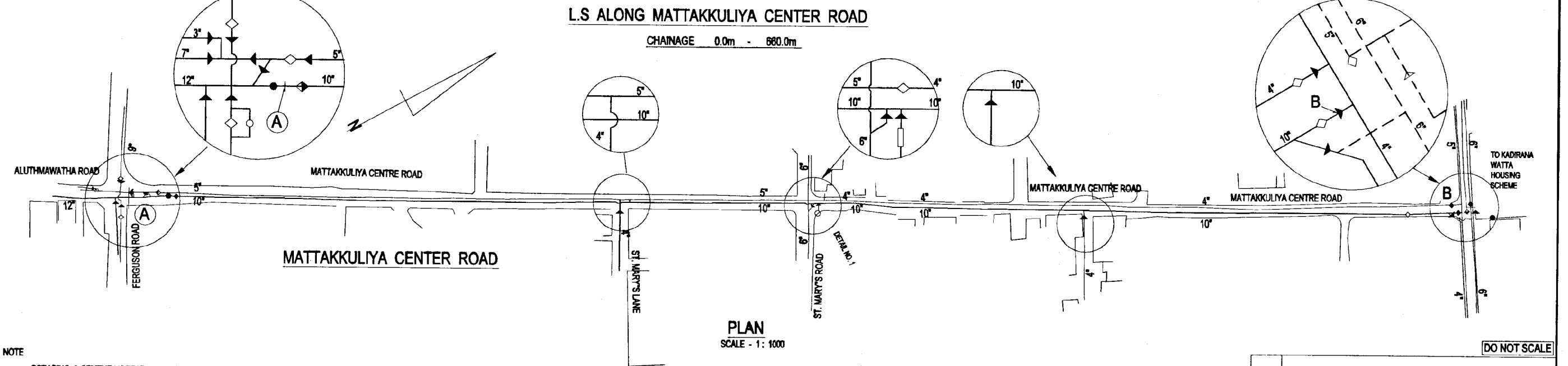


HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	12.00, 12.20, 12.00, 11.00, 10.00, 8.00, 7.50, 8.00, 7.50, 7.50, 7.20, 7.50, 0.00, 7.00
INVERT LEVEL (m)	
PIPE DETAILS	10" (250 mm) DIA
CHAINAGE (m)	0.00, 25.00, 35.00, 50.00, 75.00, 90.00, 100.00, 125.00, 130.00, 150.00, 160.00, 175.00, 190.00, 200.00, 225.00, 240.00, 250.00, 275.00, 300.00, 325.00, 337.00, 350.00, 375.00, 400.00, 425.00, 440.00, 450.00, 475.00, 500.00, 510.00, 525.00, 550.00, 575.00, 590.00, 600.00, 625.00, 630.00, 650.00, 660.00
HORIZONTAL ANGLE (°)	

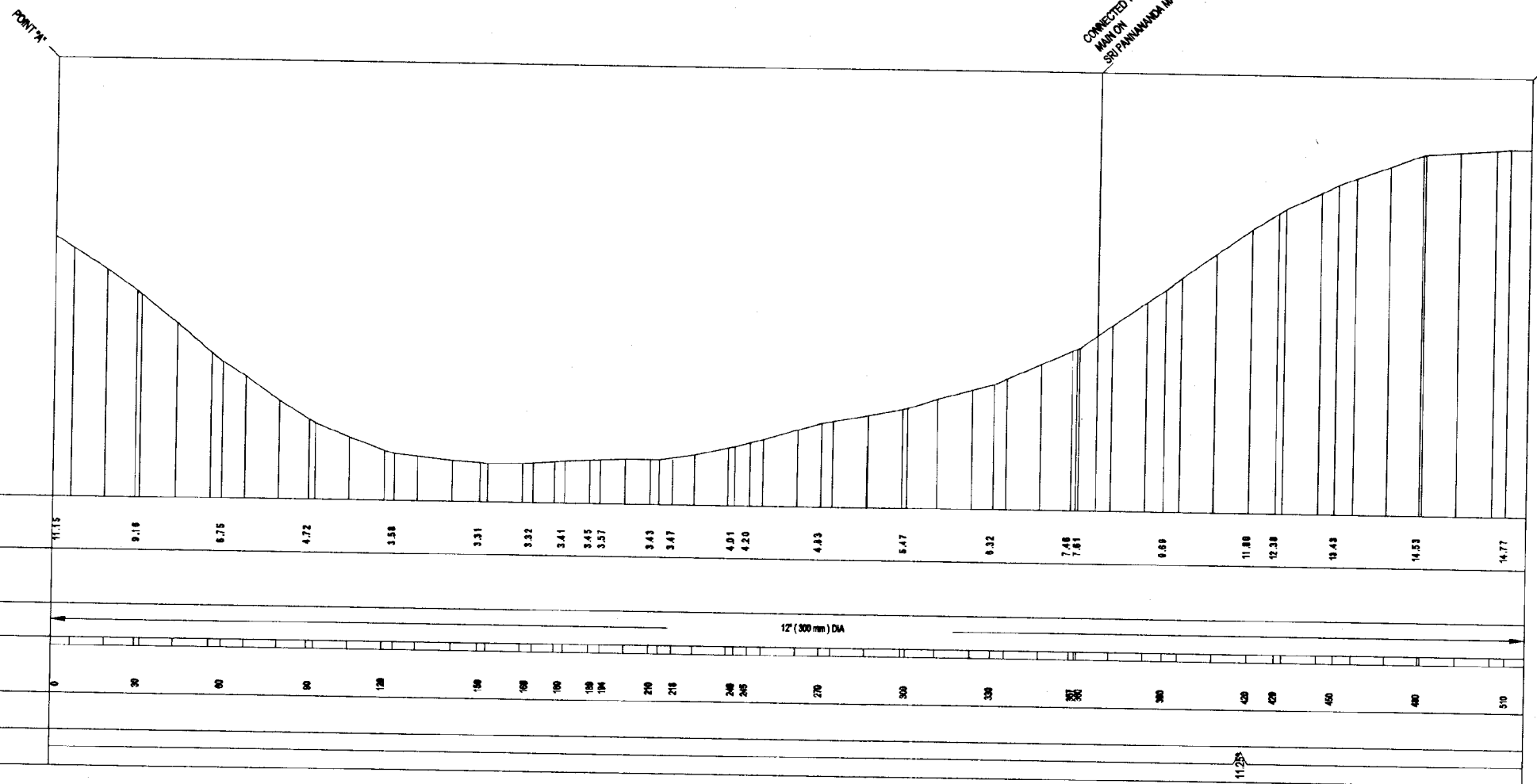
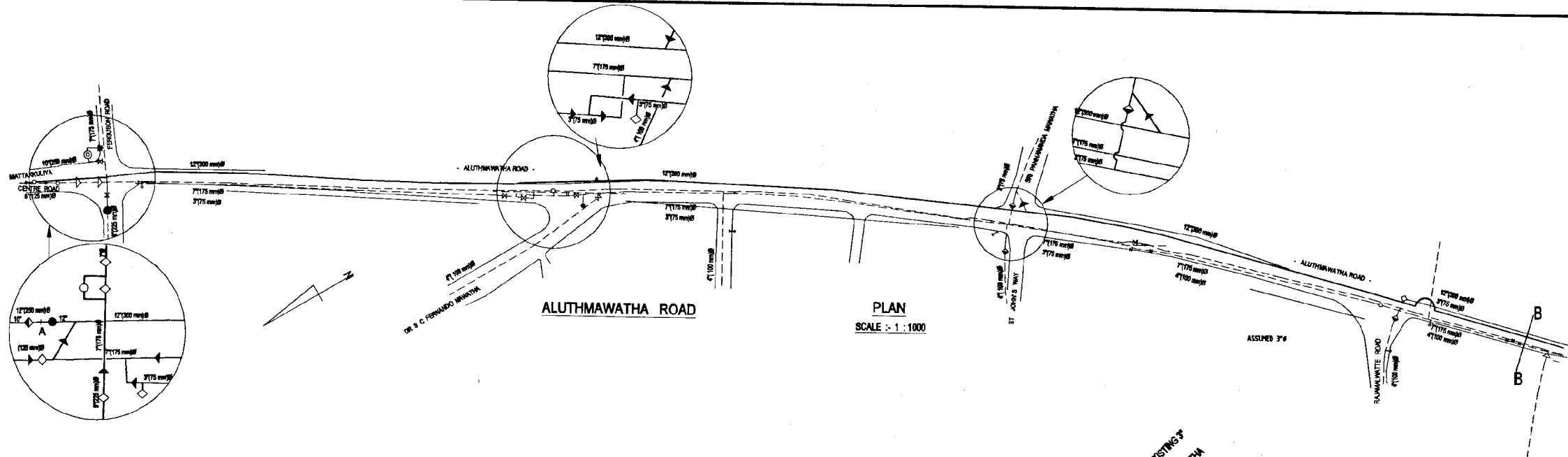


NOTE  
 SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM THE POINT 'A' TO THE POINT 'B' ALONG THE 10" DIAMETER CI DISTRIBUTION MAIN.

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION MATTAKKULIYA CENTER ROAD
	DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DT. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARUNESA PM (DRWS/APS) INCHARGE: <i>[Signature]</i> A.G.M (PMD) INCHARGE: R. D. N. C.G.M (PMD) INCHARGE:

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 STUDY TEAM  
 NIKON SUIDO CONSULTANTS CO. LTD.,  
 TOKYO, JAPAN



	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500		
DATUM 5.0 ABOVE M.S.L.																												
GROUND LEVELS (m)	11.15	9.16	6.75	4.72	3.58	3.31	3.32	3.41	3.45	3.57	3.63	3.67	4.01	4.20	4.83	5.47	6.32	7.48	7.81	8.89	11.88	12.38	13.43	14.83	14.77			
INVERT LEVELS (m)																												
DIAMETER OF PIPE	12" (300 mm) DIA																											
HORIZONTAL DISTANCES	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500		
SLOPE																												
HORIZONTAL ANGLES																												

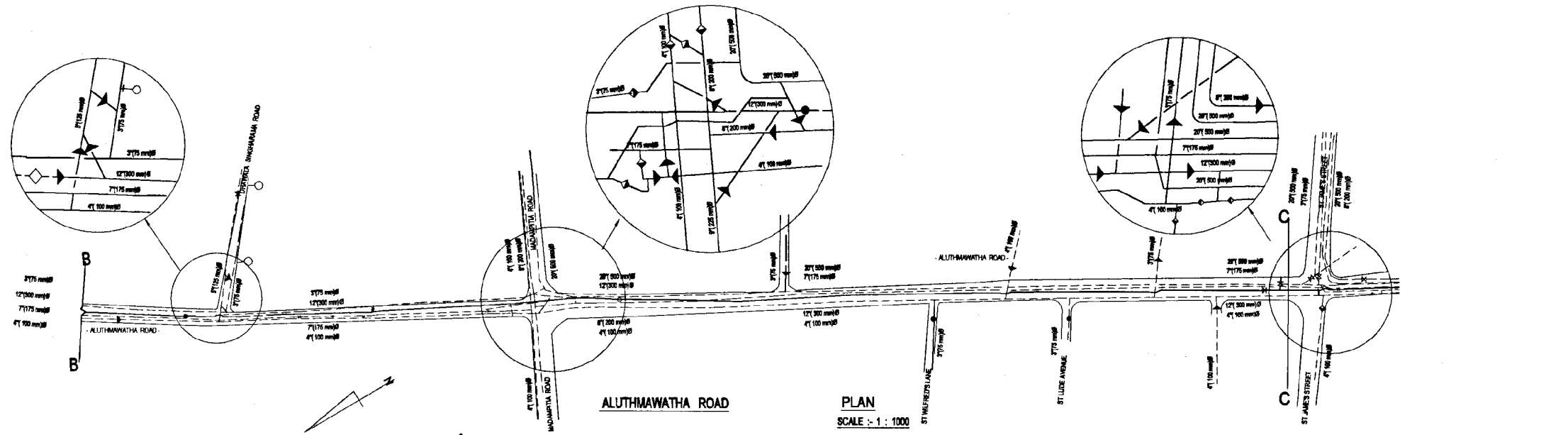
NOTE :-  
 SCRAPING & CEMENT MORTAR LINING SHOULD  
 BE DONE ONLY FROM POINT 'A' TO B.B  
 ALONG THE 12" DIA DISTRIBUTION MAIN.

LS ALONG ALUTHMAWATHA ROAD  
 CHAINAGE 0.0m - 510.0m

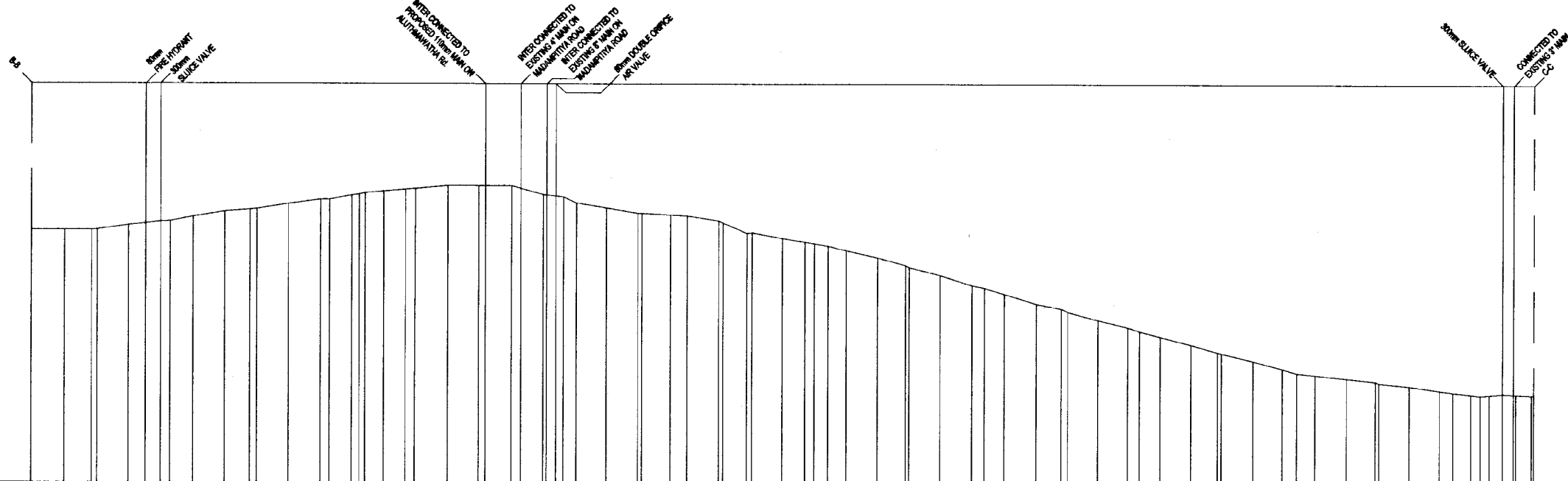
SCALE :-  
 VERTICAL - 1 : 100  
 HORIZONTAL - 1 : 1000

DO NOT SCALE

	<b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA		SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION ALUTHMAWATHA ROAD
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIPPON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN		DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> BY TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA IN CHARGE: <i>[Signature]</i> A.S.M. PAID NUMBER: <i>[Signature]</i> O.G.M. PAID NUMBER:



PLAN  
SCALE - 1 : 1000



DATUM 5.0 ABOVE M.S.L	
GROUND LEVELS (m)	14.77 14.77 15.06 15.81 15.92 16.15 16.25 16.26 16.46 16.91 16.34 15.34 15.17 15.05 14.84 14.26 14.12 13.46 12.85 11.76 10.86 10.18 9.55 9.42 9.09 8.72 8.57 8.54 8.27 8.05
INVERT LEVELS (m)	
DIAMETER OF PIPE	12" (300 mm) DIA
HORIZONTAL DISTANCES	510 52 570 600 625 635 660 680 720 750 760 765 770 780 801.5 810 840 870 900 920 980 1000 1000 1000 1074 1080
SLOPE	
HORIZONTAL ANGLES	

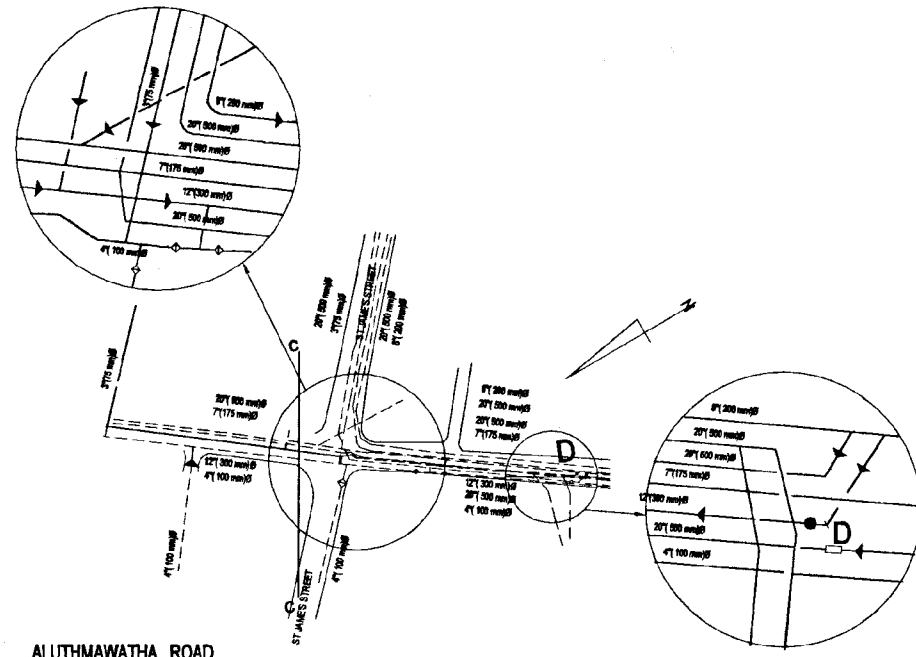
NOTE :-  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM BB TO CC ALONG THE 12" DIA DISTRIBUTION MAIN.

LS ALONG ALUTHMAWATHA ROAD

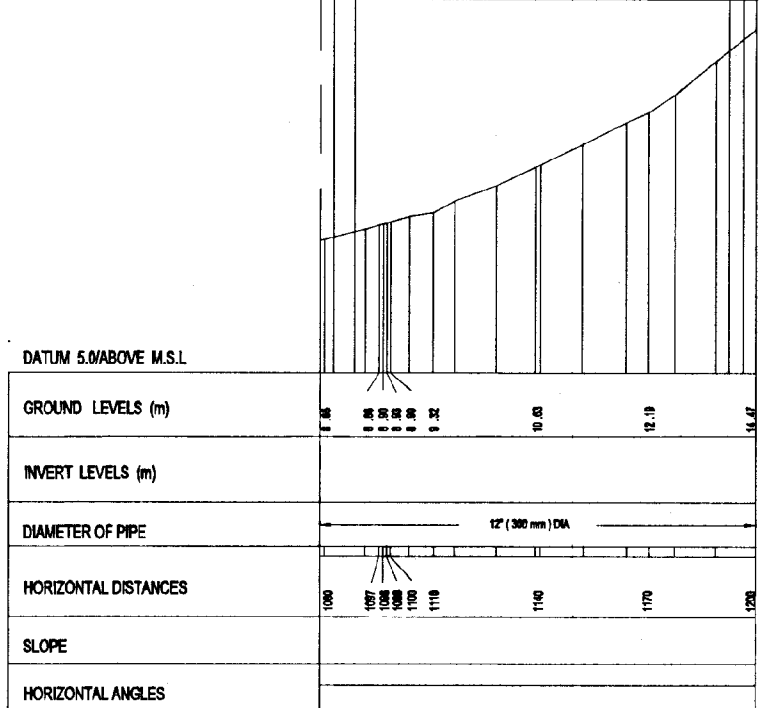
SCALE :-  
VERTICAL - 1 : 100  
HORIZONTAL - 1 : 1000

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION ALUTHMAWATHA ROAD SHEET 2 OF 3</p>
	<p>DESIGNED: [Signature]</p> <p>CHECKED: [Signature]</p> <p>BY: TEAM LEADER [Signature]</p> <p>TEAM LEADER [Signature]</p>	<p>THARANGA</p> <p>FW (PROVIDER) NUMBER [Signature]</p> <p>A.S.M (P.W) NUMBER R. D. A. P.</p> <p>D.S.M (P.W) NUMBER</p>



ALUTHMAWATHA ROAD




LS ALONG ALUTHMAWATHA ROAD

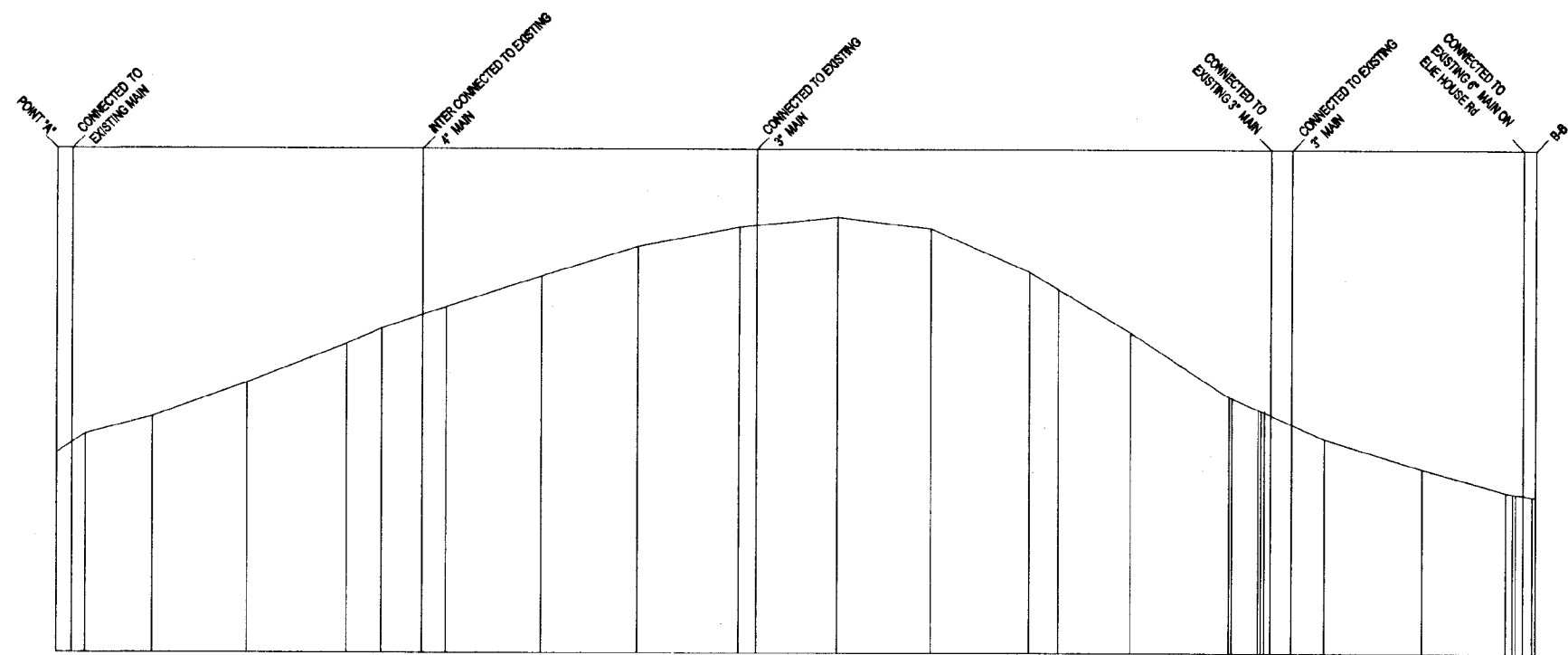
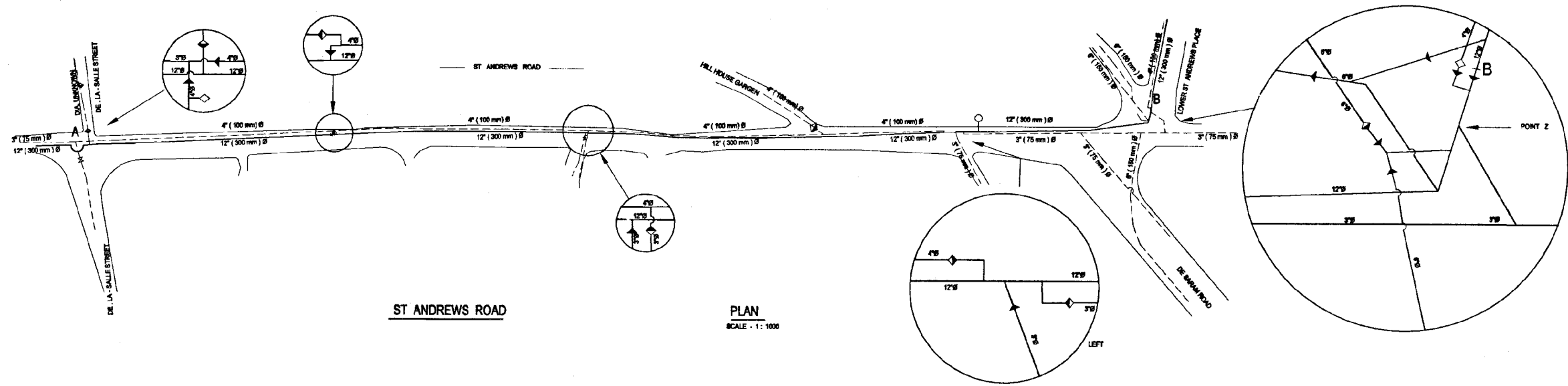
CHAINAGE 1030.0m - 1200.0m

SCALE: VERTICAL - 1 : 100  
HORIZONTAL - 1 : 1000

NOTE :-  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT 'C' TO POINT JUNCTION D ALONG THE 12" DIA DISTRIBUTION MAIN.

DO NOT SCALE

 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: <b>PLAN &amp; LONGITUDINAL SECTION ALUTHMAWATHA ROAD</b>
	SHEET 3 OF 3	
DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DT. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA PV (PROJECT) INCHARGE: <i>[Signature]</i> A.G.M (P&D) INCHARGE: <i>[Signature]</i> D.G.M (P&D) INCHARGE: <i>[Signature]</i>	DATE: JAN. 2008 CONTRACT NO: NRW / CW DRG. NO: RML/DM/RH - 04



DATUM 0.0 m ABOVE M. S. L.

GROUND LEVEL (m)	11.20	11.62	12.31	13.35	14.40	14.83	15.53	16.45	17.34	17.93	18.22	17.83	16.43	16.04	14.60	12.86	12.26	11.31	10.36
INVERT LEVEL (m)																			
DIAMETER OF PIPE	12" (300 mm) Ø																		
HORIZONTAL DISTANCE	690	700	720	750	760	790	810	840	870	900	930	960	990	998	1020	1050	1051	1058	1059
SLOPE																			
HORIZONTAL ANGLES																			

NOTE :-  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM JUNCTION A TO B ALONG THE 12" DIA. DISTRIBUTION MAIN.

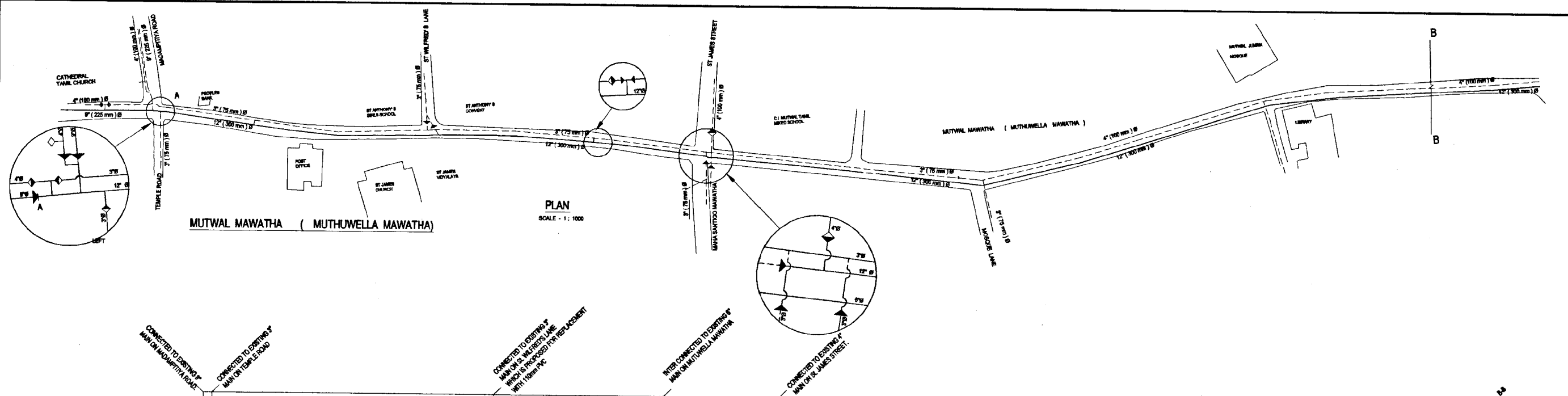
DO NOT SCALE

LS ALONG ST ANDREWS ROAD  
CHAINAGE 690.0m - 1147.0m

SCALE  
VERTICAL - 1:100  
HORIZONTAL - 1:1000

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDANAL SECTION ST. ANDREWS ROAD</p>
	<p>DESIGNED: [Signature]</p>	<p>DRAWN: THARANGA</p>
<p>CHECKED: [Signature]</p>	<p>PI (NRW/S&amp;P) NUMBER: [Signature]</p>	<p>CONTRACT NO: NRW / CW</p>
<p>BY TEAM LEADER: [Signature]</p>	<p>A.S.M (P&amp;D) NUMBER: R. D. [Signature]</p>	<p>DWG. NO: RML/DM/RH - 05</p>
<p>TEAM LEADER: [Signature]</p>	<p>D.S.M (P&amp;D) NUMBER:</p>	

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM  
NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN



PLAN  
SCALE - 1 : 1000

CONNECTED TO EXISTING MAIN ON MATHURATHA ROAD

CONNECTED TO EXISTING MAIN ON TEMPLE ROAD

CONNECTED TO EXISTING MAIN ON ST. JAMES STREET WHICH IS PROPOSED FOR REPLACEMENT WITH 100mm PVC

THIS CONNECTED TO EXISTING MAIN ON MUTWAL MAWATHA

CONNECTED TO EXISTING MAIN ON ST. JAMES STREET

DATUM 0.0 m ABOVE M. S. L.	
GROUND LEVEL (m)	7.39, 7.44, 7.90, 9.16, 10.24, 11.74, 11.49, 11.22, 10.24, 9.27, 8.56, 8.89, 8.15, 7.37, 6.64, 6.18, 5.79, 5.61, 5.80, 5.50, 5.73, 6.06, 6.56, 7.06, 7.35, 7.80, 8.30, 8.99
INVERT LEVEL (m)	
DIAMETER OF PIPE	12" (300 mm) Ø
HORIZONTAL DISTANCE	0, 6, 30, 60, 90, 126, 142, 150, 180, 210, 216, 217.5, 240, 270, 300, 330, 360, 390, 410, 420, 450, 480, 510, 540, 554, 570, 600, 630
SLOPE	
HORIZONTAL ANGLES	11.25, 11.25, 21.3, 11.25

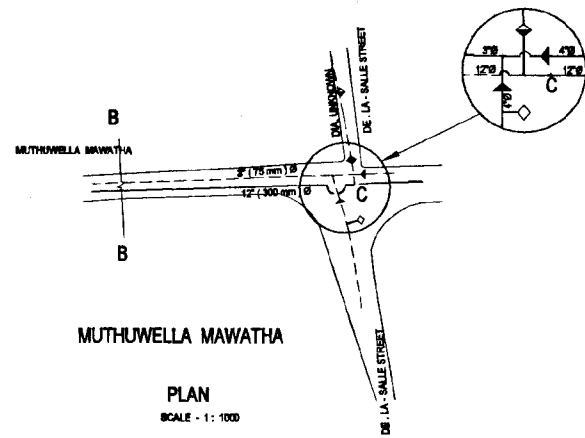
LS ALONG MUTWAL MAWATHA ( MUTHUWELLA MAWATHA )  
CHAINAGE 0.0m - 630.0m

SCALE  
VERTICAL - 1 : 100  
HORIZONTAL - 1 : 1000

NOTE :-  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT A TO B3 ALONG THE 12" DIA. DISTRIBUTION MAIN.

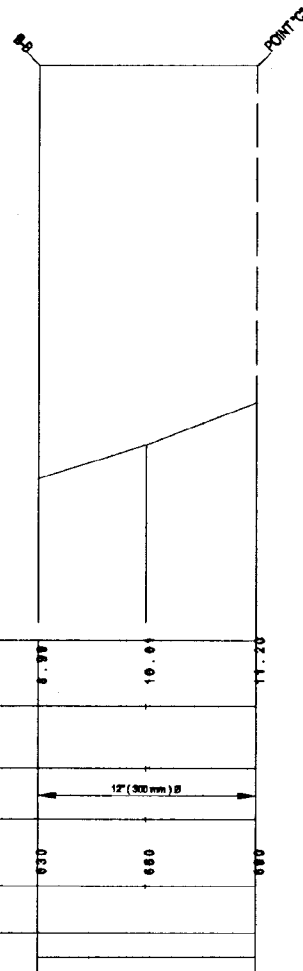
DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMG</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION MUTHUWELLA MAWATHA</p>
	<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>DESIGNED: [Signature] CHECKED: [Signature] BY TEAM LEADER: [Signature] TEAM LEADER: [Signature]</p>



MUTHUWELLA MAWATHA

PLAN  
SCALE - 1:1000



DATUM 0.0 m ABOVE M. S. L.

GROUND LEVEL (m)	6.90	10.00	11.20
INVERT LEVEL (m)	6.90	8.00	
DIAMETER OF PIPE	12" (300 mm) Ø		
HORIZONTAL DISTANCE	0.00	0.00	0.00
SLOPE			
HORIZONTAL ANGLES			

LS ALONG MUTHUWELLA MAWATHA  
CHAINAGE 630.0m - 690.0m

SCALE  
VERTICAL - 1:100  
HORIZONTAL - 1:1000

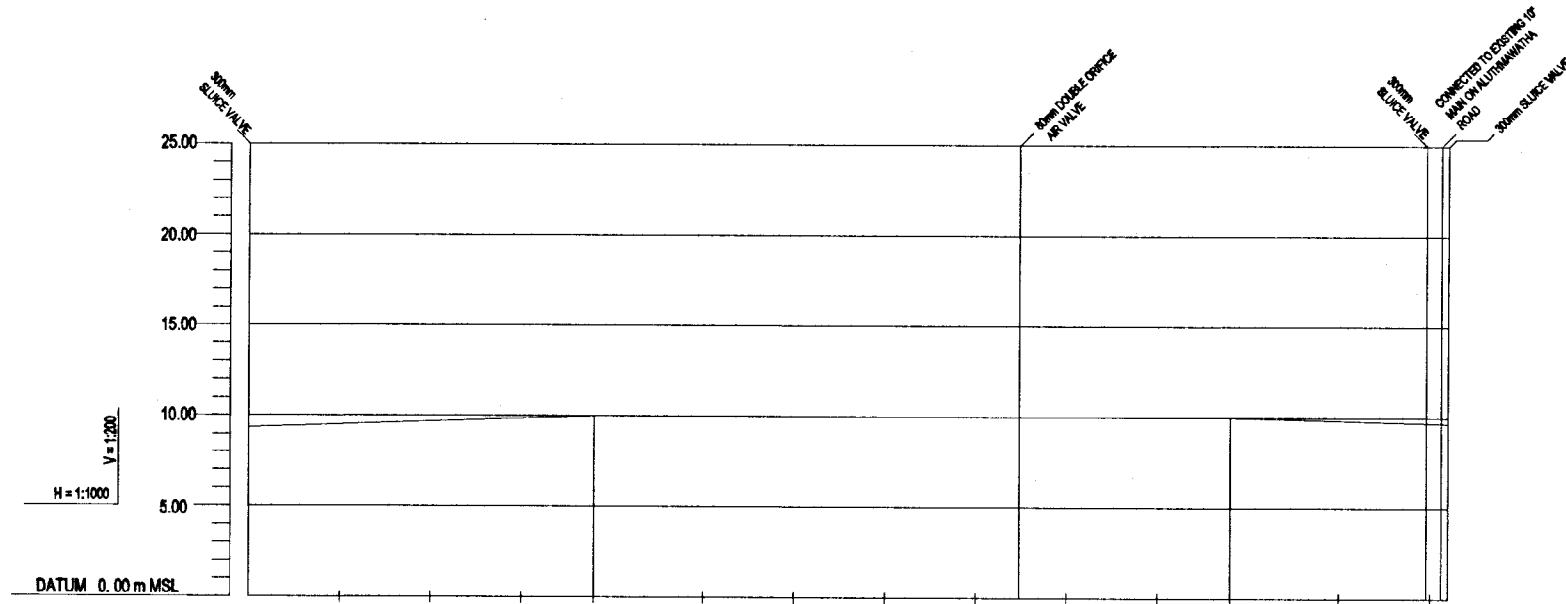
NOTE :-  
SCRAPING & CEMENT MORTAR LINING SHOULD  
BE DONE ONLY FROM "B-B" TO POINT "C"  
ALONG THE 12" DIA DISTRIBUTION MAIN.

DO NOT SCALE

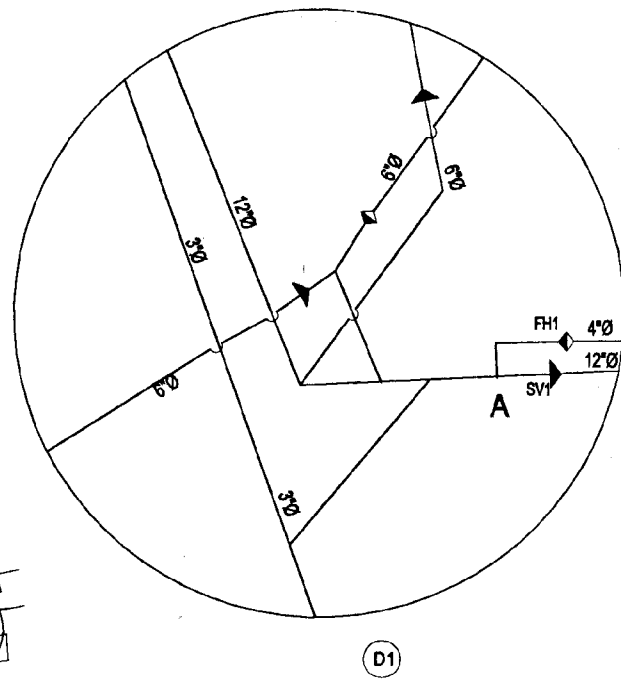
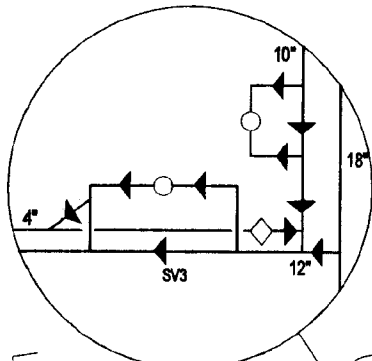
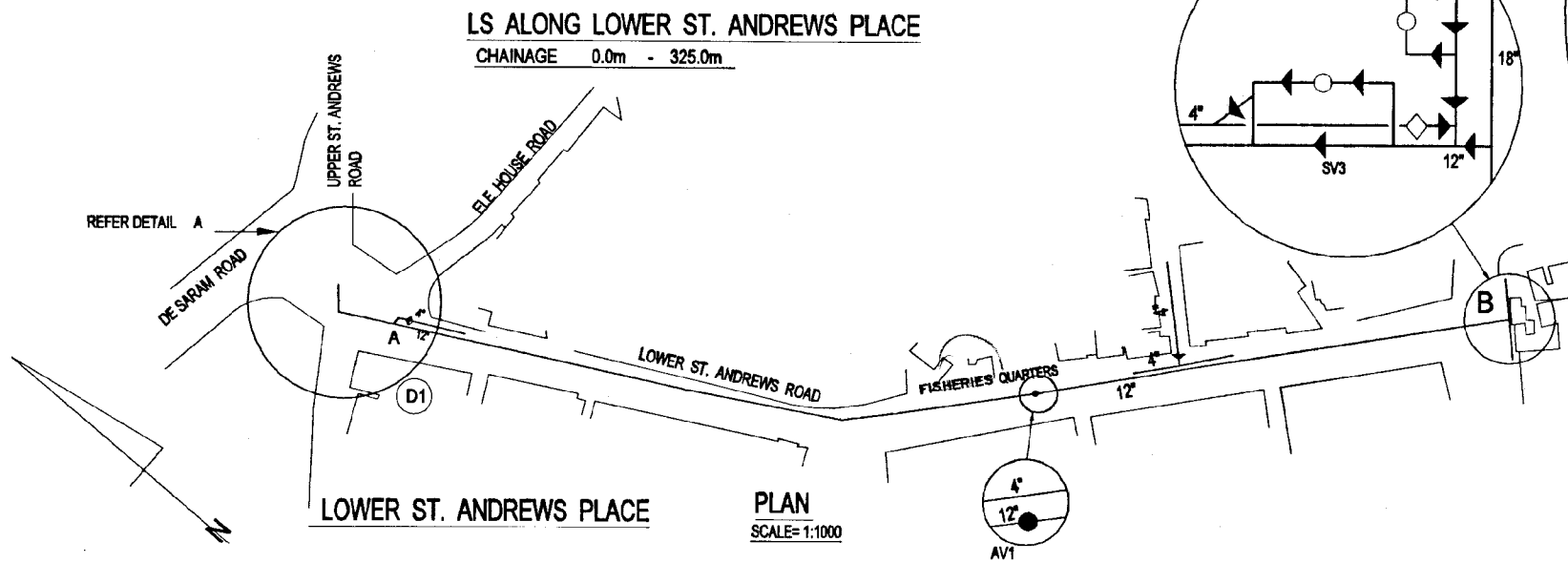
<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION MUTHUWELLA MAWATHA</p>
	<p>DESIGNER: <i>M.A.A.</i></p>	<p>DRAWN: THARANGA</p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM</p>	<p>CHECKED: <i>M.A.A.</i></p>	<p>CONTRACT No: NRW / CW</p>
<p>NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>DR. TEAM LEADER: <i>[Signature]</i></p>	<p>DRG. No: RML/DW/RH - 07</p>







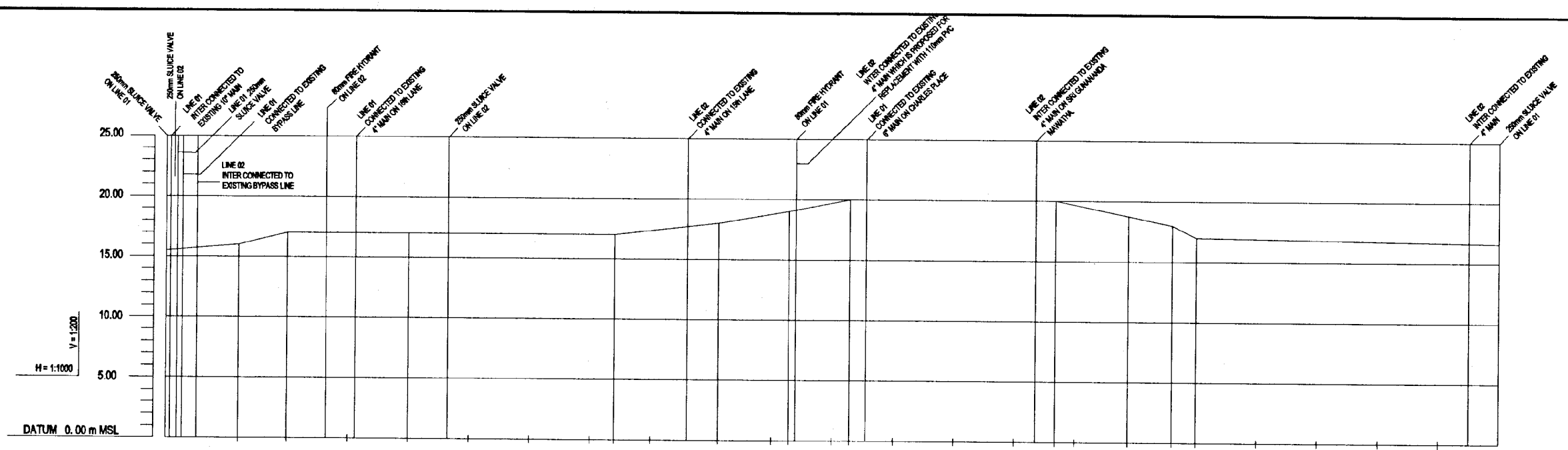
HYDRAULIC GRID LEVEL (m)																		
GROUND LEVEL (m)	9.38				10.00									10.00		9.00		9.70
INVERT LEVEL (m)																		
PIPE DETAILS	12" (300 MM) DIA																	
CHAINAGE (m)	0.00	25.00	50.00	75.00	95.00	125.00	150.00	175.00	200.00	212.00	223.00	250.00	270.00	300.00	325.00	330.00		
HORIZONTAL ANGLE (°)																		



NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM THE POINT "A" TO POINT B ALONG THE 12" DIA DISTRIBUTION MAIN

DO NOT SCALE

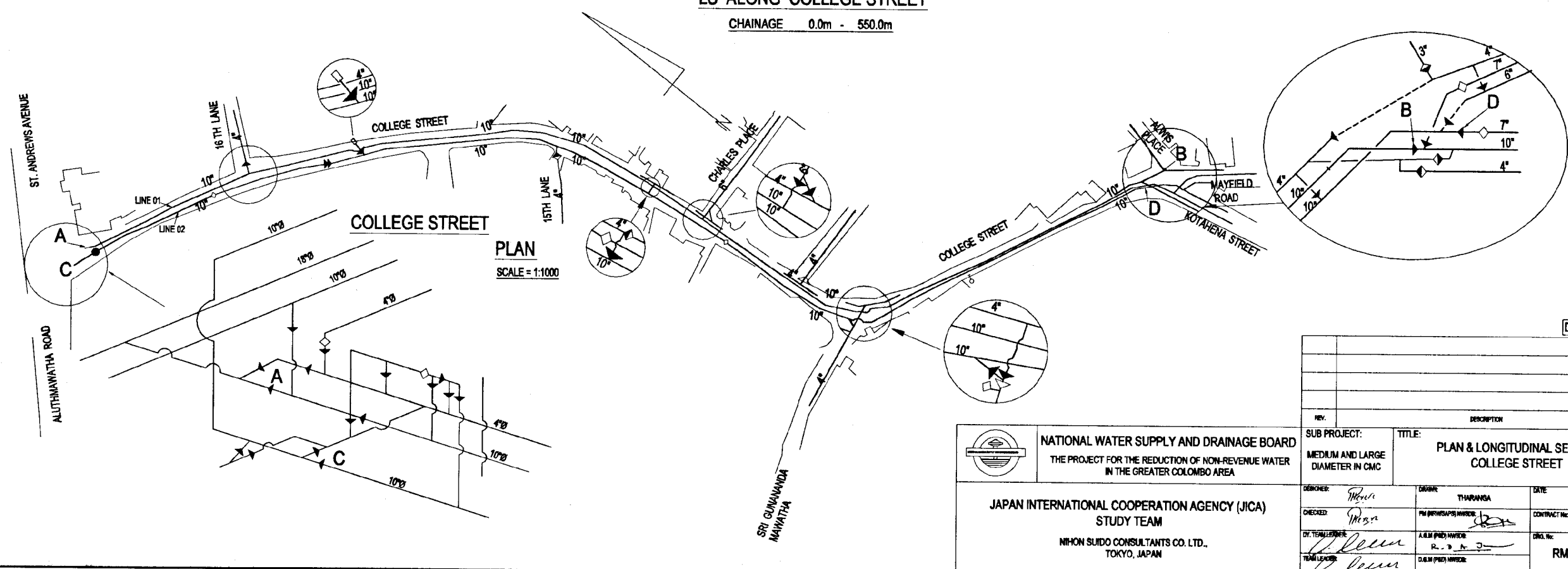
 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION LOWER ST. ANDREWS PLACE
	DESIGNED: [Signature] CHECKED: [Signature] DT. TEAM LEADER: [Signature] TEAM LEADER: [Signature]	DESIGNED: THARANGA PM (REVIEWS) NUMBER: [Signature] A.E.M (P&I) NUMBER: [Signature] D.S.M (P&I) NUMBER: [Signature]



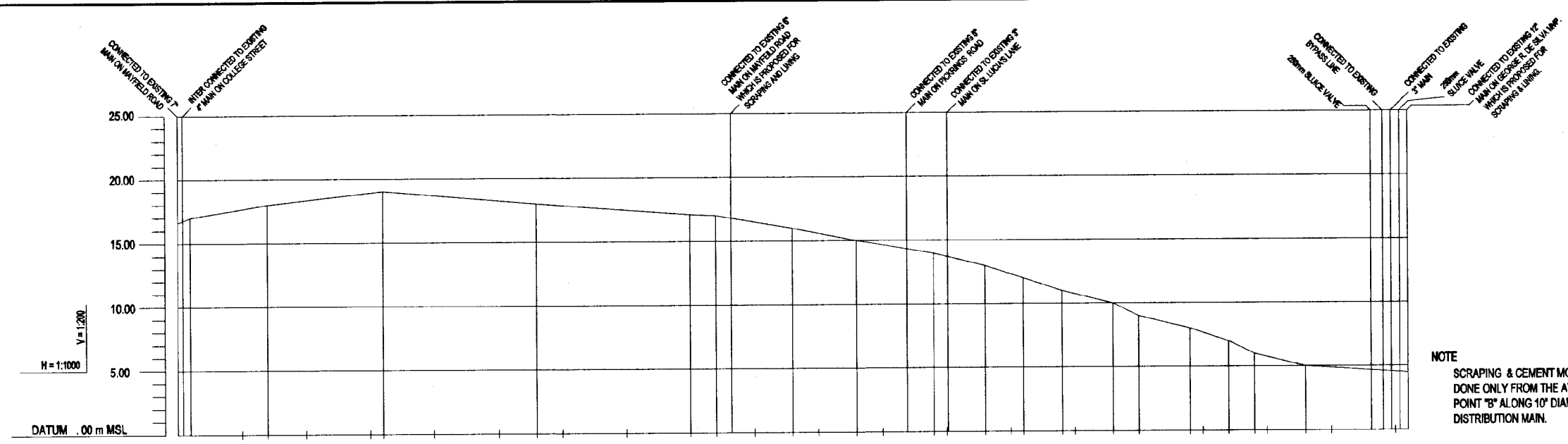
HYDRAULIC GRID LEVEL (m)																												
GROUND LEVEL (m)	15.50	16.00	17.00		17.00		17.00		18.00		19.00		20.00		19.00		18.00		17.00		16.00							
INVERT LEVEL (m)																												
PIPE DETAILS	10" (250 mm) DIA PIPE LINE (2 LINES)																											
CHAINAGE (m)	0.00	30.00	50.00	75.00	100.00	125.00	150.00	175.00	185.00	200.00	220.00	250.00	257.00	275.00	282.00	300.00	325.00	350.00	367.00	375.00	387.00	415.00	425.00	450.00	475.00	500.00	525.00	550.00
HORIZONTAL ANGLE (°)	LINE 01		11.25°		11.25°		11.25°		11.25°		11.25°		22.5°		45°		22.5°		45°		45°		45°		45°		45°	

NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT "A" TO POINT "B" ALONG THE 10" LINE (LEFT SIDE OF THE ROAD) AND FROM POINT "C" TO POINT "D" ALONG THE 10" LINE (RIGHT SIDE OF THE ROAD)

LS ALONG COLLEGE STREET  
 CHAINAGE 0.0m - 550.0m



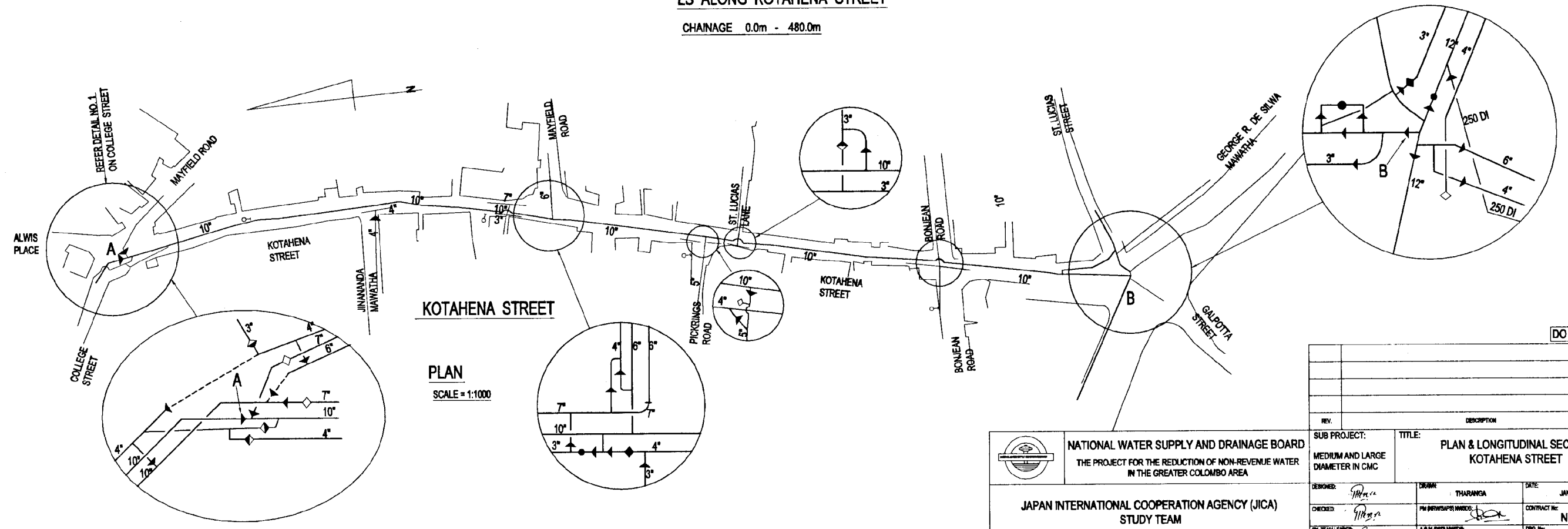
<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>		<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p> <p>TITLE: PLAN &amp; LONGITUDINAL SECTION COLLEGE STREET</p>	
DESIGNED BY: <i>[Signature]</i>	CHECKED BY: <i>[Signature]</i>	DATE: JAN. 2008	CONTRACT NO: NRW / CW
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)          STUDY TEAM          NIHON SUJIDO CONSULTANTS CO. LTD.,          TOKYO, JAPAN</p>		<p>DESIGNED BY: <i>[Signature]</i></p>	<p>CHECKED BY: <i>[Signature]</i></p>
		<p>DATE: JAN. 2008</p>	<p>CONTRACT NO: NRW / CW</p>
		<p>DESIGNED BY: <i>[Signature]</i></p>	<p>CONTRACT NO: RML/DMRH -10</p>



**NOTE**  
 SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM THE AT POINT 'A' TO THE POINT 'B' ALONG 10" DIAMETER DISTRIBUTION MAIN.

HYDRAULIC GRID LEVEL (m)																																					
GROUND LEVEL (m)	16.00	17.00	18.00	19.00	18.00	16.00	17.10	18.00	18.00	14.00	13.00	12.00	11.00	10.00	9.00	8.00	7.00	6.00	5.00	3.00																	
INVERT LEVEL (m)																																					
PIPE DETAILS	10" DIA																																				
CHAINAGE (m)	0.00	5.00	25.00	35.00	60.00	75.00	80.00	100.00	125.00	140.00	150.00	175.00	200.00	210.00	225.00	240.00	250.00	265.00	275.00	295.00	300.00	315.00	325.00	330.00	345.00	350.00	365.00	375.00	395.00	400.00	410.00	420.00	425.00	440.00	450.00	475.00	480.00
HORIZONTAL ANGLE (°)																																					


**LS ALONG KOTAHENA STREET**  
 CHAINAGE 0.0m - 480.0m

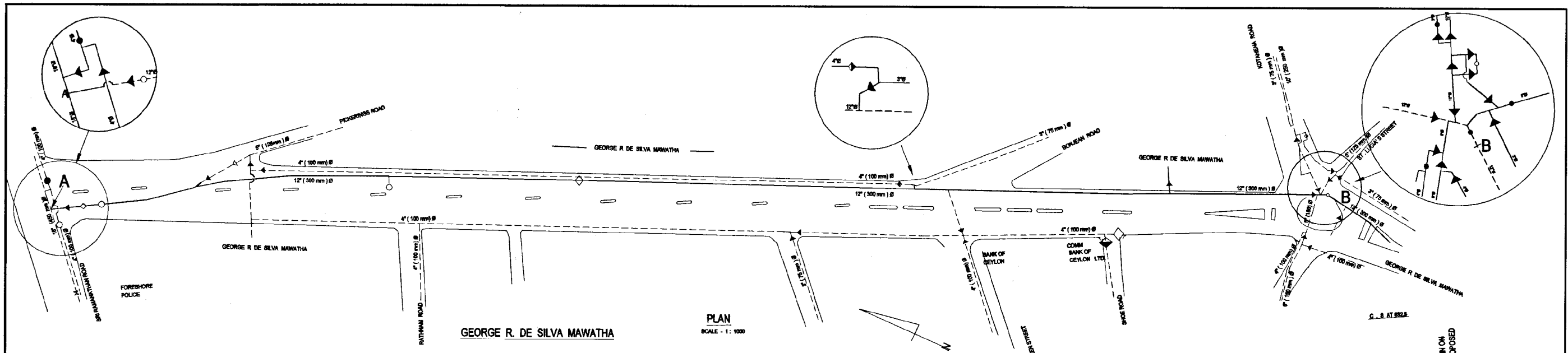


**DO NOT SCALE**

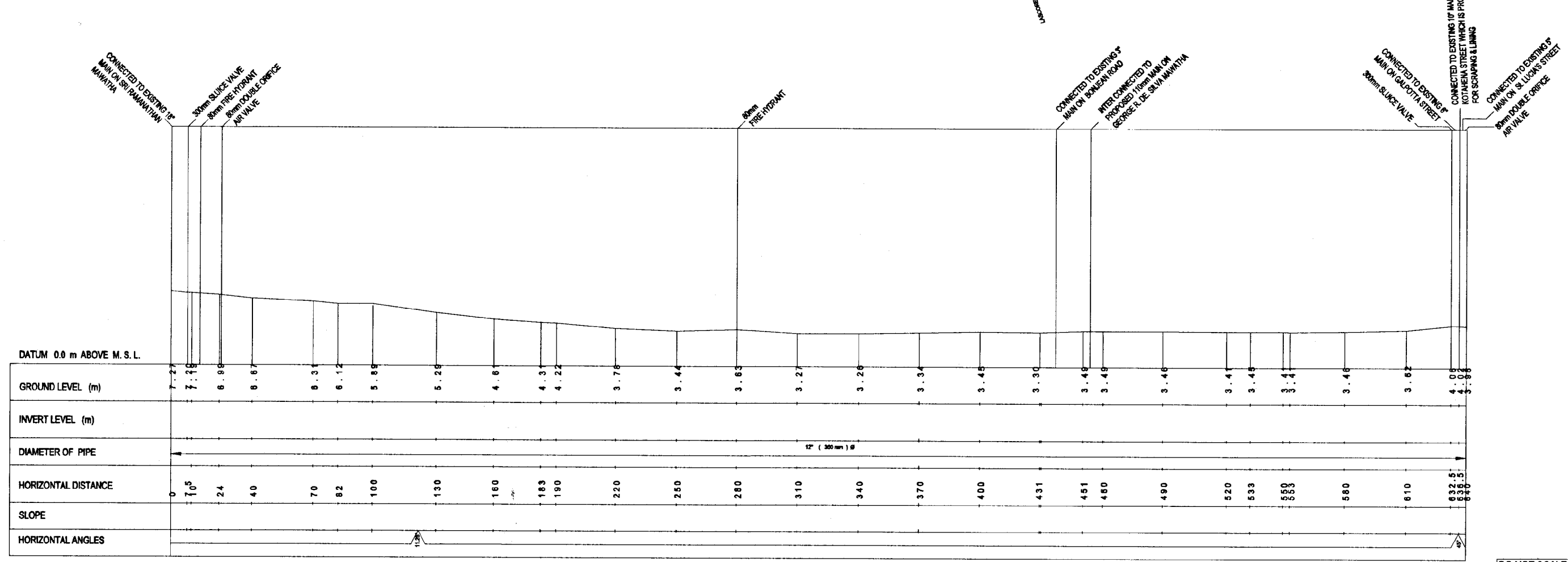
REV.	DESCRIPTION

SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC		TITLE: PLAN & LONGITUDINAL SECTION KOTAHENA STREET	
DESIGNED: <i>[Signature]</i>	DRAWN: THARUNDA	DATE: JAN. 2008	
CHECKED: <i>[Signature]</i>	PM (NWS&P) INCHES: <i>[Signature]</i>	CONTRACT NO: NRW / CW	
DR. TEAM LEADER: <i>[Signature]</i>	A&M (P&D) INCHES: R. D. N. J.	DRG. NO: RML/DM/RH-11	
TEAM LEADER: <i>[Signature]</i>	D&M (P&D) INCHES: <i>[Signature]</i>		

  
**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**  
 THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA  
  
**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**  
 STUDY TEAM  
 NIHON SUIDO CONSULTANTS CO. LTD.,  
 TOKYO, JAPAN



PLAN  
SCALE - 1: 1000



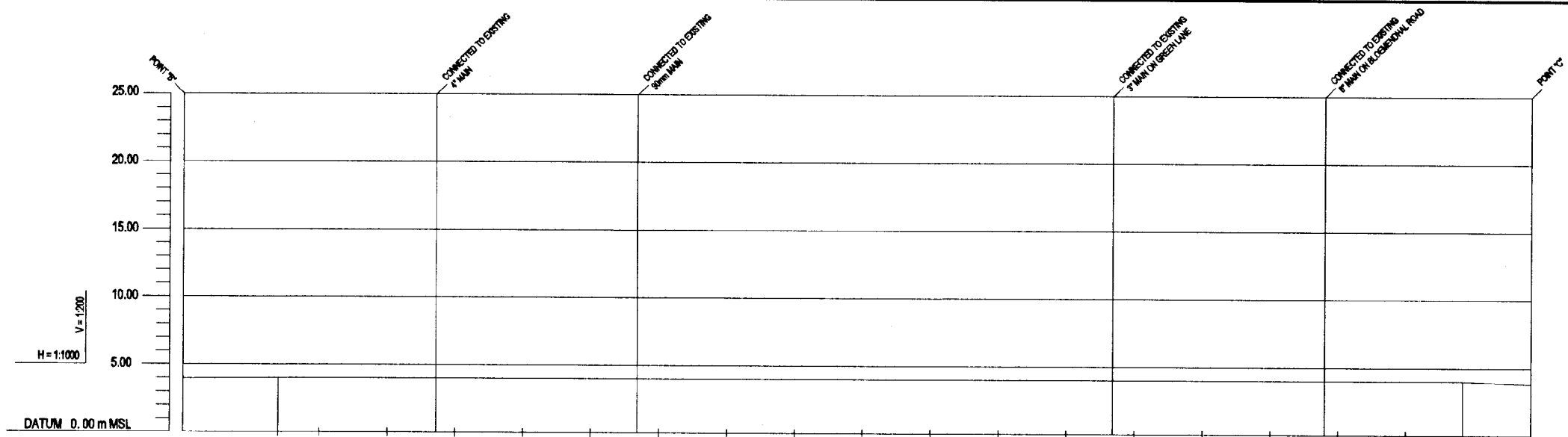
NOTE  
SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM THE POINT "A" TO THE POINT "B" ALONG 12" DIAMETER DISTRIBUTION MAIN.

LS ALONG GEORGE R. DE SILVA MAWATHA  
CHAINAGE 0.0m - 640.0m

SCALE  
VERTICAL - 1: 200  
HORIZONTAL - 1: 1000

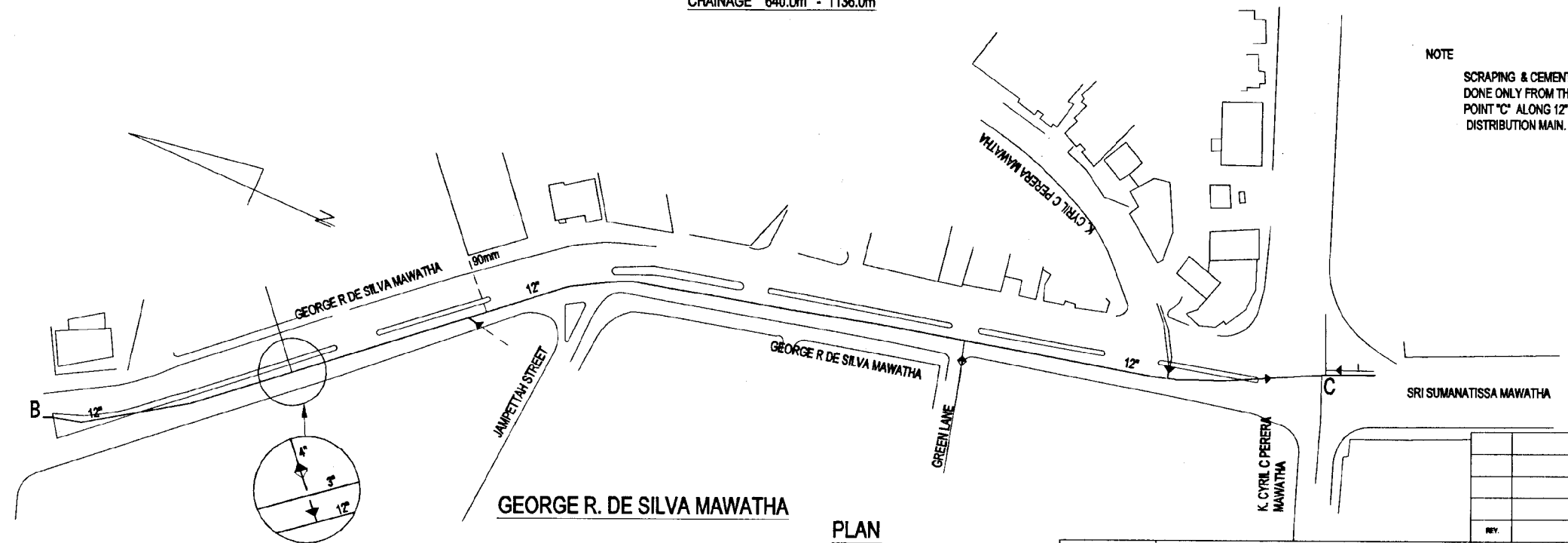
DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION GEORGE R DE SILVA MAWATHA</p>
	<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>DRIVER: THARUNGA DATE: JAN. 2009</p>
<p>DR. TEAM LEADER: [Signature]</p>	<p>DR. [Signature]</p>	<p>CONTRACT NO: NRW / CW</p>
<p>TEAM LEADER: [Signature]</p>	<p>A.S.M (P&amp;I) INCHARGE: [Signature]</p>	<p>DRG. No: RML/DW/RH - 12</p>



HYDRAULIC GRID LEVEL (m)									
GROUND LEVEL (m)	3.98	4.00						4.00	3.90
INVERT LEVEL (m)									
PIPE DETAILS	12" (300 mm) DIA								
CHAINAGE (m)	640.00	675.00	733.00					1111.00	1136.00
HORIZONTAL ANGLE (°)		22.5°		82.5°				11.2°	

**LS ALONG GEORGE R. DE SILVA MAWATHA**  
CHAINAGE 640.0m - 1136.0m



**NOTE**  
SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM THE POINT "B" TO POINT "C" ALONG 12" DIAMETER DISTRIBUTION MAIN.

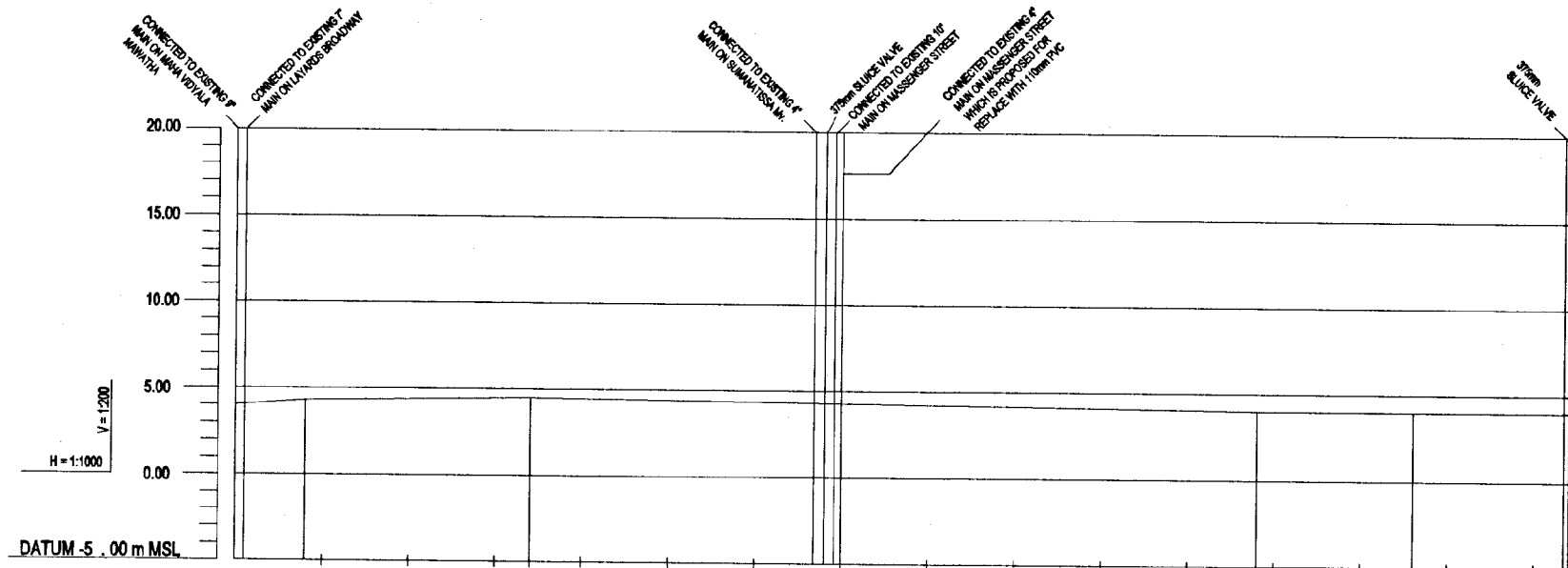
DO NOT SCALE

**GEORGE R. DE SILVA MAWATHA**

**PLAN**

SCALE = 1:1000

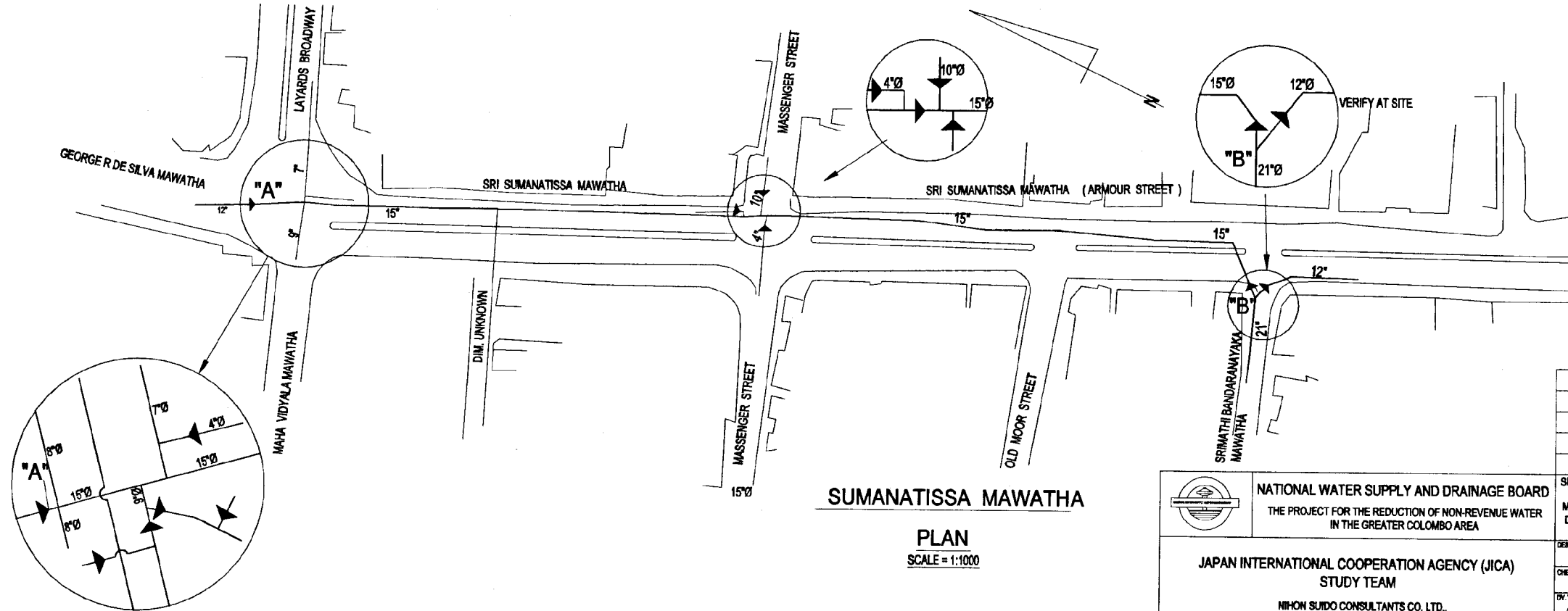
<p><b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: <b>PLAN &amp; LONGITUDINAL SECTION GEORGE R DE SILVA MAWATHA</b></p>
	<p>DESIGNED: <i>[Signature]</i></p>	<p>DRAWN: THARANGA</p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM</p>	<p>CHECKED: <i>[Signature]</i></p>	<p>CONTRACT No: <b>NRW / CW</b></p>
<p>NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>BY TEAM LEADER: <i>[Signature]</i></p>	<p>DIRE. No: <b>RML/DM/RH -13</b></p>
	<p>TEAM LEADER: <i>[Signature]</i></p>	



HYDRAULIC GRID LEVEL (m)	[Grid lines]																					
GROUND LEVEL (m)	4.00	4.30		4.90									0.00		4.00	4.00						
INVERT LEVEL (m)	[Invert profile]																					
PIPE DETAILS	15" (375 mm) DIA LINE																					
CHAINAGE (m)	0.00	20.00	25.00	50.00	75.00	85.00	100.00	125.00	150.00	167.00	175.00	200.00	225.00	250.00	275.00	285.00	300.00	325.00	340.00	350.00	375.00	385.00
HORIZONTAL ANGLE (°)	[Angles]																					

NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM THE 15" X 12" TAPER AT POINT "A" TO THE POINT "B" ALONG 15" DIAMETER DISTRIBUTION MAIN.

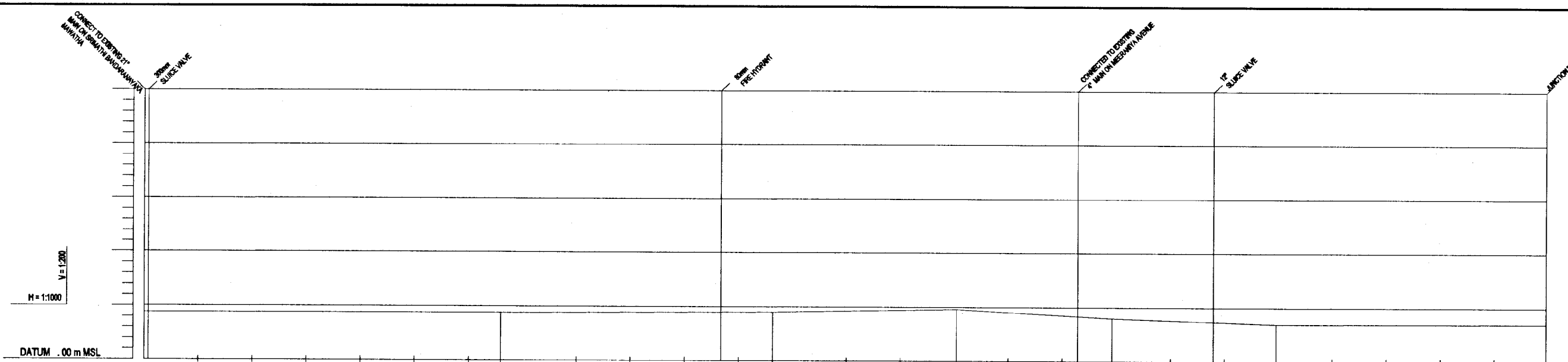
LS ALONG SUMANATISSA MAWATHA  
 CHAINAGE 0.0m - 385.0m



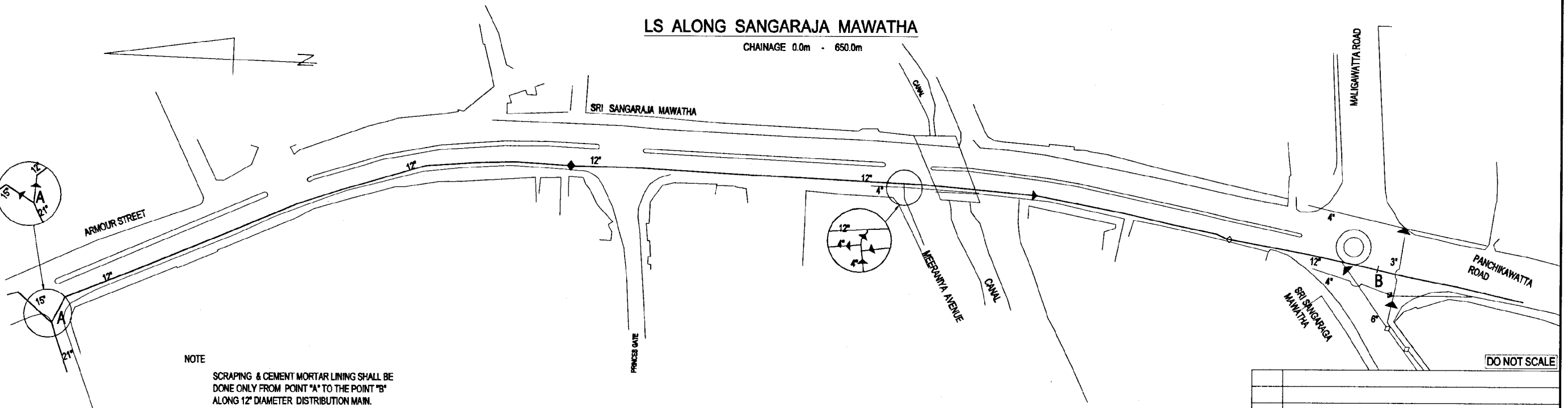
SUMANATISSA MAWATHA  
 PLAN  
 SCALE = 1:1000

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC		TITLE: PLAN & LONGITUDINAL SECTION SUMANATISSA MAWATHA	
	DESIGNED: [Signature]		DRAWN: THARUNGA	DATE: JAN. 2007
	CHECKED: [Signature]		PM (BWS&PS) INCHARGE: [Signature]	CONTRACT No: NRW / CW
	BY TEAM LEADER: [Signature]		A&M (P&D) INCHARGE: [Signature]	DRW. No: RML/DM/RH-14
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN				




HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	4.40, 4.40, 4.30, 4.00, 4.00, 3.90, 3.90
INVERT LEVEL (m)	
PIPE DETAILS	12" (300 mm) DIA
CHAINAGE (m)	0.00, 25.00, 50.00, 75.00, 100.00, 125.00, 150.00, 165.00, 200.00, 225.00, 250.00, 267.00, 275.00, 291.00, 325.00, 350.00, 375.00, 400.00, 425.00, 432.00, 448.00, 475.00, 500.00, 524.00, 550.00, 575.00, 600.00, 625.00, 640.00
HORIZONTAL ANGLE (°)	22.5°, 41.25°



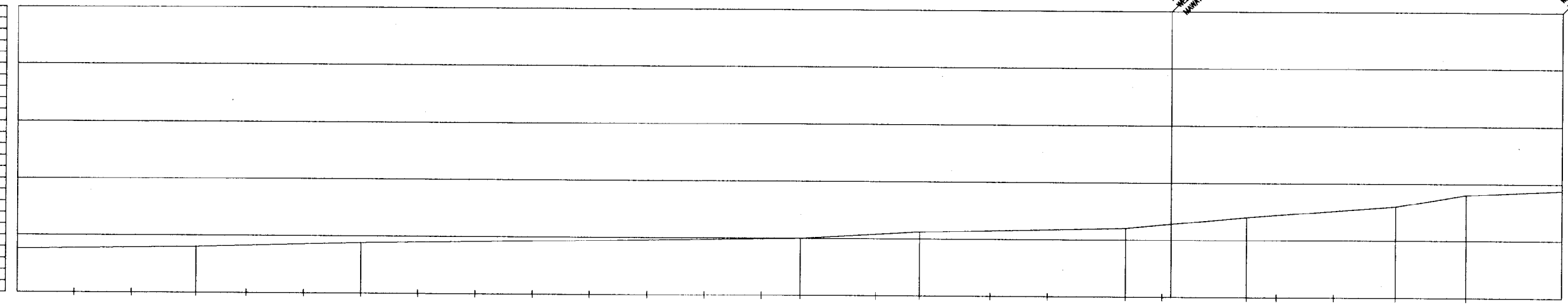
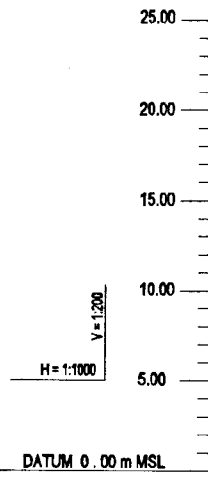
NOTE  
 SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM POINT "A" TO THE POINT "B" ALONG 12" DIAMETER DISTRIBUTION MAIN.

**SANGARAJA MAWATHA**  
**PLAN**  
 SCALE= 1:1000

 NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION SANGARAJA MAWATHA
	DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA P.L. PERWASAPU INWSD: <i>[Signature]</i> A.S.M. (P.D.) INWSD: <i>[Signature]</i> D.O.M. (P.D.) INWSD: <i>[Signature]</i>

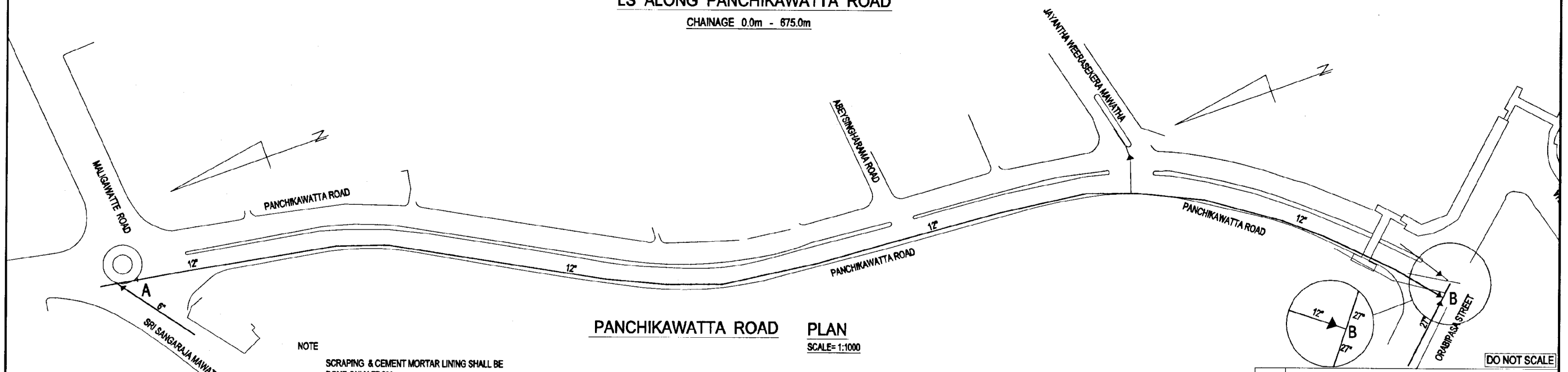
CONNECTED TO EXISTING 12" MAIN ON JAYANTHA WEERASEKERA MAWATHA

CONNECTED TO EXISTING 12" MAIN ON ORAIPASSA STREET



HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	3.90 4.00 4.40 5.00 5.80 6.00 7.00 8.00 9.00 9.40
INVERT LEVEL (m)	
PIPE DETAILS	12" DIA
CHAINAGE (m)	0.00 25.00 50.00 75.00 100.00 125.00 150.00 175.00 200.00 225.00 250.00 275.00 300.00 325.00 342.00 375.00 394.00 425.00 450.00 484.00 500.00 537.00 550.00 564.00 575.00 602.00 633.00 675.00
HORIZONTAL ANGLE (°)	22.5 11.25 11.25 22.5 1.25 1.25

**LS ALONG PANCHIKAWATTA ROAD**  
CHAINAGE 0.0m - 675.0m



NOTE  
SCRAPING & CEMENT MORTAR LINING SHALL BE DONE ONLY FROM POINT "A" TO THE POINT "B" ALONG 12" DIAMETER DISTRIBUTION MAIN.

**PANCHIKAWATTA ROAD PLAN**  
SCALE= 1:1000

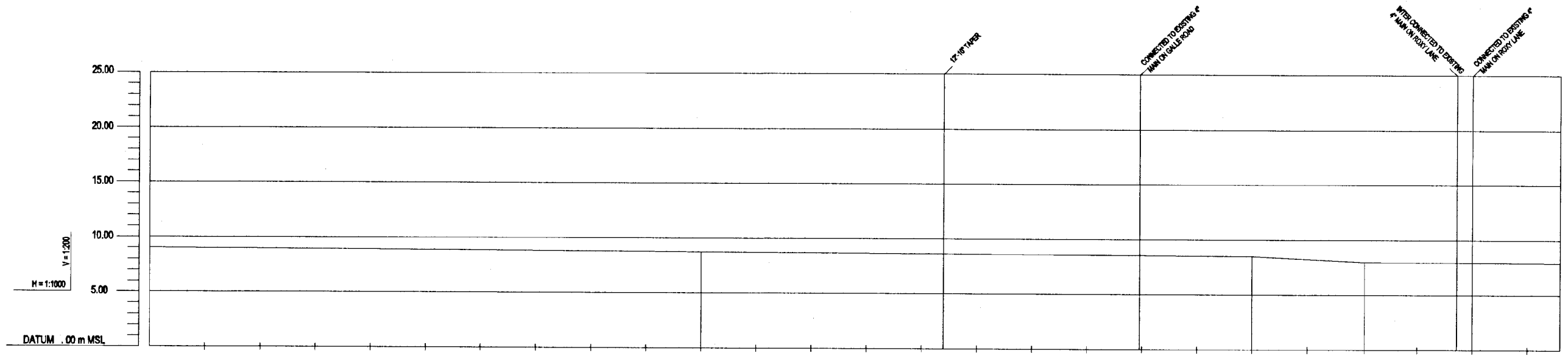
REV.	DESCRIPTION

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p> <p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM</p> <p>NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p> <p>DESIGNER: <i>[Signature]</i></p> <p>CHECKED: <i>[Signature]</i></p> <p>DR. TEAM LEADER: <i>[Signature]</i></p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION PANCHIKAWATTA ROAD</p> <p>DATE: JAN. 2001</p> <p>CONTRACT No: NRW / CW</p> <p>DWG. No: RML/DM/RH - 16</p>
	<p>DESIGNER: THARANGA</p> <p>DATE: JAN. 2001</p>	<p>CONTRACT No: NRW / CW</p>
	<p>DR. TEAM LEADER: <i>[Signature]</i></p>	<p>DWG. No: RML/DM/RH - 16</p>
	<p>DATE: JAN. 2001</p>	<p>CONTRACT No: NRW / CW</p>

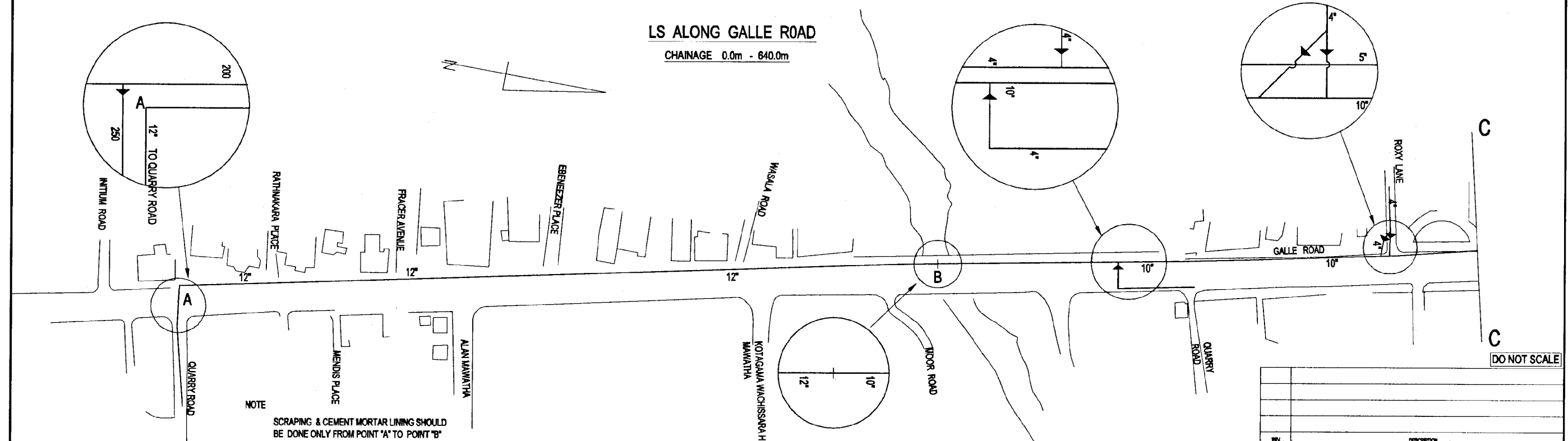








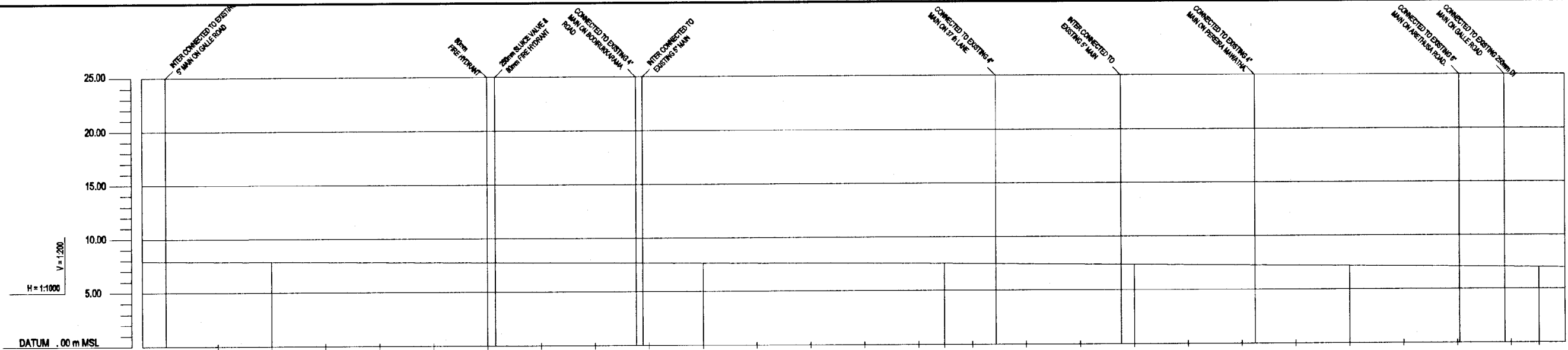
HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	0.00 8.78 8.50 8.00 7.98
INVERT LEVEL (m)	
PIPE DETAILS	12" (300 mm) DIA 10" (250 mm) DIA
CHAINAGE (m)	0.00 25.00 50.00 75.00 100.00 125.00 150.00 175.00 200.00 225.00 250.00 275.00 300.00 325.00 350.00 360.00 375.00 400.00 425.00 450.00 475.00 500.00 525.00 550.00 575.00 600.00 625.00 640.00
HORIZONTAL ANGLE (°)	28



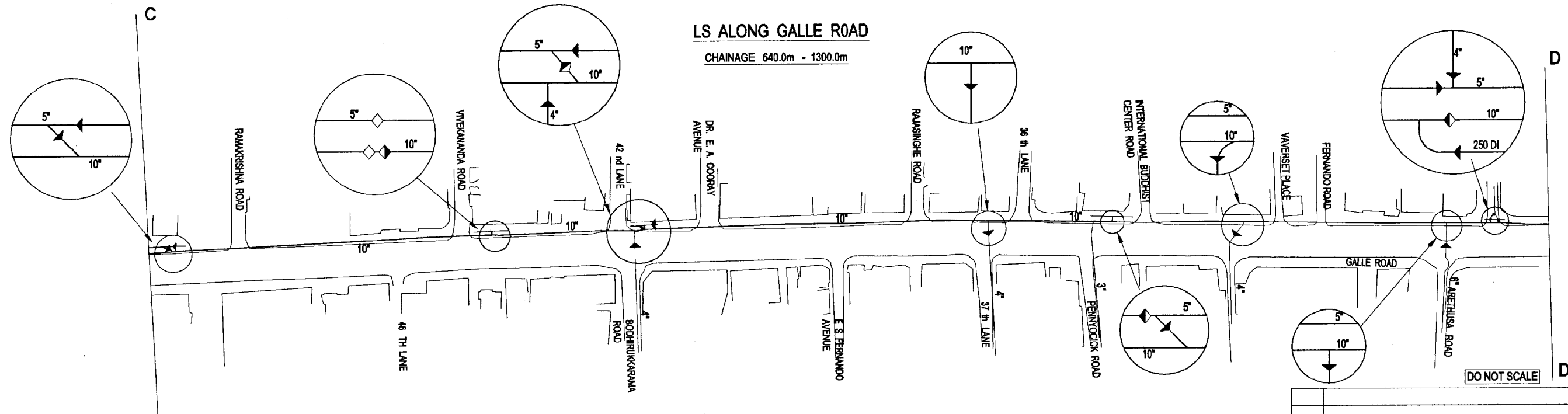
NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT "A" TO POINT "B" ALONG THE 12" DIA DISTRIBUTION MAIN AND POINT "B" TO C-C ALONG 10" DIA DISTRIBUTION MAIN.

**PLAN**  
SCALE= 1:1000

	<b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA		SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMK	TITLE: <b>PLAN &amp; LONGITUDINAL SECTION GALLE ROAD</b>
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHOW SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN		SHEET 1 OF 7	DATE: JUN. 2008
DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DIV. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA PM (PROV/SUP) INCHARGE: <i>[Signature]</i> A.G.M (PRO) NUMBER: E. D. N. J. D.O.M (PRO) NUMBER:	CONTRACT NO: <b>NRW / CW</b>	DATE: JUN. 2008	DRG. NO.: <b>RME/DM/RH -19</b>



HYDRAULIC GRID LEVEL (m)										
GROUND LEVEL (m)	7.90	7.90	7.73	7.60	7.50	7.30	7.16	7.00	6.90	
INVERT LEVEL (m)										
PIPE DETAILS	10" (250 mm) DIA									
CHAINAGE (m)	640.00	700.00	800.00	900.00	1000.00	1072.00	1100.00	1200.00	1288.00	1300.00
HORIZONTAL ANGLE (°)										

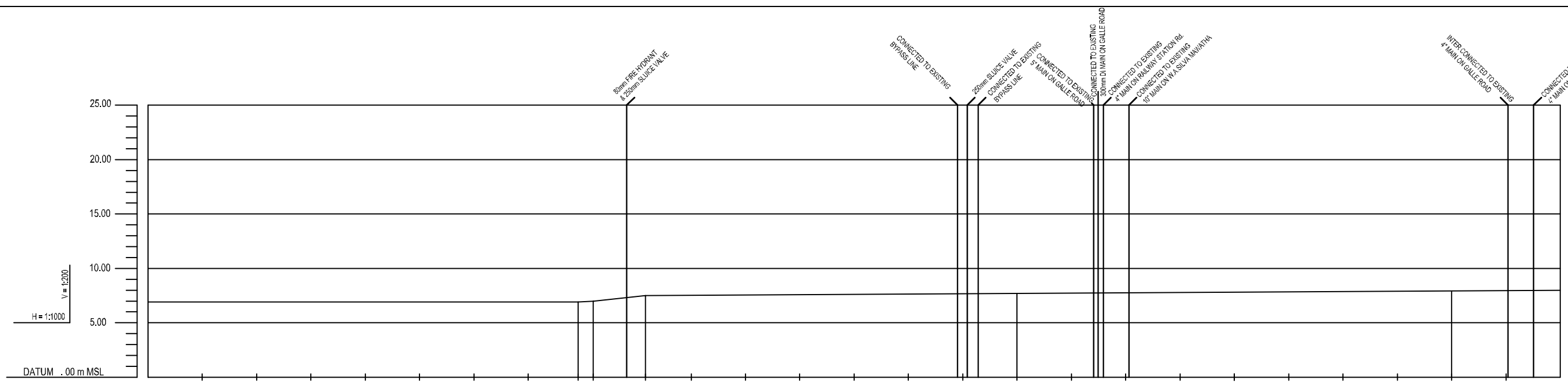


NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD  
 BE DONE ONLY FROM C-C TO D-D  
 ALONG THE 10" DIA DISTRIBUTION MAIN.

GALLE ROAD

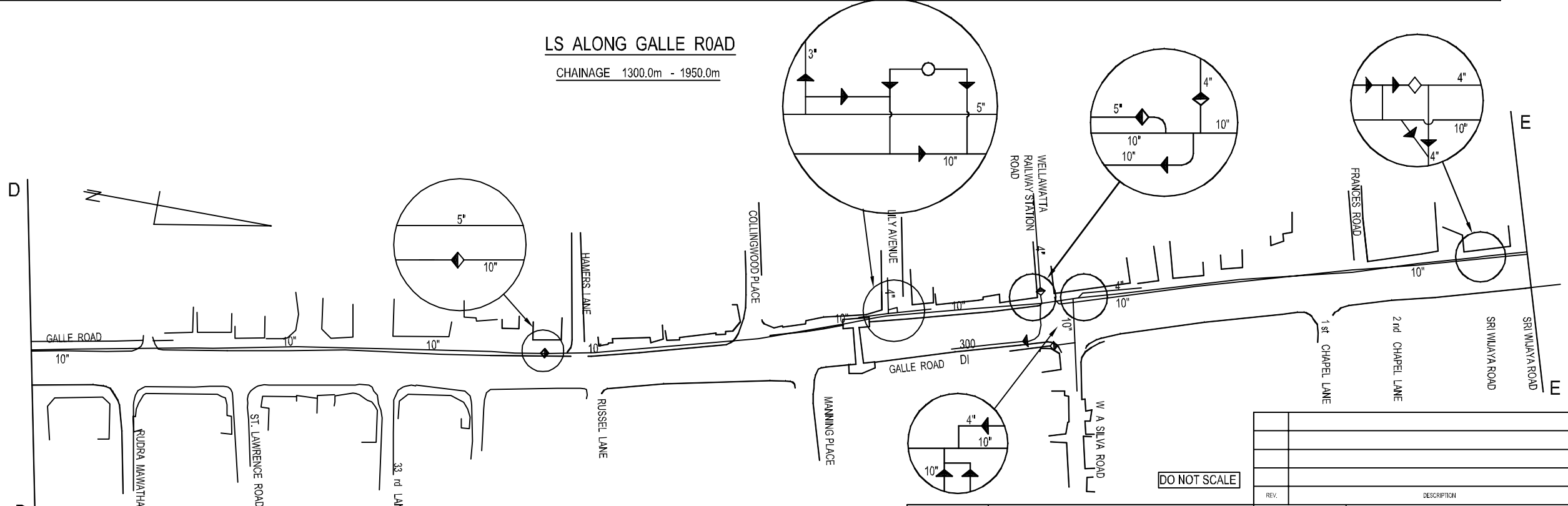
PLAN  
 SCALE= 1:1000

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER          IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION GALLE ROAD SHEET 2 OF 7
	DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARUNGA FM (NRWS&PS) INCHARGE: <i>[Signature]</i> A.G.M (P&D) INCHARGE: <i>[Signature]</i> D.G.M (P&D) INCHARGE:



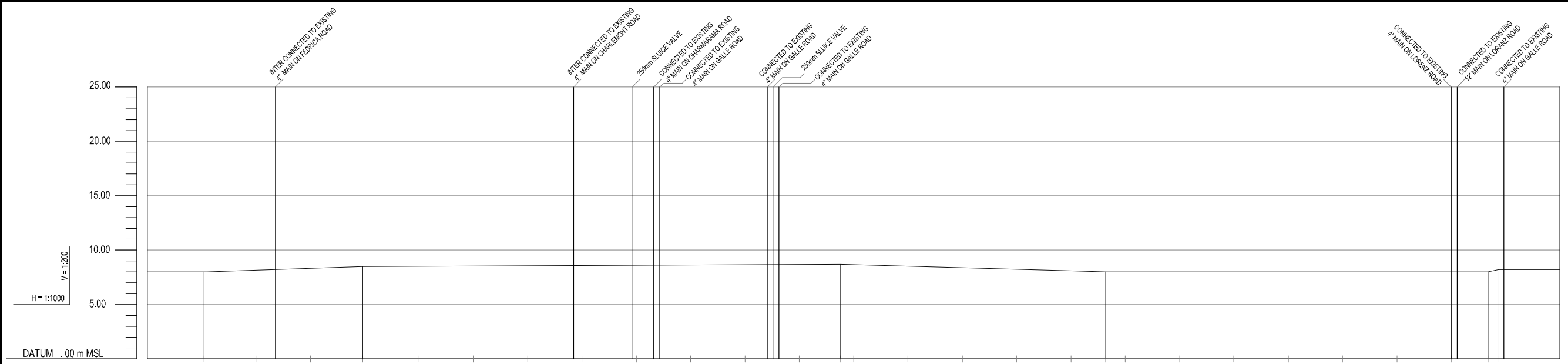
HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	6.90, 6.90, 7.00, 7.50, 7.70, 7.90, 8.00
INVERT LEVEL (m)	
PIPE DETAILS	10" (250 mm) DIA
CHAINAGE (m)	1300.00, 1400.00, 1498.00, 1505.00, 1520.00, 1600.00, 1700.00, 1800.00, 1900.00, 1950.00
HORIZONTAL ANGLE (°)	22.5

**LS ALONG GALLE ROAD**  
CHAINAGE 1300.0m - 1950.0m



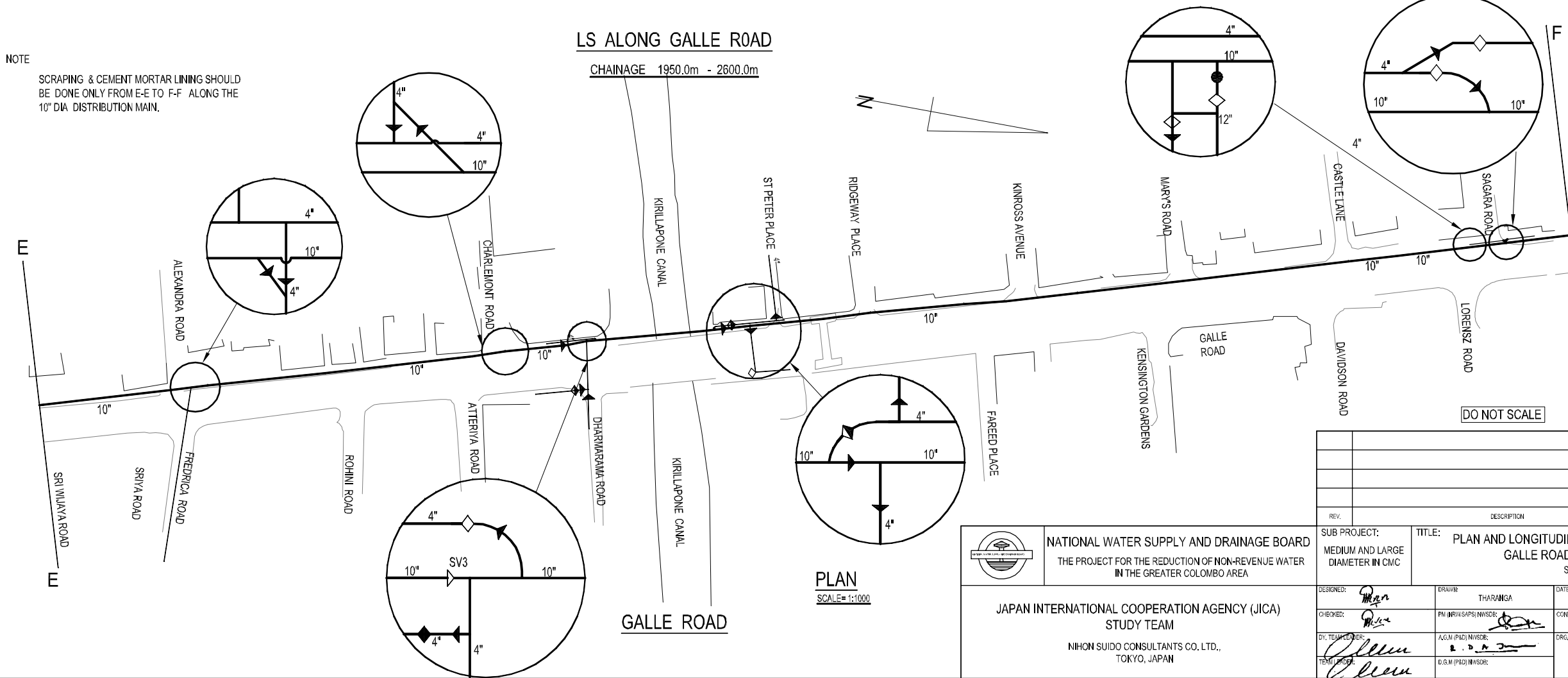
NOTE  
SCRAPING & CEMENT MORTAR LINING SHOULD  
BE DONE ONLY FROM D-D TO E-E  
ALONG THE 10" DIA DISTRIBUTION MAIN.

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION GALLE ROAD</p>
	<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM</p> <p>NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TEAM ENGINEER: <i>[Signature]</i></p>



HYDRAULIC GRID LEVEL (m)														
GROUND LEVEL (m)	8.00	8.00	8.50			8.70		8.00	8.20	8.40				
INVERT LEVEL (m)														
CHAINAGE (m)	1950.00	1976.00	2000.00	2049.00	2100.00	2200.00	2269.00	2300.00	2391.00	2400.00	2500.00	2567.00	2572.00	2600.00
HORIZONTAL ANGLE (°)														

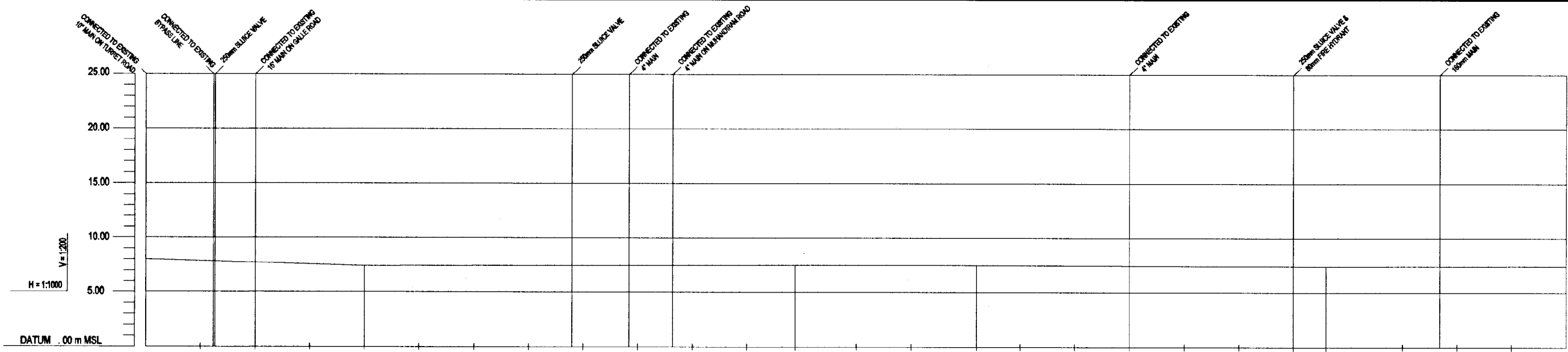
NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM E-E TO F-F ALONG THE 10" DIA DISTRIBUTION MAIN.



PLAN  
 SCALE= 1:1000

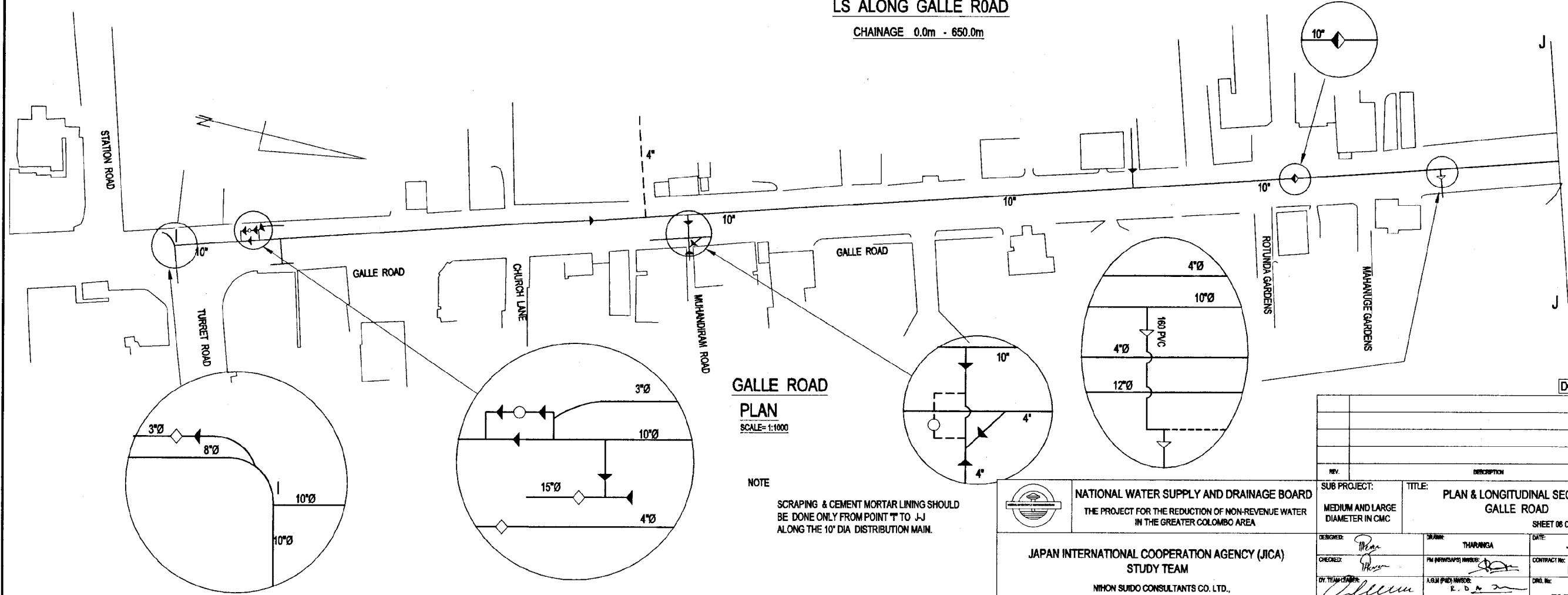
	NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA		SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN AND LONGITUDINAL SECTION GALLE ROAD SHEET 4 OF 7
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN		DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TERNI: <i>[Signature]</i>	DRAWN: THARANGA PM (NRW/SAPS) IN/SCB: <i>[Signature]</i> A.G.M (PAD) IN/SCB: <i>[Signature]</i> D.G.M (PAD) IN/SCB: <i>[Signature]</i>





HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	8.00 7.50 7.50 7.40 7.40
INVERT LEVEL (m)	
PIPE DETAILS	10" (250 mm) DIA
CHAINAGE (m)	0.00 50.00 200.00 297.00 390.00 400.00 450.00 500.00 525.00 540.00 650.00
HORIZONTAL ANGLE (°)	

**LS ALONG GALLE ROAD**  
CHAINAGE 0.0m - 650.0m

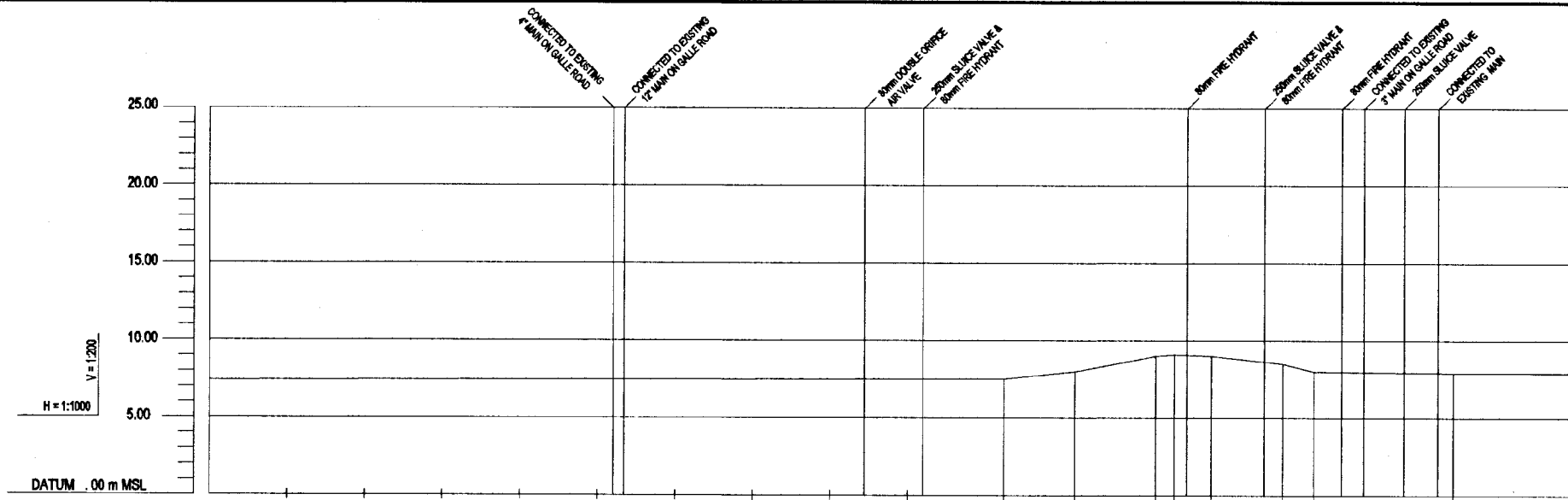


**GALLE ROAD**  
**PLAN**  
SCALE= 1:1000

NOTE  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT \* TO J-J ALONG THE 10" DIA DISTRIBUTION MAIN.

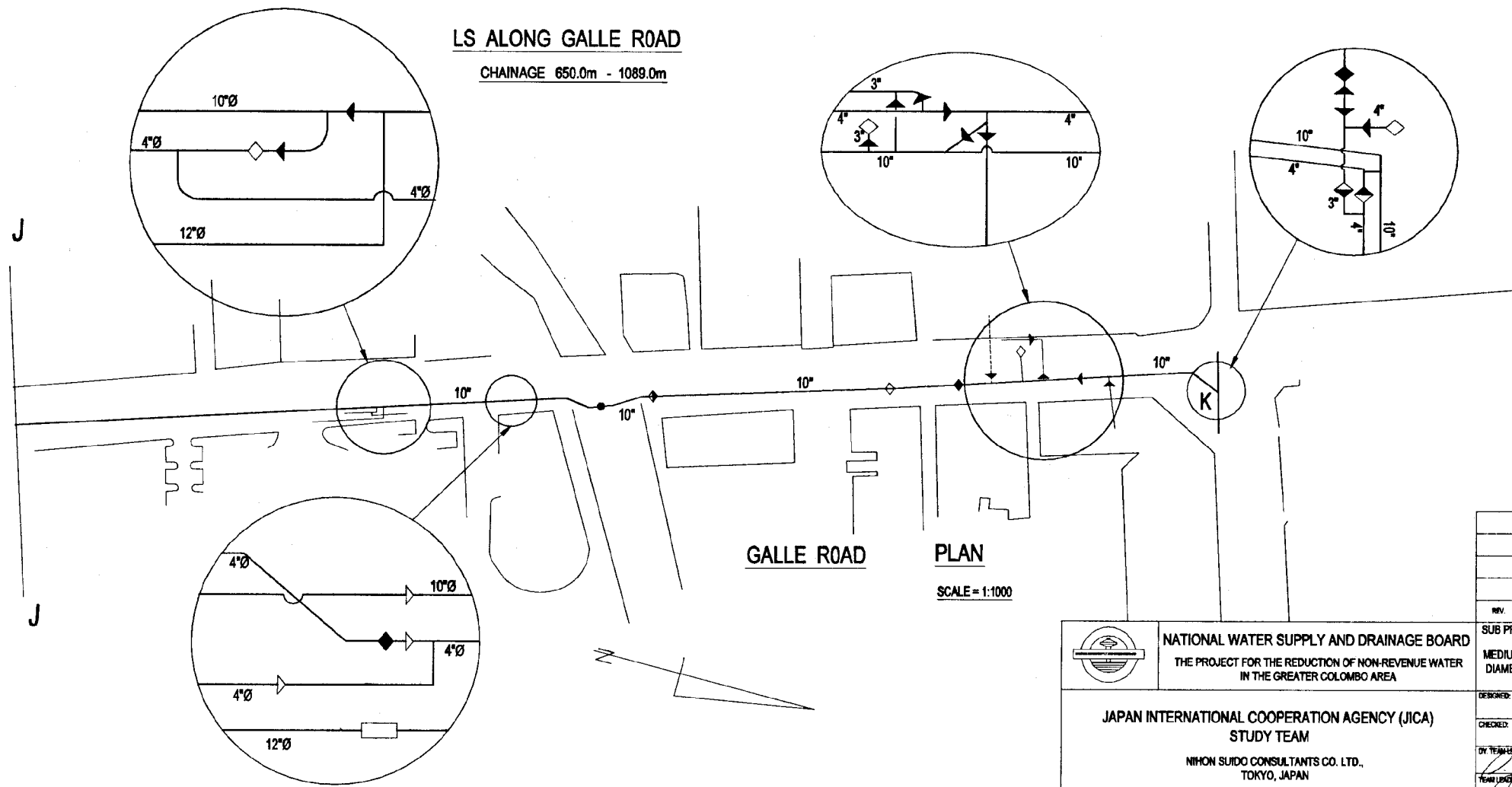
<p><b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: <b>PLAN &amp; LONGITUDINAL SECTION GALLE ROAD</b></p>
	<p>DESIGNED: <i>[Signature]</i></p>	<p>DATE: <b>JUN 2008</b></p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM</p>	<p>DRIVER: <b>THARANGA</b></p>	<p>CONTRACT No: <b>NRW / CW</b></p>
<p>NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>	<p>DR. TEAM LEADER: <i>[Signature]</i></p>	<p>DATE: <b>RML/DM/RH -24</b></p>





HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	7.40 7.50 8.00 9.00 9.10 9.00 8.50 8.00 7.90 7.90
INVERT LEVEL (m)	
PIPE DETAILS	10" (250 mm) DIA
CHAINAGE (m)	650.00 700.00 800.00 900.00 929.00 955.00 961.00 973.00 985.00 1000.00 1081.00 1089.00
HORIZONTAL ANGLE (°)	45°

NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM J-J TO POINT "K" ALONG THE 10" DIA DISTRIBUTION MAIN.

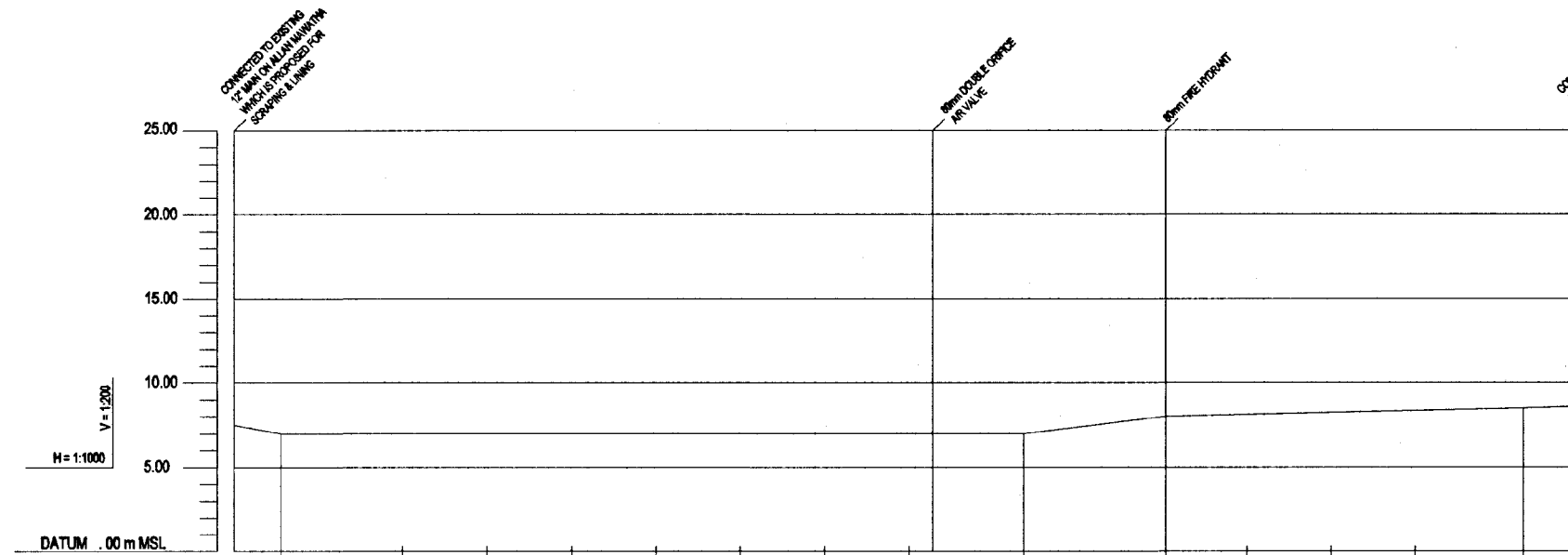


LS ALONG GALLE ROAD  
 CHAINAGE 650.0m - 1089.0m

GALLE ROAD  
 PLAN  
 SCALE = 1:1000

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION GALLE ROAD SHEET 07 OF 07
	DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA IN CHARGE: <i>[Signature]</i> J.G.M (P&I) INCHARGE: E. D. K. J. D.G.M (P&I) INCHARGE:

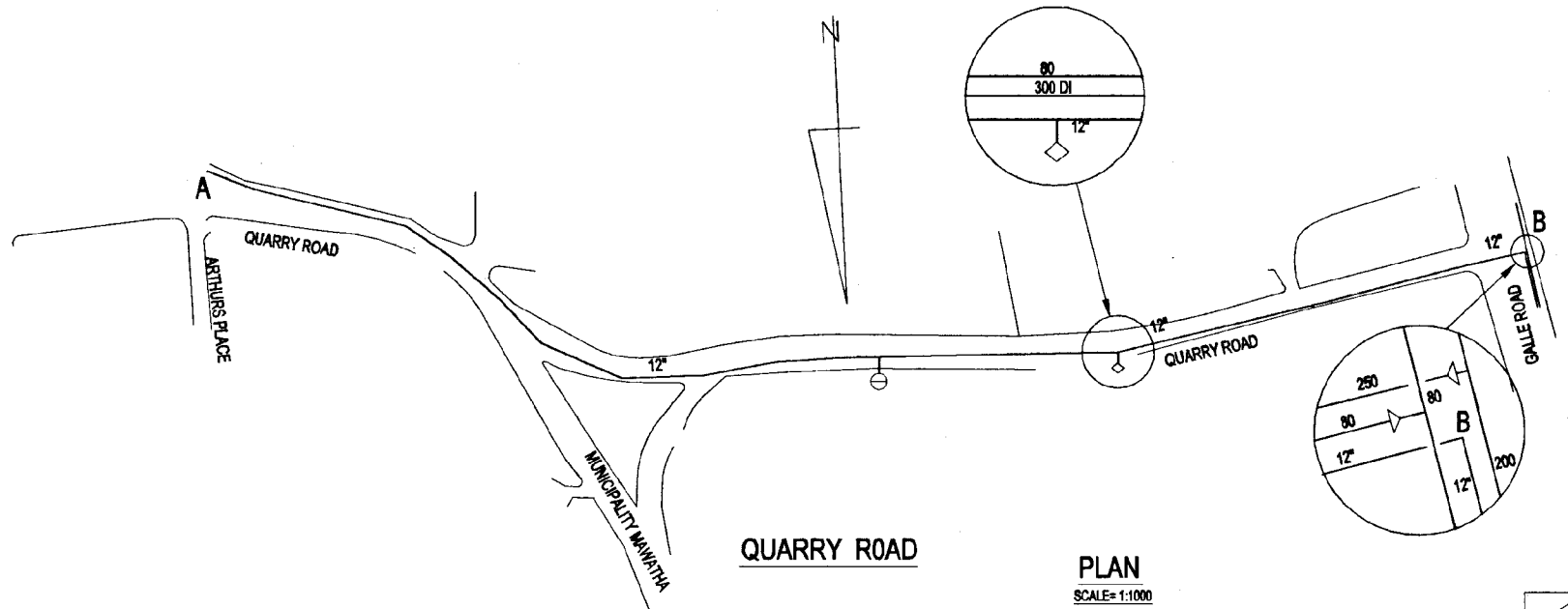


HYDRAULIC GRID LEVEL (m)											
GROUND LEVEL (m)	7.50	7.00					7.00	8.00		8.50	8.50
INVERT LEVEL (m)											
PIPE DETAILS	12" DIA										
CHAINAGE (m)	0.00	14.00	59.00	100.00	110.00	135.00	200.00	234.00	278.00	342.00	396.00
HORIZONTAL ANGLE (°)			22.5°	22°	22°				11.25°		

NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT "A" TO POINT "B" ALONG THE 12" DIA DISTRIBUTION MAIN.

**LS ALONG QUARRY ROAD**


CHAINAGE 0.0m - 396.0m

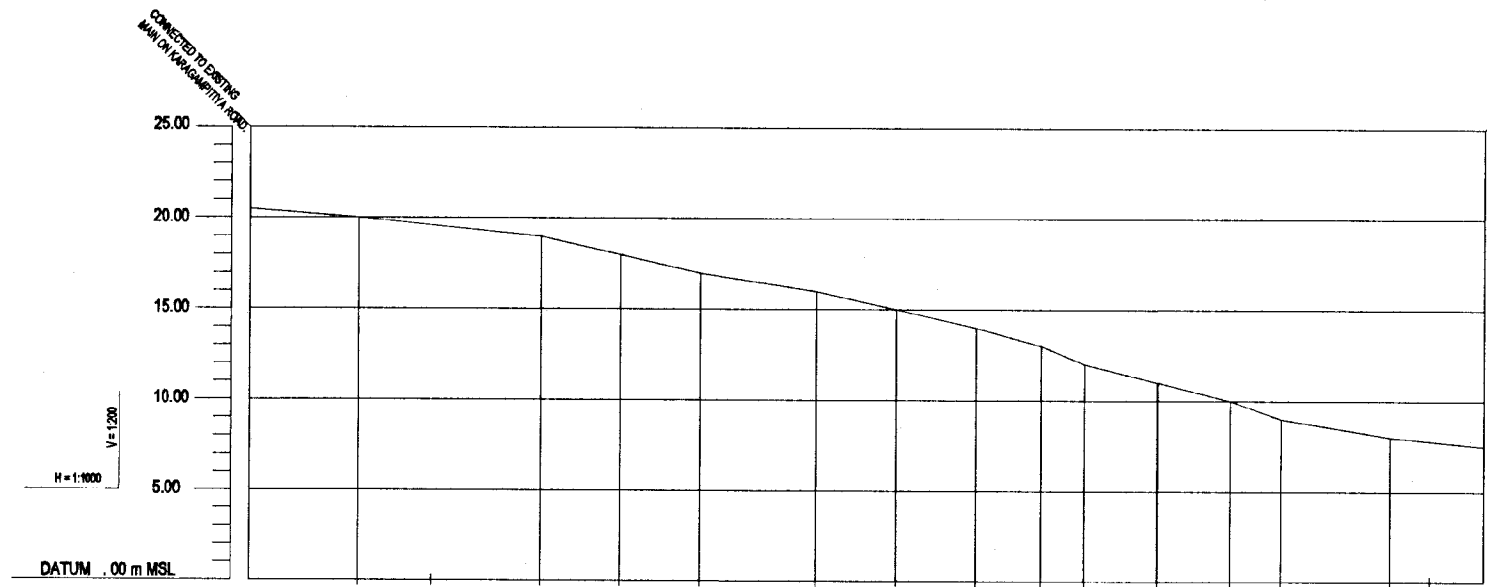


**QUARRY ROAD**

**PLAN**  
 SCALE=1:1000

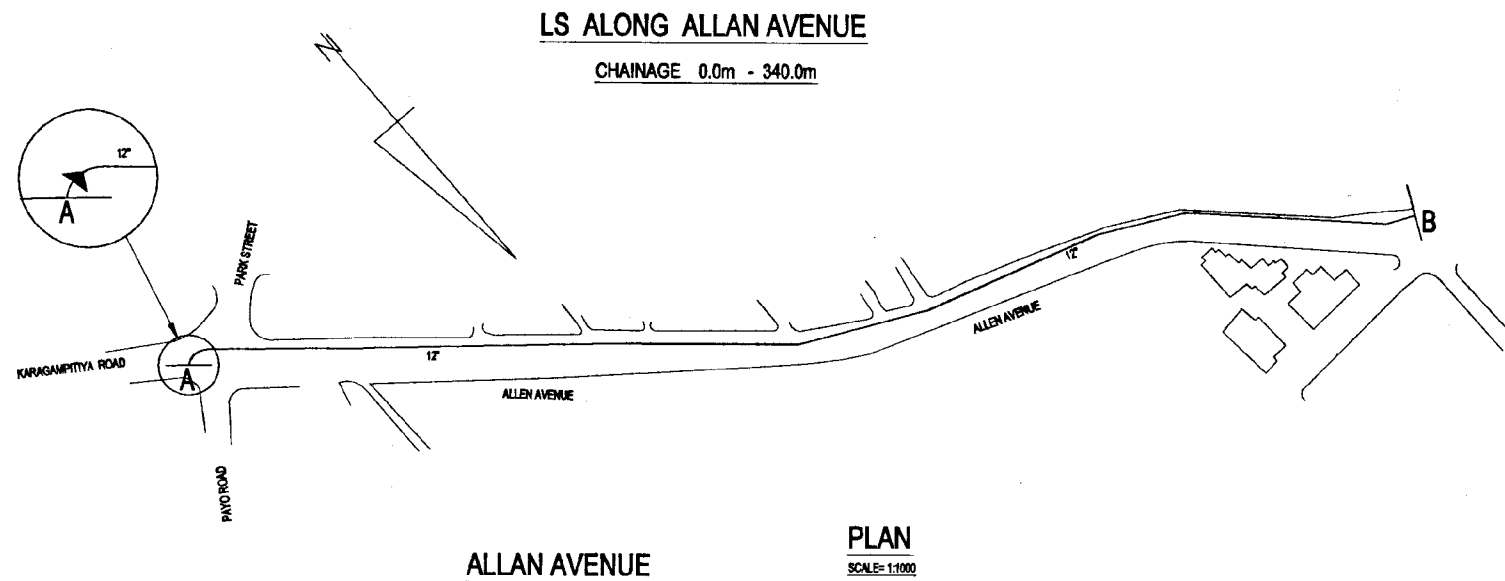
DO NOT SCALE

 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: <b>PLAN &amp; LONGITUDINAL SECTION QUARRY ROAD</b>
	DESIGNED: [Signature] CHECKED: [Signature] CIV. TEAM LEADER: [Signature] TEAM LEADER: [Signature]	DRAWN: THARANGA IN CHARGE: [Signature] A.S.M. (P&I) NUMBER: K.D.A.J. C.S.M. (P&I) NUMBER:



HYDRAULIC GRID LEVEL (m)																
GROUND LEVEL (m)	20.00	20.00	19.00	18.00	17.00	16.00	15.00	14.00	13.00	12.00	11.00	10.00	9.00	8.00	7.50	
INVERT LEVEL (m)																
PIPE DETAILS	← 12" DIA →															
CHAINAGE (m)	0.00	30.00	50.00	80.00	102.00	124.00	156.00	178.00	200.00	216.00	230.00	250.00	270.00	284.00	314.00	340.00
HORIZONTAL ANGLE (°)																

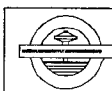
NOTE  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT 'A' TO POINT 'B' ALONG THE 12" DIA. DISTRIBUTION MAIN.



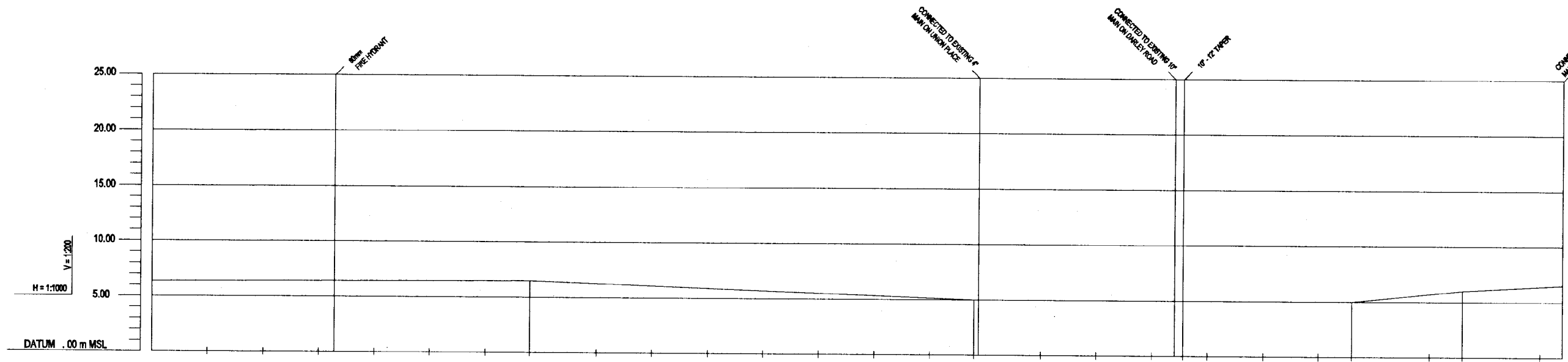
LS ALONG ALLAN AVENUE  
CHAINAGE 0.0m - 340.0m

ALLAN AVENUE  
PLAN  
SCALE= 1:1000

DO NOT SCALE

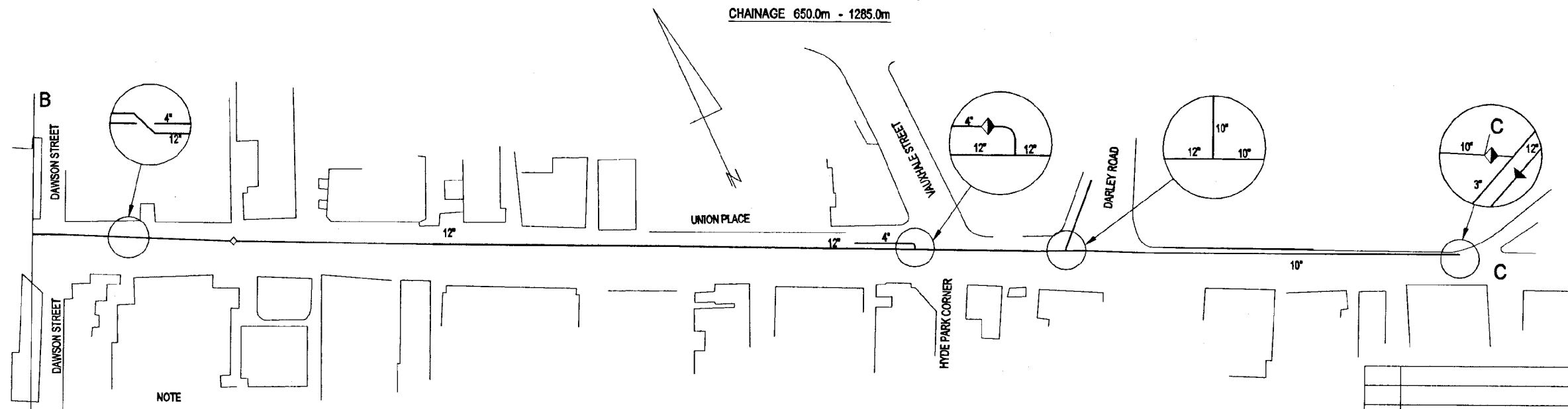
 <p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>		<p>TITLE: PLAN &amp; LONGITUDINAL SECTION ALLAN AVENUE</p>	
	<p>DESIGNED: <i>[Signature]</i></p> <p>CHECKED: <i>[Signature]</i></p> <p>BY: TEAM LEADER <i>[Signature]</i></p> <p>TEAM LEADER <i>[Signature]</i></p>	<p>DATE: THURSDAY</p> <p>PM (PROVISED) NUMBER: <i>[Signature]</i></p> <p>A.S.M (PROV) NUMBER: <i>[Signature]</i></p> <p>D.S.M (PROV) NUMBER: <i>[Signature]</i></p>	<p>DATE: JUN. 2009</p> <p>CONTRACT No: NRW / CW</p> <p>DWG. No: RML/DM/RH -27</p>	
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>				





HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	6.34, 5.00, 5.00, 5.00, 6.00, 6.34
INVERT LEVEL (m)	
PIPE DETAILS	12" (300mm) DIA, 10" (250mm) DIA
CHAINAGE (m)	650.00, 732.00, 820.00, 1020.00, 1114.00, 1190.00, 1240.00, 1285.00
HORIZONTAL ANGLE (°)	

**LS ALONG UNION PLACE**  
CHAINAGE 650.0m - 1285.0m

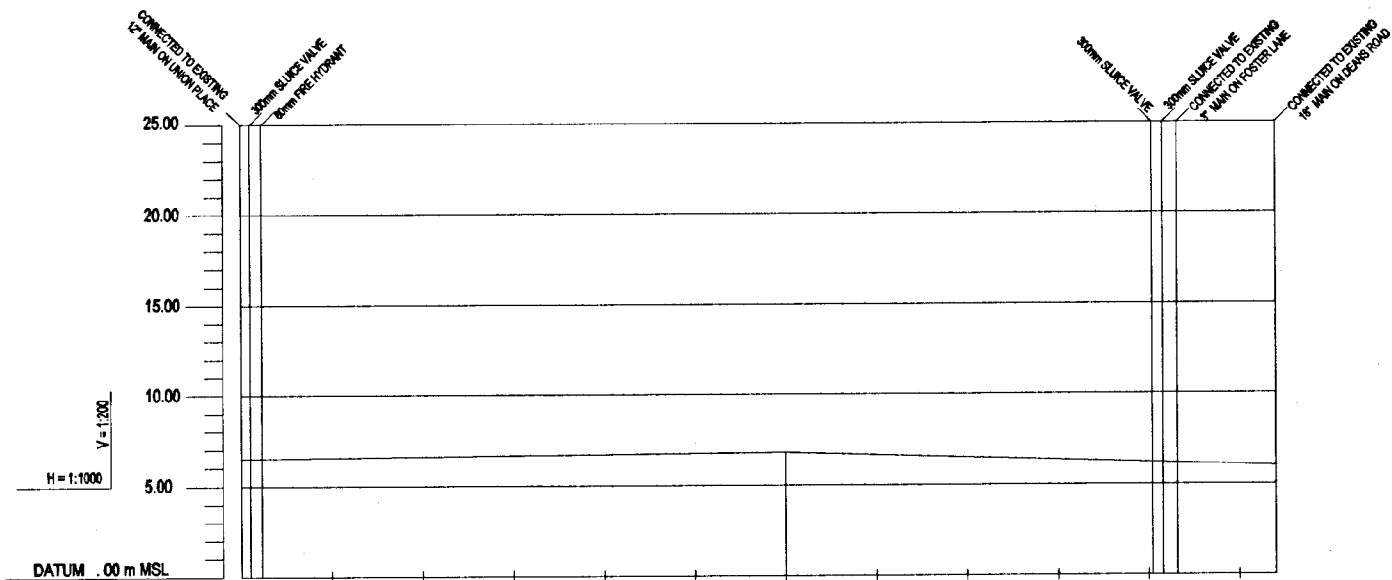


**NOTE**  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM B-B TO POINT 'C' ALONG THE 12" DIA DISTRIBUTION MAIN.

**UNION PLACE PLAN**  
SCALE = 1:1000

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION UNION PLACE</p>
	<p>SHEET 02 OF 02</p>	
<p>DESIGNED: [Signature]</p>	<p>DATE: THURSDAY</p>	<p>DATE: JAN. 2008</p>
<p>CHECKED: [Signature]</p>	<p>PA (PW/SAP) INCH: [Signature]</p>	<p>CONTRACT NO: NRW / CW</p>
<p>BY: TEAM LEADER [Signature]</p>	<p>A.B.M (P.D) INCH: [Signature]</p>	<p>DRG. NO: RML/DM/RH-29</p>
<p>TEAM LEADER [Signature]</p>	<p>D.O.M (P.D) INCH: [Signature]</p>	
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>		

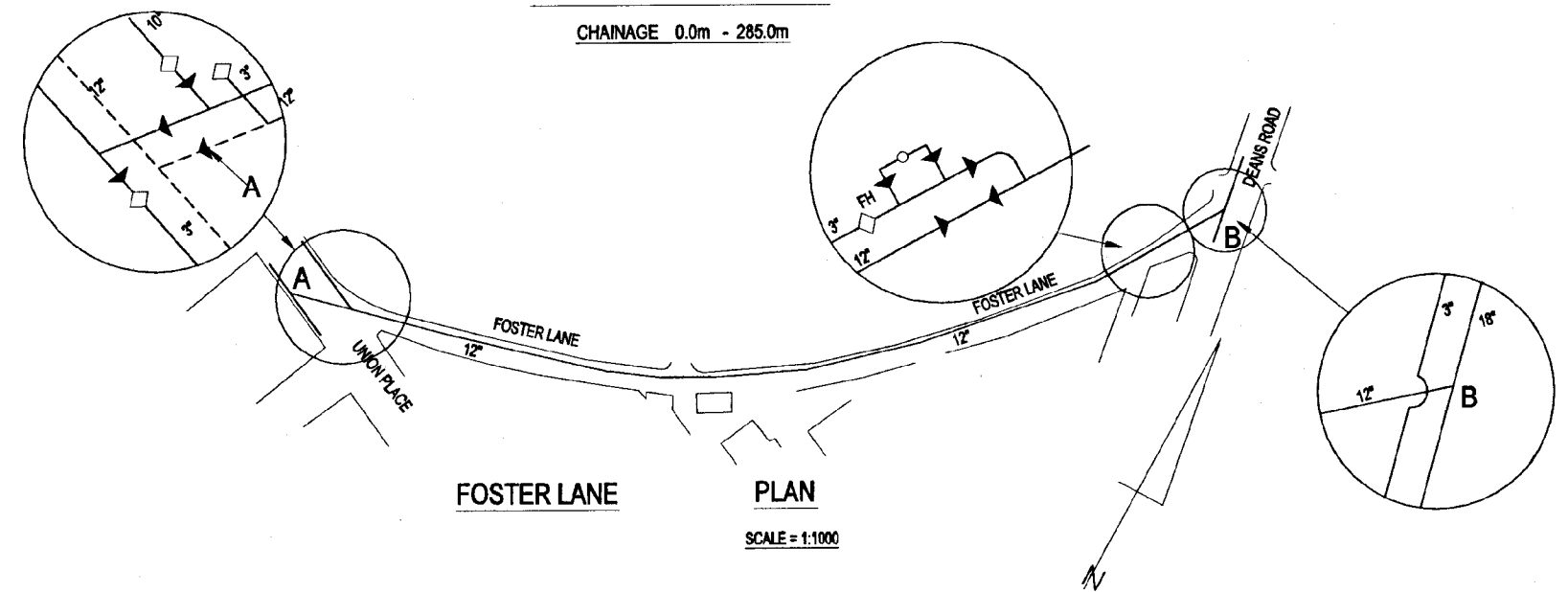


HYDRAULIC GRID LEVEL (m)			
GROUND LEVEL (m)	6.80	6.80	6.80
INVERT LEVEL (m)			
PIPE DETAILS	12" DIA		
CHAINAGE (m)	0.00	150.00	285.00
HORIZONTAL ANGLE (°)	21.25	11.25	11.75

**NOTE**  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT 'A' TO POINT 'B' ALONG THE 12" DIA DISTRIBUTION MAIN.


**LS ALONG FOSTER LANE**

CHAINAGE 0.0m - 285.0m



**FOSTER LANE PLAN**  
 SCALE = 1:1000

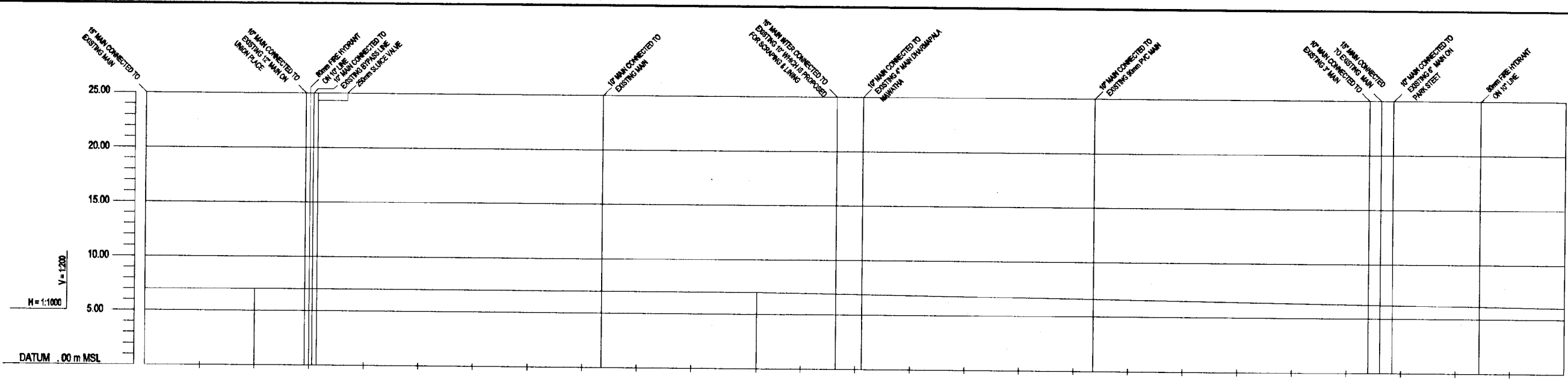
DO NOT SCALE

 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: <b>PLAN &amp; LONGITUDINAL SECTION FOSTER LANE</b>
	DESIGNED: [Signature] CHECKED: [Signature] BY: TEAM LEADER [Signature] TEAM LEADER [Signature]	DRAWN: THARANGA PW (NWS&D) INCHG: [Signature] A.G.M (P&D) WARD: R. D. A. J. D.G.M (P&D) WARD: [Signature]





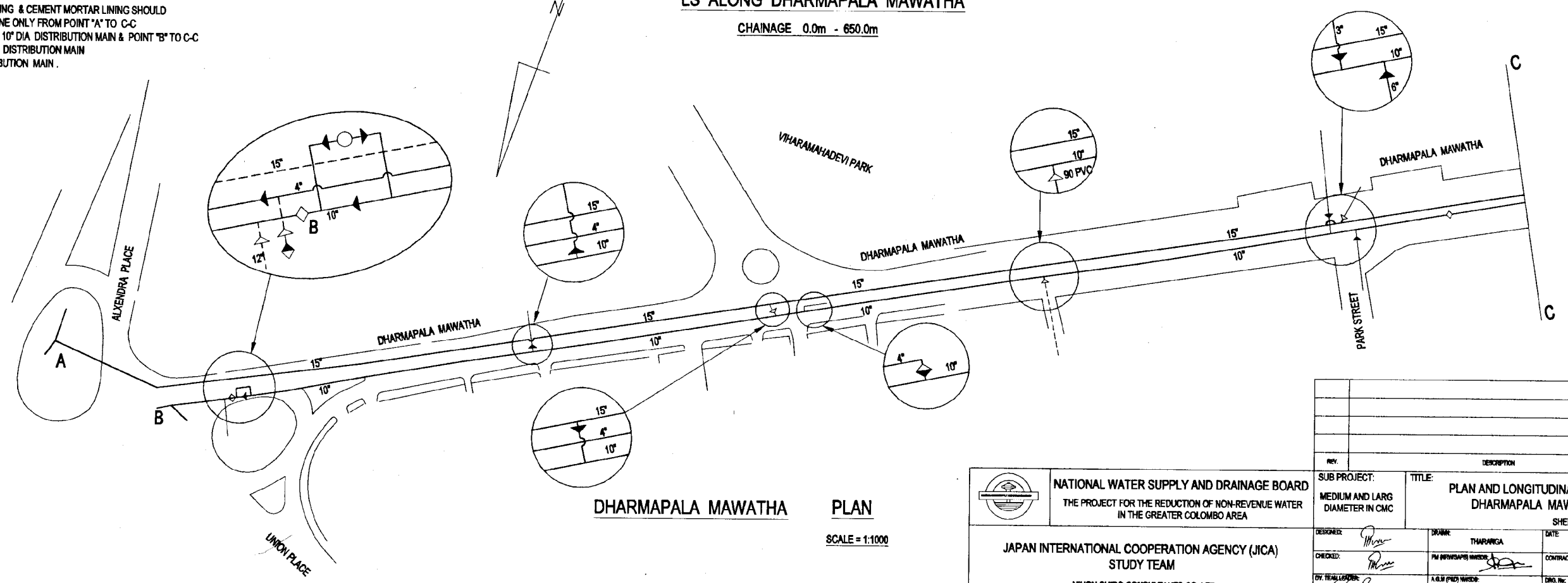




HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	7.00
INVERT LEVEL (m)	
PIPE DETAILS	15" DIA 10" DIA
CHAINAGE (m)	0.00, 25.00, 50.00, 75.00, 100.00, 125.00, 150.00, 175.00, 200.00, 225.00, 250.00, 280.00, 300.00, 325.00, 350.00, 375.00, 400.00, 425.00, 450.00, 475.00, 500.00, 525.00, 550.00, 575.00, 600.00, 625.00, 650.00
HORIZONTAL ANGLE (°)	22.5

**NOTE**  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT 'A' TO C-C ALONG 10" DIA DISTRIBUTION MAIN & POINT 'B' TO C-C 15" DIA DISTRIBUTION MAIN.

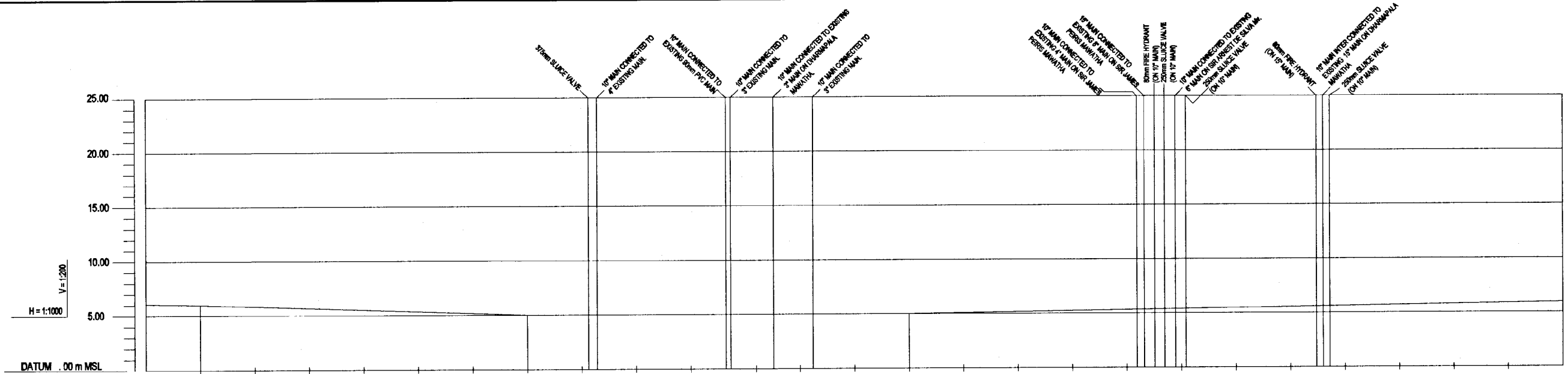
**LS ALONG DHARMAPALA MAWATHA**  
 CHAINAGE 0.0m - 650.0m



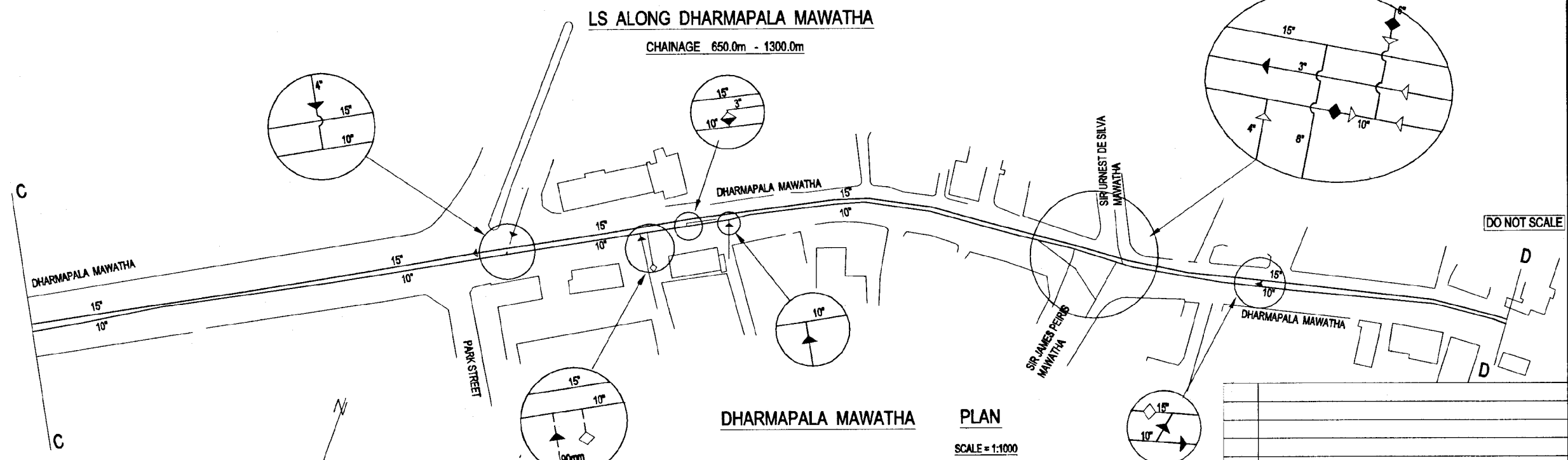
**DHARMAPALA MAWATHA PLAN**  
 SCALE = 1:1000

DO NOT SCALE

	<b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARG DIAMETER IN CMC	TITLE: PLAN AND LONGITUDINAL SECTION DHARMAPALA MAWATHA SHEET 01 OF 03
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN	DESIGNED: [Signature] CHECKED: [Signature] DR. REALLEADER: [Signature] TRANSLATOR: [Signature]	DRAWN: THARANGA PW (REVISED) INCHES: [Signature] A.O.B (PW) INCHES: [Signature] D.O.M (PW) INCHES: [Signature]

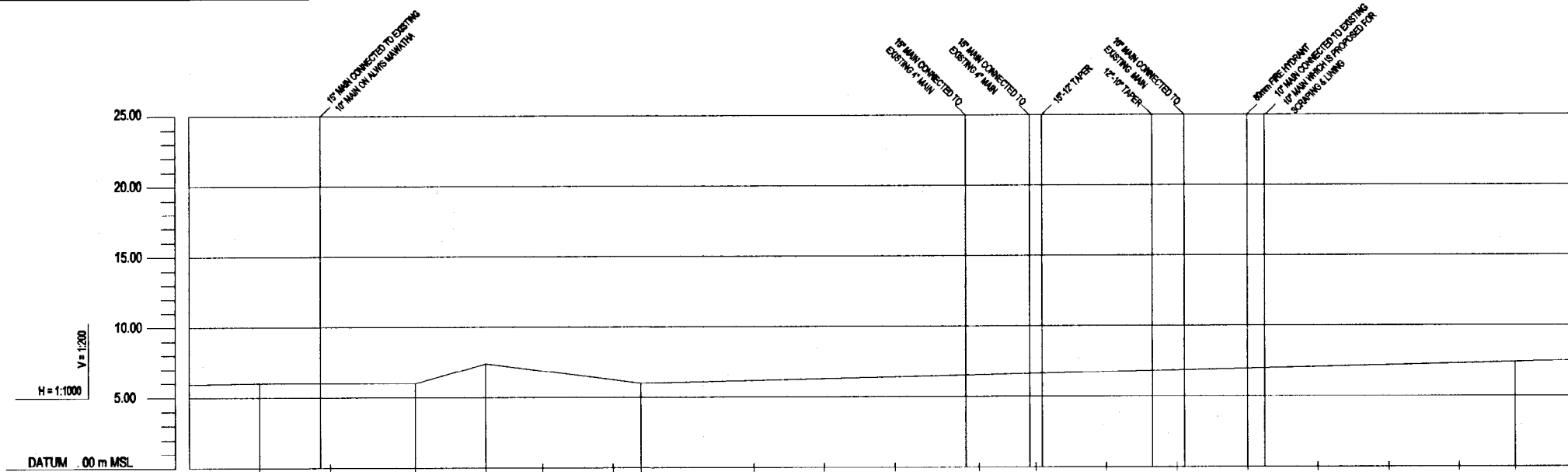


HYDRAULIC GRID LEVEL (m)											
GROUND LEVEL (m)	8.07	8.00		5.00				5.00			5.25
INVERT LEVEL (m)											
PIPE DETAILS	15" DIA 10" DIA										
CHAINAGE (m)	650.00	675.00		825.00			1000.00	1015.00		1125	1300.00
HORIZONTAL ANGLE (°)								11.25		11.25	



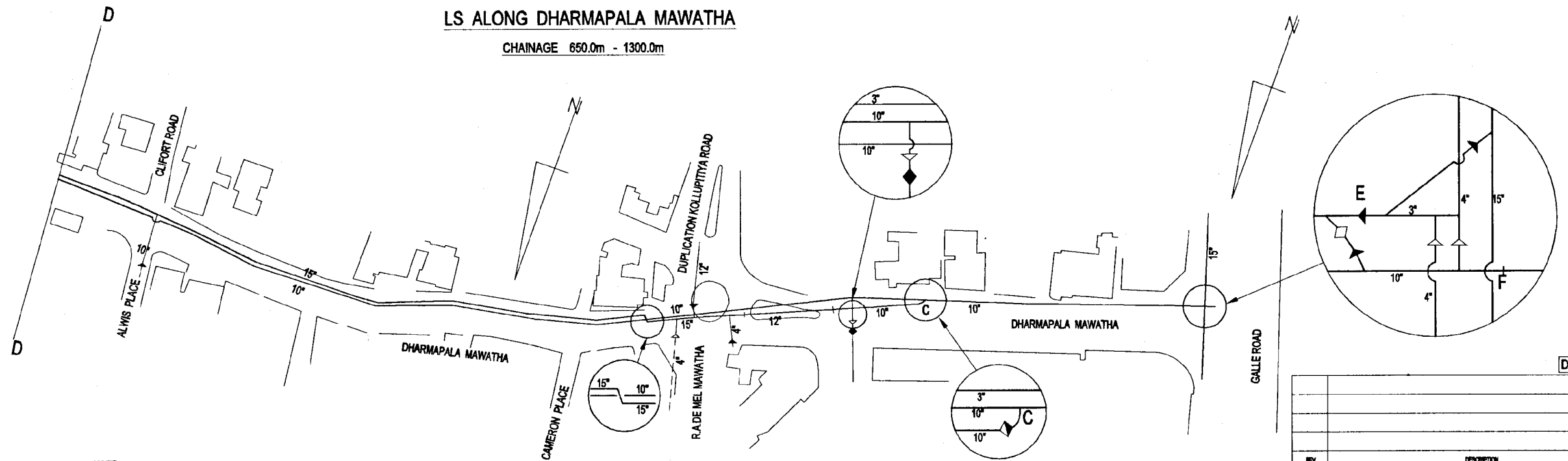
NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM C-C TO D-D ALONG 10" DIA DISTRIBUTION MAIN & 15" DISTRIBUTION MAIN.

<p><b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b>          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p> <p><b>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</b>          STUDY TEAM</p> <p>NIHON SUIDO CONSULTANTS CO. LTD.,          TOKYO, JAPAN</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION DHARMAPALA MAWATHA SHEET 02 OF 03	
	DESIGNED: <i>[Signature]</i>	DRAWN: THARANGA	DATE: JAN. 2008
	CHECKED: <i>[Signature]</i>	P.M. (P/MS/PS) INCHARGE: <i>[Signature]</i>	CONTRACT NO.: NRW / CW
	DR. TEAM LEADER: <i>[Signature]</i>	A.E.M. (P/2) INCHARGE: R. D. J.	DRG. NO.: RML/DM/RH-34
TEAM LEADER: <i>[Signature]</i>	O.G.M. (P/2) INCHARGE:		



HYDRAULIC GRID LEVEL (m)													
GROUND LEVEL (m)	5.92	6.00	6.00	7.40	6.00							7.40	7.50
INVERT LEVEL (m)													
PIPE DETAILS													
CHAINAGE (m)	1300.00	1325.00	1380.00	1405.00	1460.00	1603.00	1641.00	1681.00	1770.00	1790.00			
HORIZONTAL ANGLE (°)													

**LS ALONG DHARMAPALA MAWATHA**  
CHAINAGE 850.0m - 1300.0m

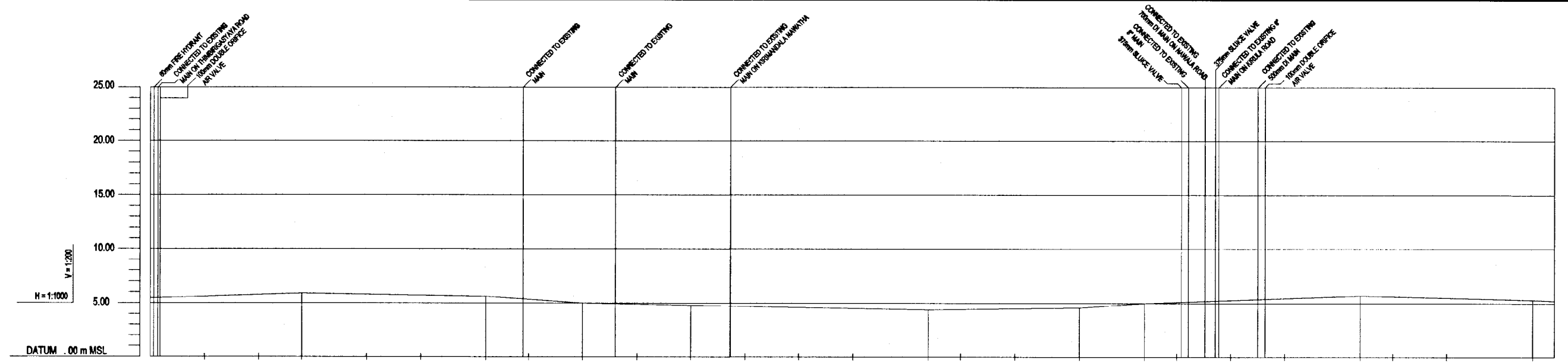


**NOTE**  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM D-D TO POINT F ALONG THE 10\"/>

**DHARMAPALA MAWATHA PLAN**  
SCALE = 1:1000

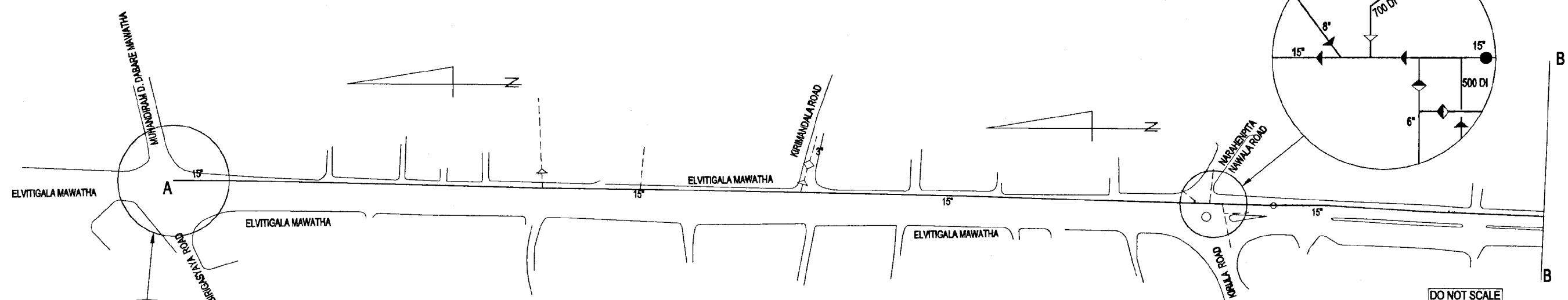
<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION DHARMAPALA MAWATHA</p>
	<p>DESIGNED: [Signature]</p> <p>CHECKED: [Signature]</p> <p>DR. TEAM LEADER: [Signature]</p> <p>TEAM LEADER: [Signature]</p>	<p>DATE: JAN. 2009</p> <p>CONTRACT NO: NRW / CW</p> <p>DWG. NO: RML/DW/RH -35</p>

DO NOT SCALE



HYDRAULIC GRID LEVEL (m)																											
GROUND LEVEL (m)	5.46		5.90		5.80		5.00		4.80		4.40		4.80		5.00		5.70		5.30								
INVERT LEVEL (m)																											
PIPE DETAILS	15" (375 mm) DIA																										
CHAINAGE (m)	0.00	25.00	50.00	70.00	100.00	125.00	155.00	175.00	200.00	225.00	250.00	275.00	300.00	325.00	360.00	375.00	400.00	430.00	460.00	475.00	500.00	525.00	560.00	575.00	600.00	640.00	650.00
HORIZONTAL ANGLE (°)																											

**LS ALONG ELVITIGALA MAWATHA**  
CHAINAGE 0.0m - 650.0m




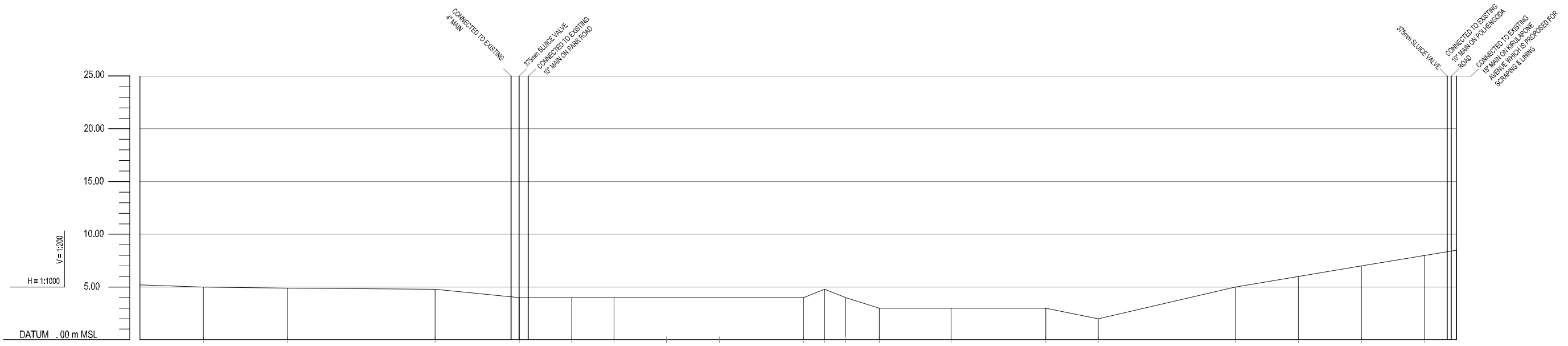
**NOTE**  
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT "A" TO B-B ALONG THE 15" DIA DISTRIBUTION MAIN.

**ELVITIGALA MAWATHA**

**PLAN**  
SCALE = 1:1000

DO NOT SCALE

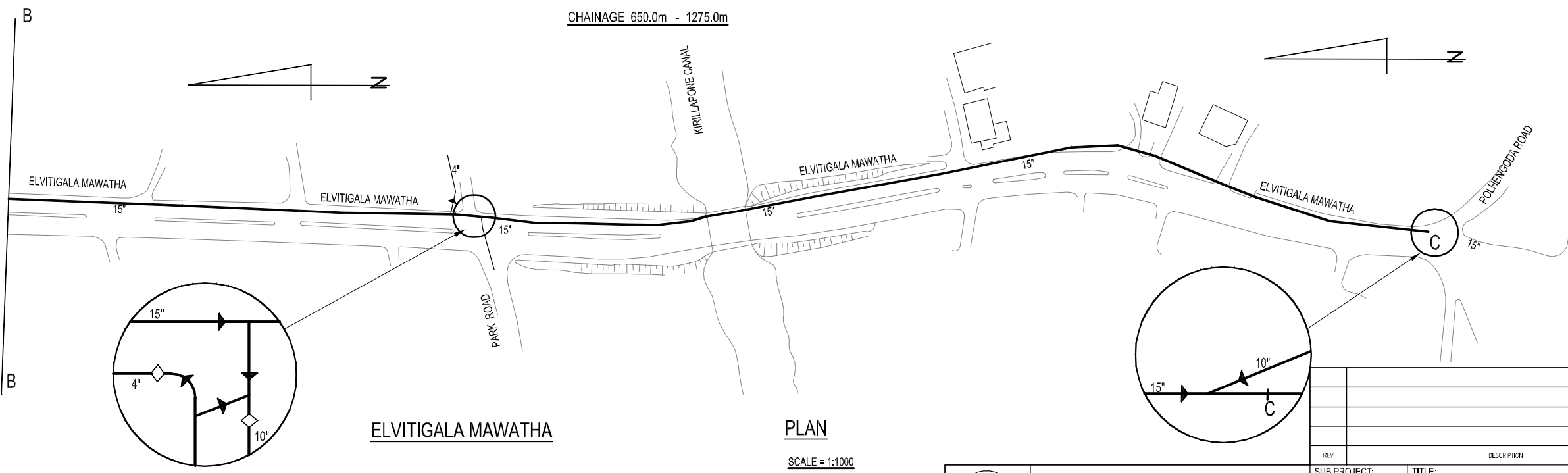
 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC		TITLE: <b>PLAN &amp; LONGITUDINAL SECTION ELVITIGALA MAWATHA</b>	
	DESIGNED: [Signature]		DRAWN: THARANGA	
<b>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</b> STUDY TEAM NIPPON KAIEN KAISHA LTD., TOKYO, JAPAN		CHECKED: [Signature]	DATE: JUN 2001	
		DR. TEAM LEADER: [Signature]	CONTRACT NO: <b>NRW / CW</b>	
		TEAM LEADER: [Signature]	D.R.O. IN CHARGE: [Signature]	
				D.R.O. NO: <b>RML/DM/RH -36</b>



HYDRAULIC GRID LEVEL (m)																								
GROUND LEVEL (m)	5.22	5.00	4.90	4.80	4.00	3.00	2.00				1.00	4.80	1.80	2.00	3.00	3.00	2.00	5.00	6.00	7.00	8.00	8.50		
INVERT LEVEL (m)																								
PIPE DETAILS	← 15" DIA →																							
CHAINAGE (m)	650.00	660.00	720.00	790.00	830.00	855.00	875.00	900.00				965.00	975.00	985.00	1001.00	1035.00	1080.00	1105.00	1170.00	1200.00	1230.00	1260.00	1275.00	
HORIZONTAL ANGLE (°)								11.25										11.25			11.25			

**LS ALONG ELVITIGALA MAWATHA**

CHAINAGE 650.0m - 1275.0m




**ELVITIGALA MAWATHA**

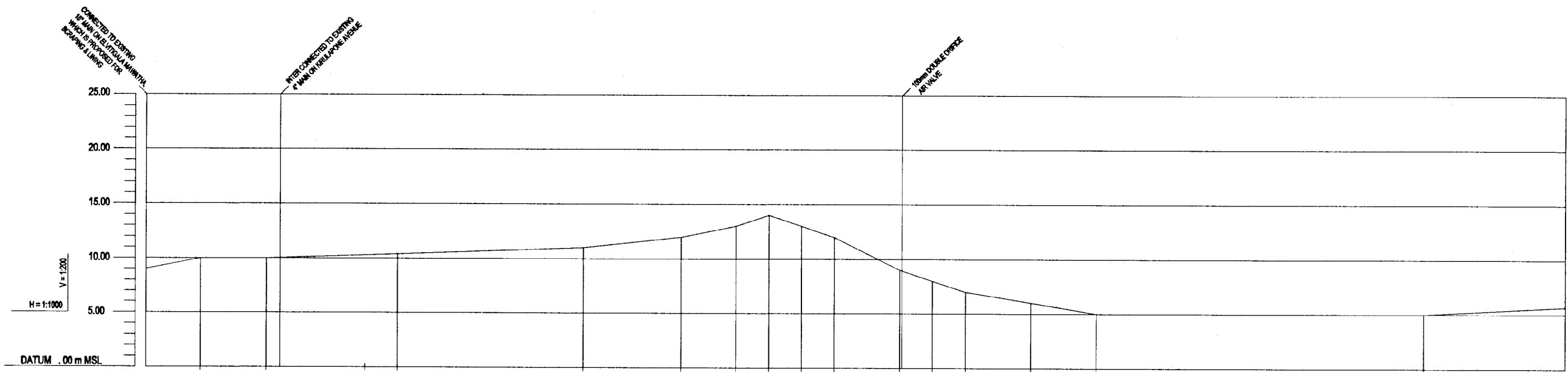
**PLAN**

SCALE = 1:1000

**NOTE**  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM B-B TO POINT "C" ALONG THE 15" DIA DISTRIBUTION MAIN.

DO NOT SCALE

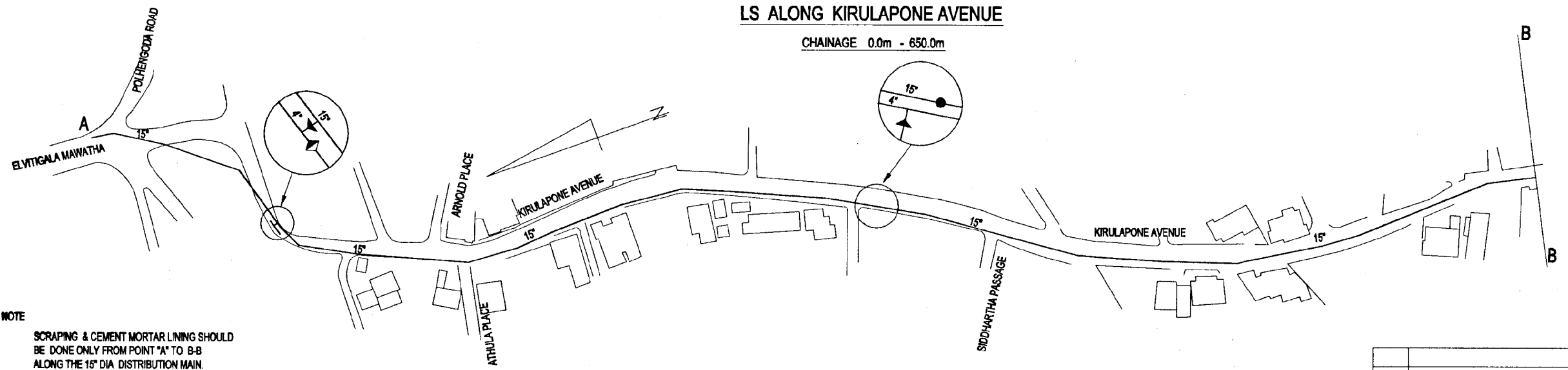
 <b>NATIONAL WATER SUPPLY AND DRAINAGE BOARD</b> THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: <b>PLAN &amp; LONGITUDINAL SECTION ELVITIGALA MAWATHA</b>
	SHEET 02 OF 02	
DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>	DRAWN: THARANGA PM (NRW/SAPS) IN/SDR: <i>[Signature]</i> A.G.M (PAD) IN/SDR: <i>[Signature]</i> D.G.M (PAD) IN/SDR: <i>[Signature]</i>	DATE: JAN. 2001 CONTRACT NO: NRW / CW DRG. NO: RML/DM/RH -37



HYDRAULIC GRID LEVEL (m)																		
GROUND LEVEL (m)	9.00	10.00	10.00	10.40	11.00	12.00	13.00	14.00	13.00	12.00	9.00	8.00	7.00	6.00	5.00	5.00		
INVERT LEVEL (m)																		
PIPE DETAILS	15" DIA																	
CHAINAGE (m)	0.00	25.00	50.00	100.00	115.00	200.00	245.00	270.00	285.00	300.00	315.00	345.00	390.00	375.00	405.00	455.00	585.00	650.00
HORIZONTAL ANGLE (°)	45°	22.5°	45°	22.5°	22.5°	22.5°	22.5°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°

**LS ALONG KIRULAPONE AVENUE**

CHAINAGE 0.0m - 650.0m



**NOTE**  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM POINT 'A' TO B-B ALONG THE 15" DIA DISTRIBUTION MAIN.

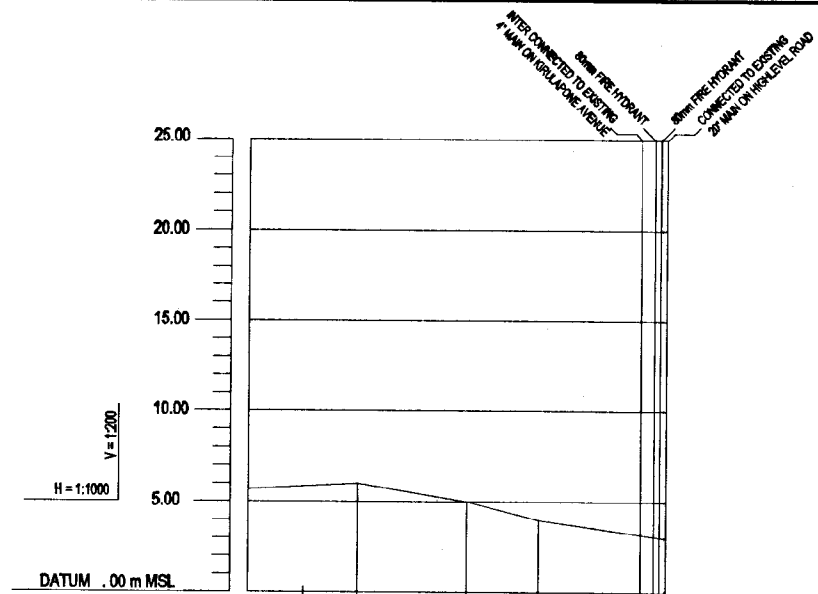
**KIRULAPONE AVENUE**

**PLAN**

SCALE = 1:1000

DO NOT SCALE

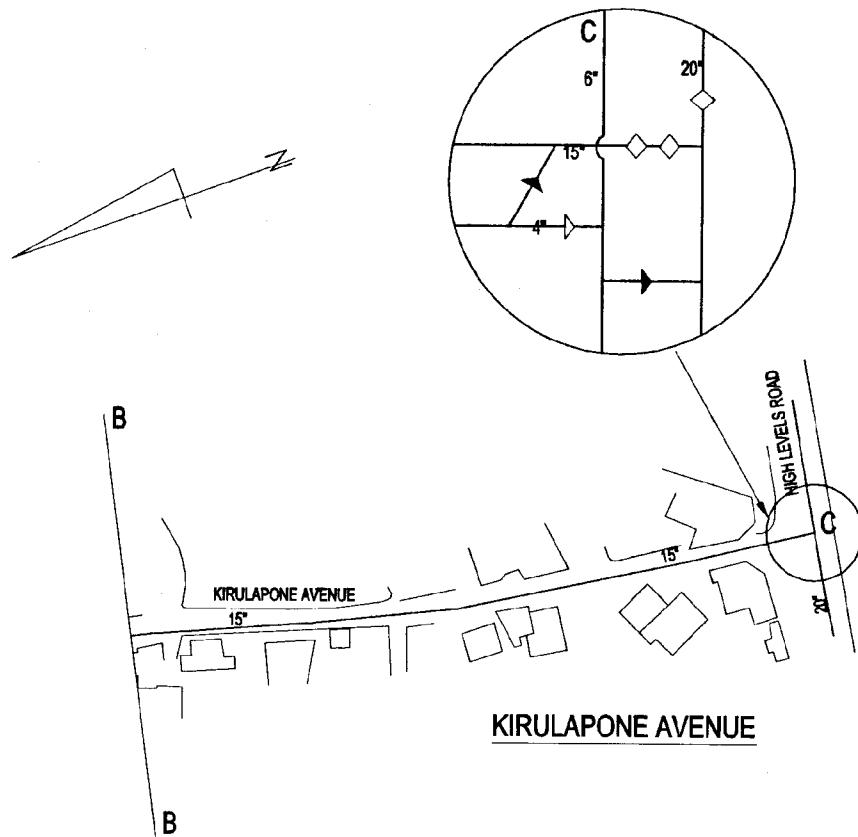
<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION KIRULAPONE AVENUE SHEET 01 OF 02
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUDO CONSULTANTS CO. LTD., TOKYO, JAPAN	DESIGNED: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. TEAM LEADER: <i>[Signature]</i> TEAM LEADER: <i>[Signature]</i>
	DATE: JAN. 2008 CONTRACT NO.: NRW / CW DWG. NO.: RML/DM/RH -38	



HYDRAULIC GRID LEVEL (m)					
GROUND LEVEL (m)	5.88	6.00	5.00	4.00	3.88
INVERT LEVEL (m)					
PIPE DETAILS	← 15' DIA →				
CHAINAGE (m)	650.00	690.00	710.00	730.00	765.00
HORIZONTAL ANGLE (°)					

**LS ALONG KIRULAPONE AVENUE**

CHAINAGE 650.0m - 765.0m




**NOTE**

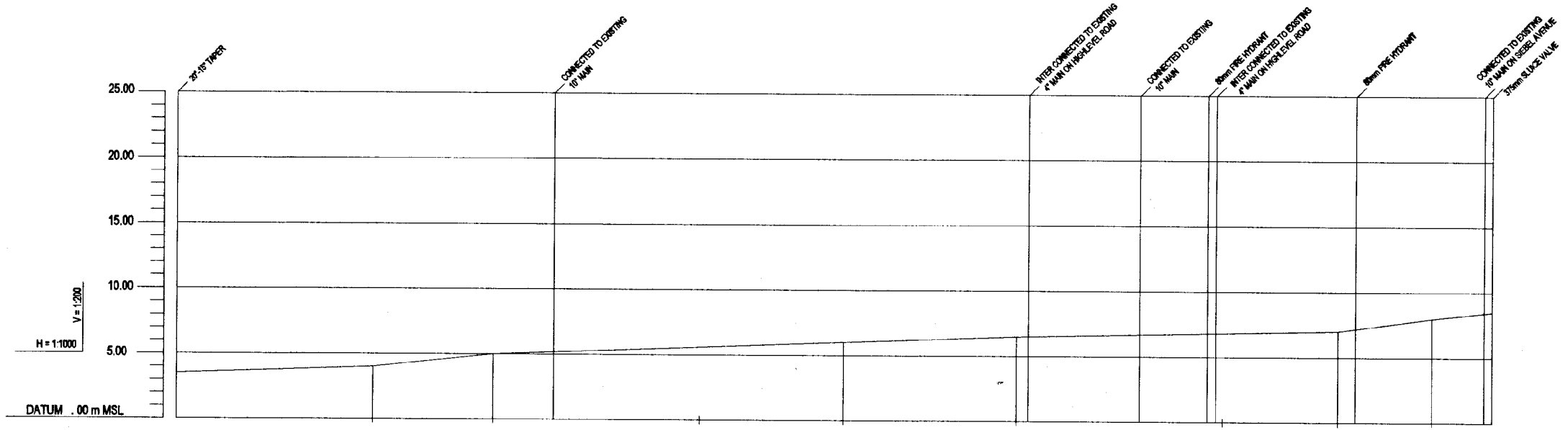
SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM B-B TO POINT 'C' ALONG 15' DIA DISTRIBUTION MAIN.

**PLAN**

SCALE = 1:1000

DO NOT SCALE

 <p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	<p>SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC</p>	<p>TITLE: PLAN &amp; LONGITUDINAL SECTION KIRULAPONE AVENUE SHEET 02 OF 02</p>
	<p>DESIGNED: <i>[Signature]</i></p>	<p>DRAWN: THARANGA</p>
<p>CHECKED: <i>[Signature]</i></p>	<p>PM (NWS&amp;D) INCHARGE: <i>[Signature]</i></p>	<p>CONTRACT No: NRW / CW</p>
<p>BY TEAM LEADER: <i>[Signature]</i></p>	<p>A.S.M (P&amp;D) INCHARGE: <i>[Signature]</i></p>	<p>DRAWN No: RML/DM/RH -39</p>
<p>TEAM LEADER: <i>[Signature]</i></p>	<p>D.S.M (P&amp;D) INCHARGE: <i>[Signature]</i></p>	
<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUIDO CONSULTANTS CO. LTD., TOKYO, JAPAN</p>		

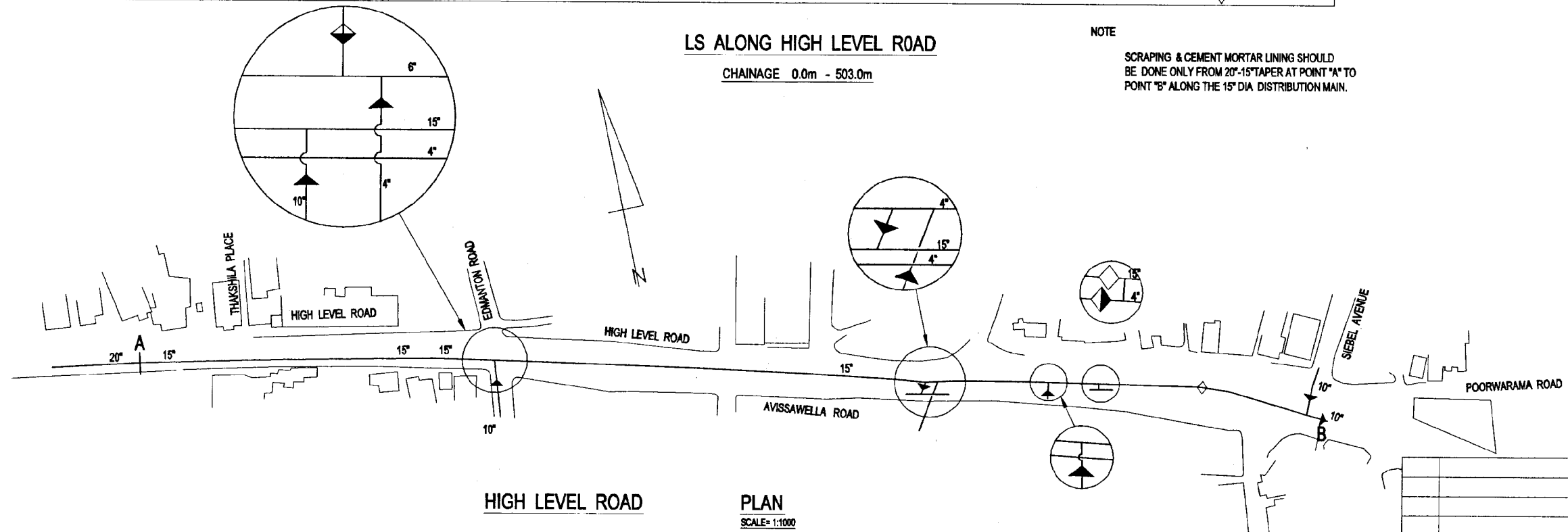


HYDRAULIC GRID LEVEL (m)	
GROUND LEVEL (m)	3.50      4.00      5.00      6.00      6.50      7.00      8.00      8.50
INVERT LEVEL (m)	
PIPE DETAILS	← 15" (375 mm) DIA →
CHAINAGE (m)	0.00      75.00      121.00      200.00      255.00      321.00      400.00      444.00      480.00      503.00
HORIZONTAL ANGLE (°)	

**LS ALONG HIGH LEVEL ROAD**

CHAINAGE 0.0m - 503.0m

NOTE  
 SCRAPING & CEMENT MORTAR LINING SHOULD BE DONE ONLY FROM 20°-15° TAPER AT POINT "A" TO POINT "B" ALONG THE 15" DIA DISTRIBUTION MAIN.



**PLAN**  
 SCALE= 1:1000

DO NOT SCALE

<p>NATIONAL WATER SUPPLY AND DRAINAGE BOARD          THE PROJECT FOR THE REDUCTION OF NON-REVENUE WATER IN THE GREATER COLOMBO AREA</p>	SUB PROJECT: MEDIUM AND LARGE DIAMETER IN CMC	TITLE: PLAN & LONGITUDINAL SECTION HIGH LEVEL ROAD
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) STUDY TEAM NIHON SUJIDO CONSULTANTS CO. LTD., TOKYO, JAPAN	DESIGNER: <i>[Signature]</i> CHECKED: <i>[Signature]</i> DR. YAMAGUCHI TEAM LEADER: <i>[Signature]</i>