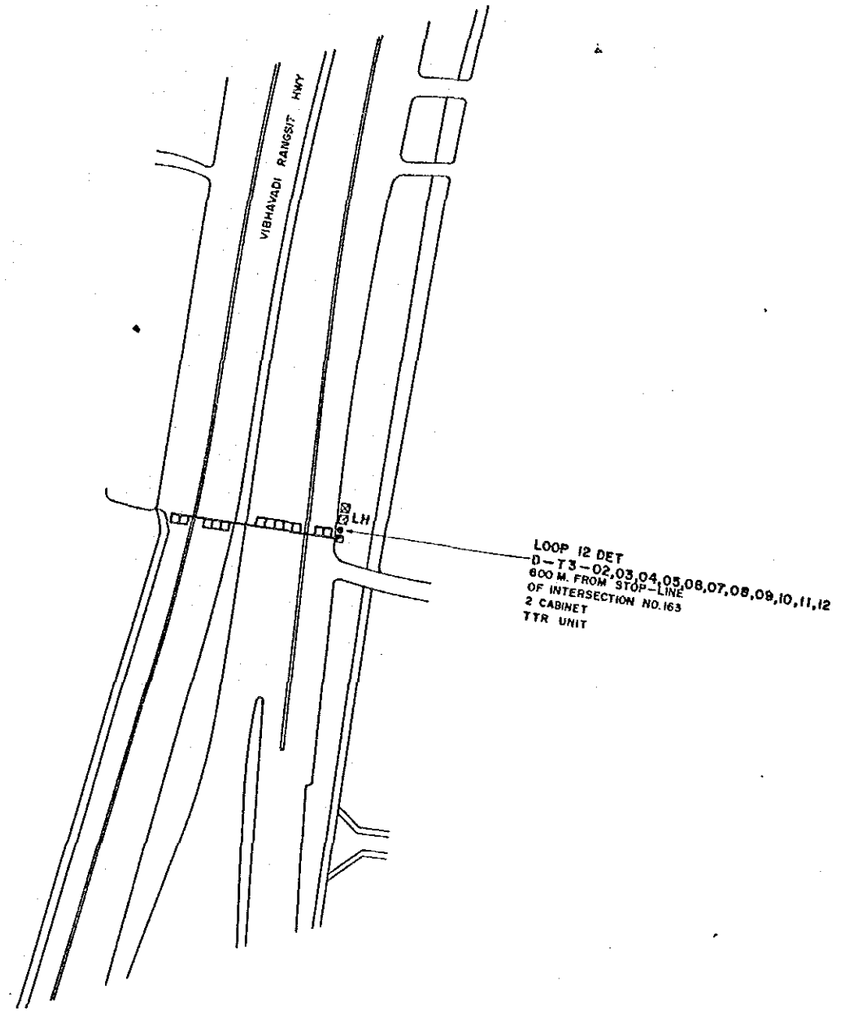
Scale 1 / 1,000

Date SEPTEMBER '90

Drawing Nº 4992

Total 85 / 86

Detector Equipments List		
Drawing NO. 4993		
ITEM	Name of Equipment	Qty.
1	Detector Cabinet (with TTR Unit)	1
2	Detector Cabinet (without TTR Unit)	1
3	Pre-Processor of Detector Pulse	1
4	Loop Coil Detector Unit	12
5	Loop Coil Cable	96
6	Loop Coil Feeder Cable	430
7	Ultrasonic Detector Unit	–
8	Ultrasonic Detector Head	–
9	Ultrasonic Detector Feeder Cable	–
10	Supply Power Switch Box with Power Breaker	1
11	TOT Line Box	1
12	Type A Pole	–
13	Type B Pole	1
14	Type C Pole with 7.0m Arm	–
15	Type C Pole with 8.5m Arm	–
16	Assembly for Installation on Pedestrian Overpass	–
17	Conduit PVC 3" or 70mm	–
18	Conduit Steel 3" or 70mm	–
19	Conduit Steel 39mm	6
20	Conduit Steel 28mm	6
21	Install Conduit under Asphalt Pavement	–
22	Install Conduit under Concrete Pavement or Sidewalk	–
23	Install Conduit on Pedestrian Overpass	–
24	Install Conduit on Riser Support pole	6
25	Handhole Type C	1
26	Aerial Cable Supporter	–
27	Detector Cable 6c	–
28	Detector Cable 8c	–
29	Detector Cable 12c	–
30	Detector Cable SS 6c	–
31	Detector Cable SS 8c	–
32	Detector Cable SS 12c	–
33	Power Cable	20
34	TOT line (CPV, 0.65mm, 1P)	20
35	Grounding Rod	1
36	Grounding Cable	5



Code	Revision	Date	Initial
Associated Plan No. :			

BANGKOK AREA TRAFFIC CONTROL SYSTEM PROJECT : STAGE I

VEHICLE DETECTOR AND CABLE LAYOUT PLAN

INTERSECTION NO

JICA Japan International Cooperation Agency

BMA Bangkok Metropolitan Administration

Submitted By : Jun Kodera, JICA Study Team Leader

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Scale 1 / 1,000

Date SEPTEMBER '90

Drawing NO 4993

Total 86 / 86