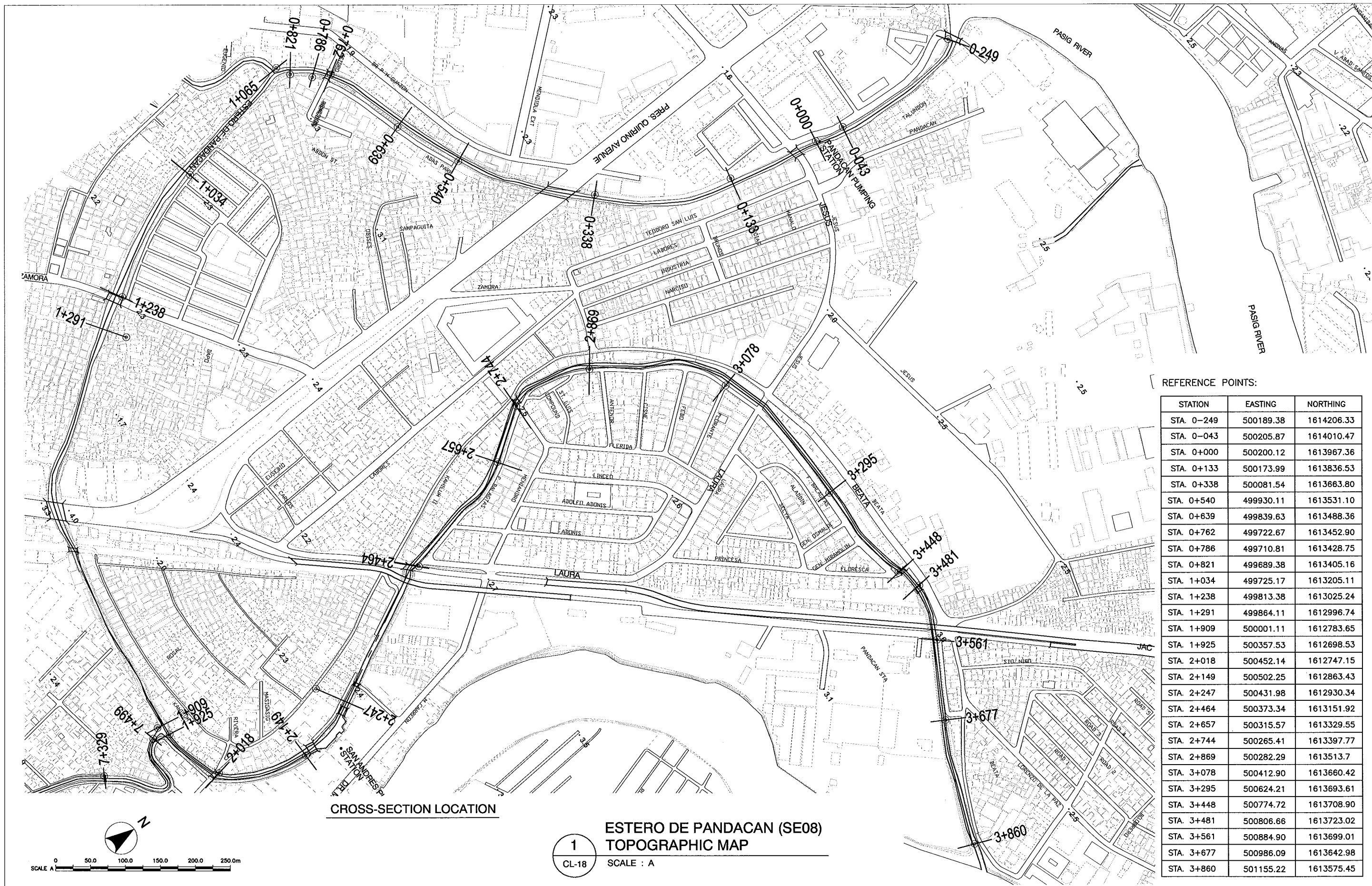


ESTERO DE PANDACAN

(SE08)



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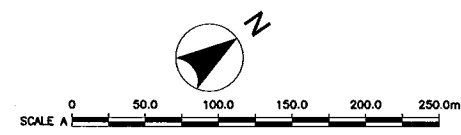
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STA. 0-043	500205.87	1614010.47
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STA. 0+133	500173.99	1613836.53
STA. 0+338	500081.54	1613663.80
STA. 0+540	499930.11	1613531.10
STA. 0+639	499839.63	1613488.36
STA. 0+762	499722.67	1613452.90
STA. 0+786	499710.81	1613428.75
STA. 0+821	499689.38	1613405.16
STA. 1+034	499725.17	1613205.11
STA. 1+238	499813.38	1613025.24
STA. 1+291	499864.11	1612996.74
STA. 1+909	500001.11	1612783.65
STA. 1+925	500357.53	1612698.53
STA. 2+018	500452.14	1612747.15
STA. 2+149	500502.25	1612863.43
STA. 2+247	500431.98	1612930.34
STA. 2+464	500373.34	1613151.92
STA. 2+657	500315.57	1613329.55
STA. 2+744	500265.41	1613397.77
STA. 2+869	500282.29	1613513.7
STA. 3+078	500412.90	1613660.42
STA. 3+295	500624.21	1613693.61
STA. 3+448	500774.72	1613708.90
STA. 3+481	500806.66	1613723.02
STA. 3+561	500884.90	1613699.01
STA. 3+677	500986.09	1613642.98
STA. 3+860	501155.22	1613575.45

CROSS-SECTION LOCATION

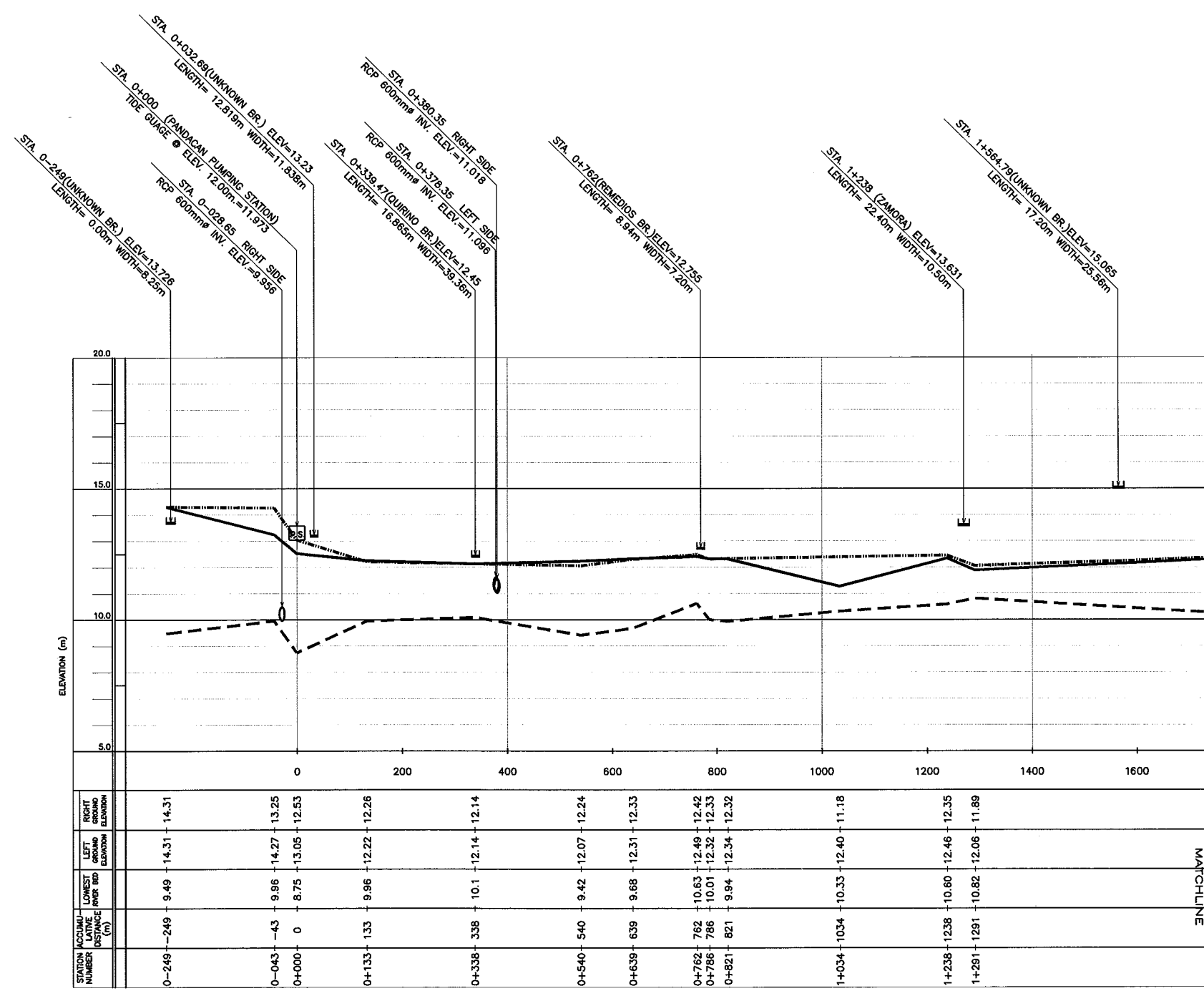
ESTERO DE PANDACAN (SE08)
TOPOGRAPHIC MAP

1
CL-18

SCALE : A

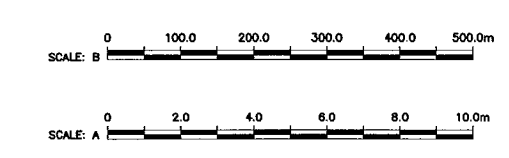


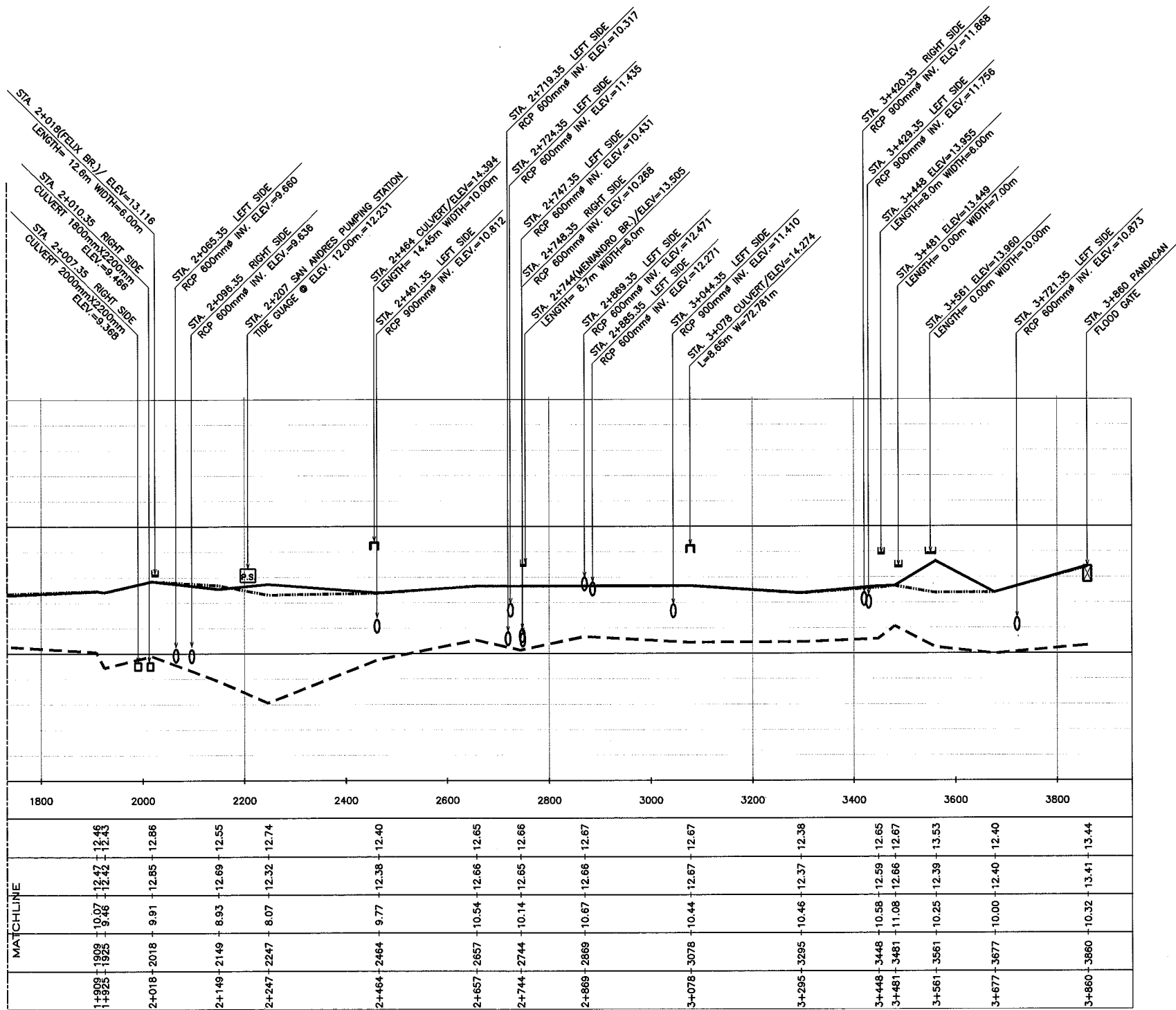
<p>CONSULTANTS</p>		<p>REPUBLIC OF THE PHILIPPINES</p>		<p>PROJECT & LOCATION:</p> <p>THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA</p>	<p>SHT. CONTENTS:</p> <p>CROSS-SECTION LOCATION ESTERO DE PANDACAN (SE08) (STA. 0-249 - STA. 3+860)</p>	<p>SHT. NO</p> <p>CL-16 01 01</p>
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- LEGEND:
- : RIGHT BANK
 - - - : LEFT BANK
 - . - . : LOWEST RIVERBED
 - : BOX CULVERT
 - ▬ : BRIDGE
 - : REINFORCE CONCRETE PIPE
 - PS : PUMPING STATION
 - ▭ : CULVERT
 - W : FLOOD GATE

1
LONGITUDINAL PROFILE
LP-16 VER. = SCALE : A / HOR. = SCALE : B



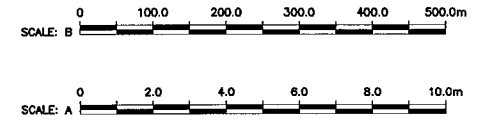


1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800			
1+909-1908 1+925-1925	2+018-2018	2+149-2149	2+247-2247	2+464-2464	2+657-2657	2+744-2744	2+869-2869	3+078-3078	3+295-3295	3+448-3448 3+481-3481	3+561-3561	3+677-3677	3+860-3860
10.07-12.47 9.46-12.42	9.91-12.85	8.93-12.69	8.07-12.32	9.77-12.38	10.54-12.66	10.14-12.65	10.87-12.66	10.44-12.67	10.46-12.37	10.58-12.58 11.08-12.66	10.25-12.39	10.00-12.40	10.32-13.41
12.46 12.43	12.86	12.55	12.74	12.40	12.65	12.66	12.67	12.67	12.38	12.65 12.67	13.53	12.40	13.44

LEGEND:

- : RIGHT BANK
- - - : LEFT BANK
- - - : LOWEST RIVERBED
- : BOX CULVERT
- ⌊ : BRIDGE
- : REINFORCE CONCRETE PIPE
- PS : PUMPING STATION
- : CULVERT
- ⊗ : FLOOD GATE

1 LONGITUDINAL PROFILE
LP-16 VER. = SCALE : A / HOR. = SCALE : B



CONSULTANTS

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IN ASSOCIATION WITH
NIKKEN CONSULTANTS, INC.

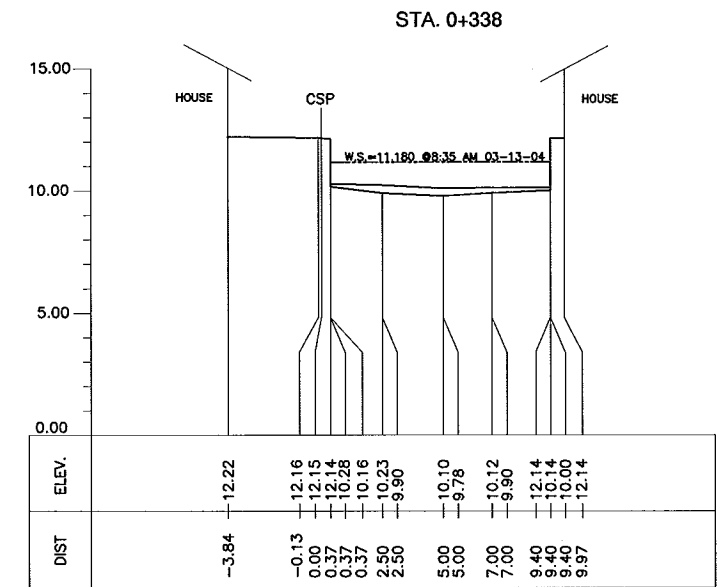
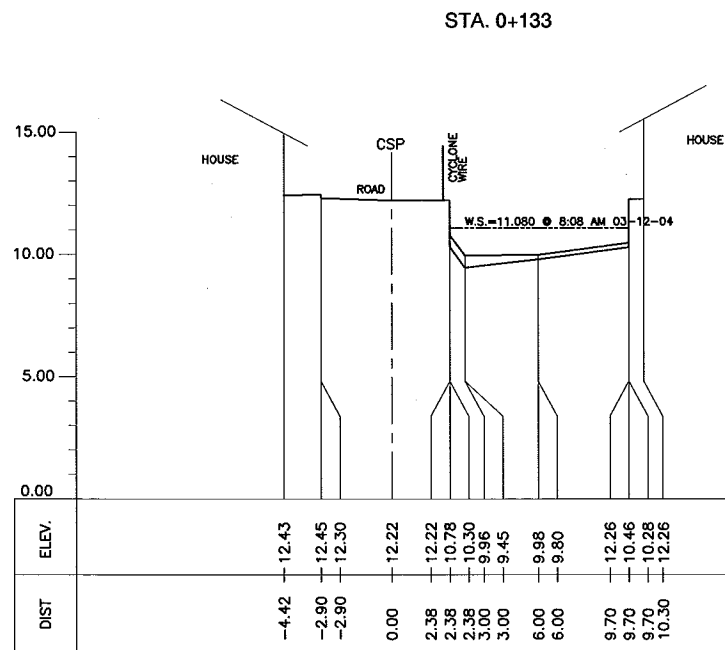
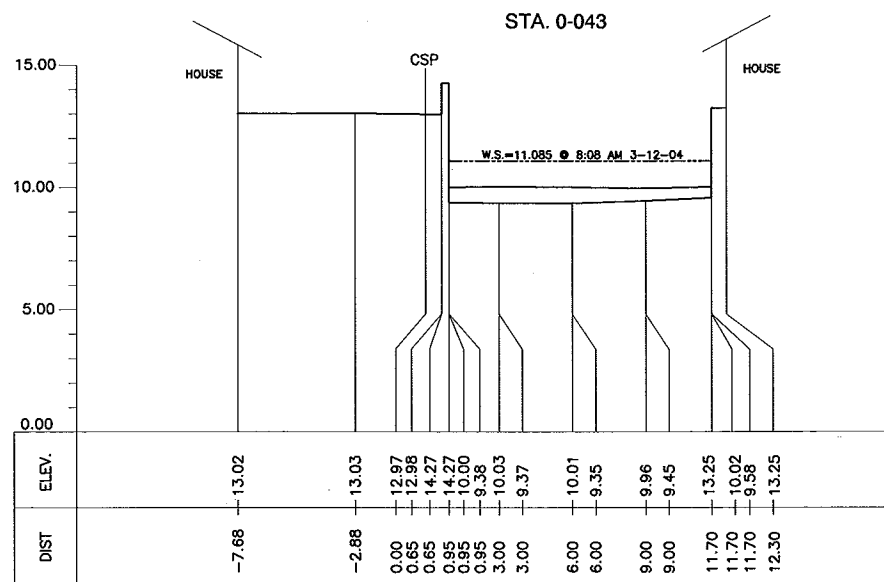
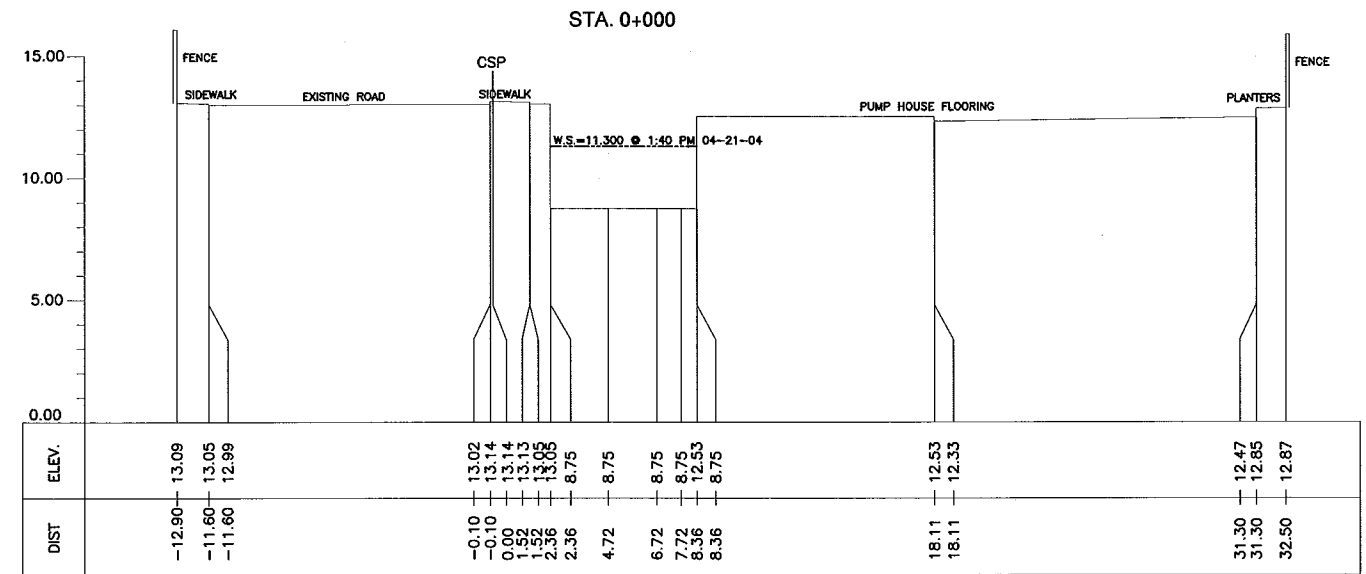
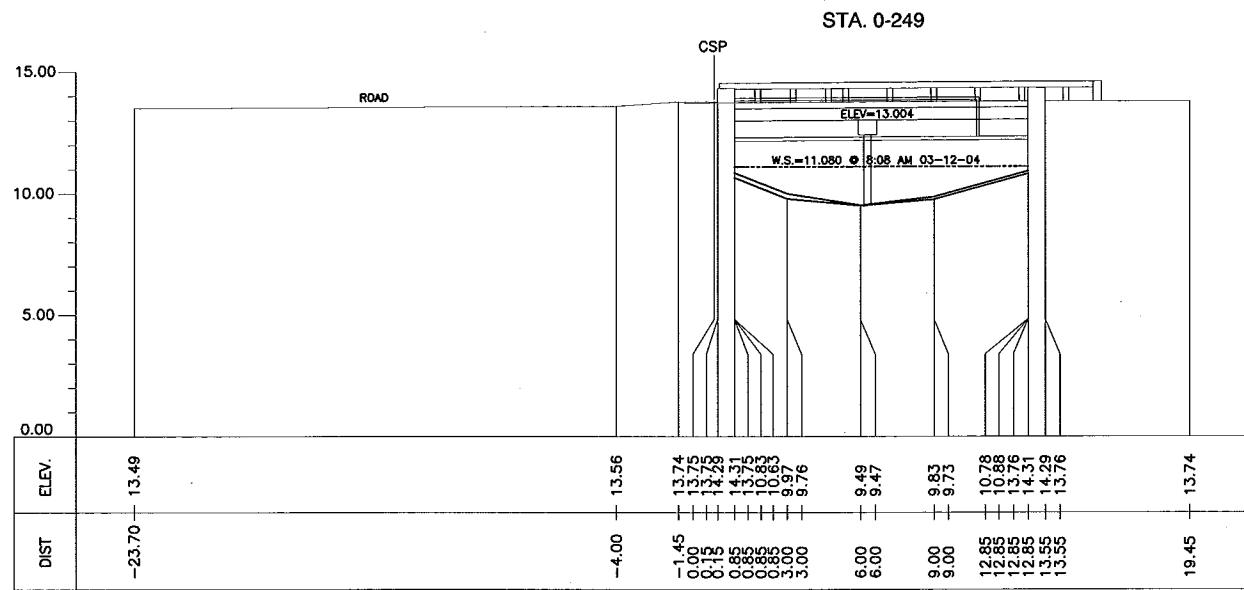
REPUBLIC OF THE PHILIPPINES

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

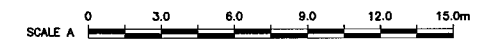
PROJECT & LOCATION:
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:
LONGITUDINAL PROFILE
ESTERO DE PANDACAN (SE08)
(STA. 1+909~ STA. 3+860)

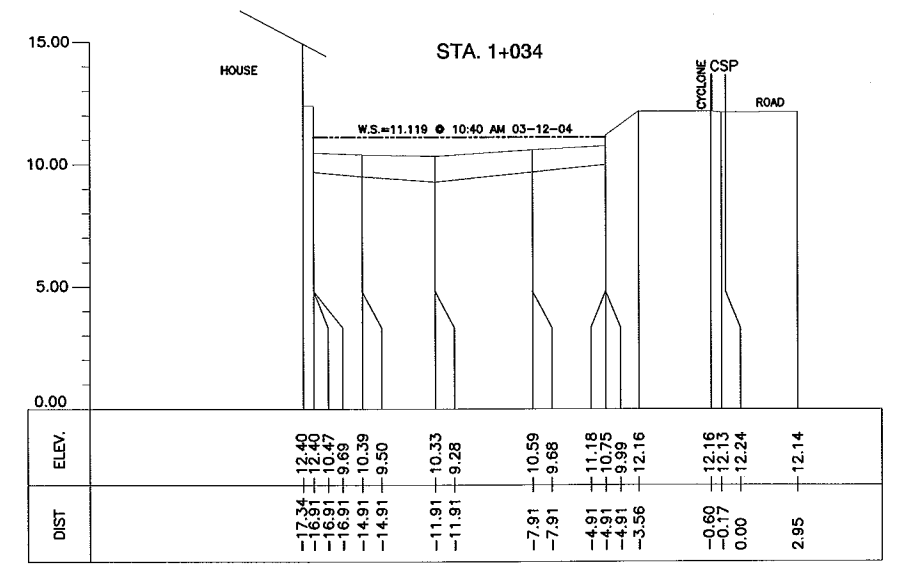
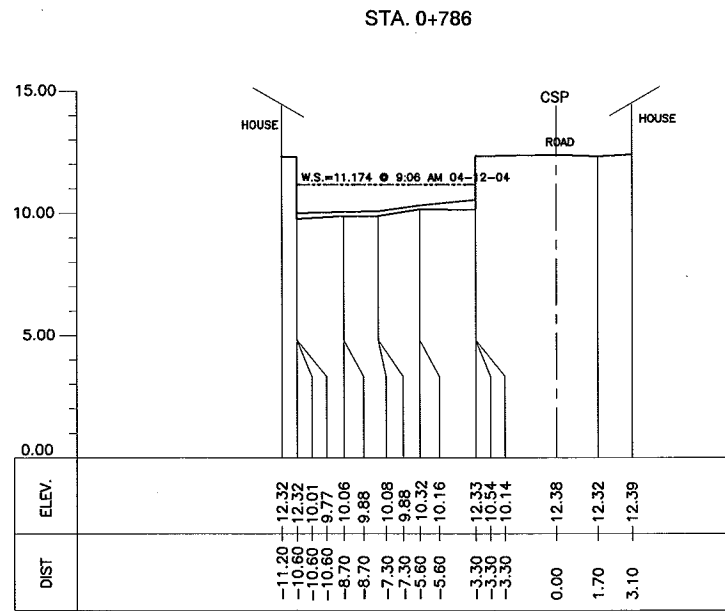
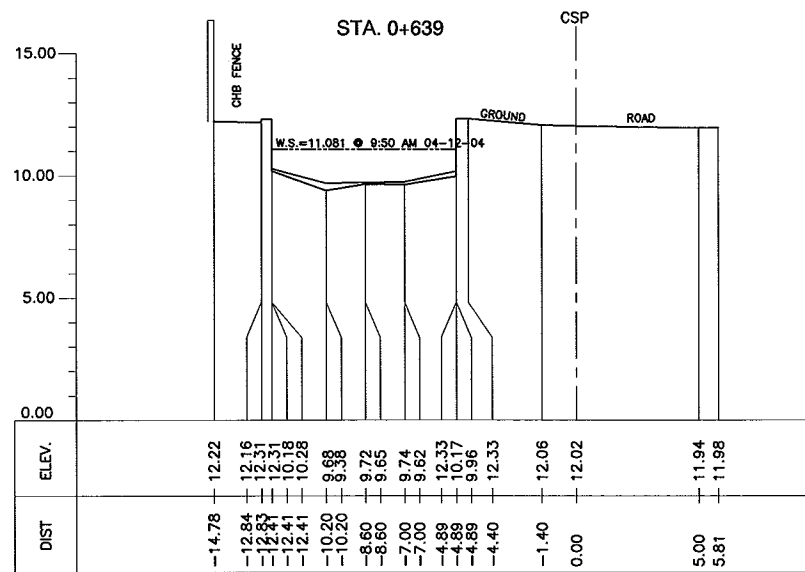
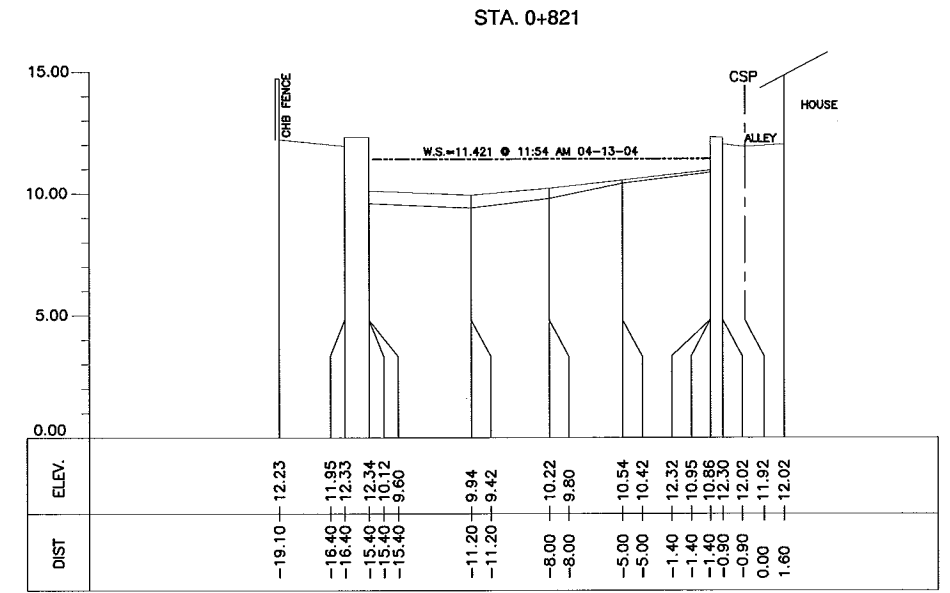
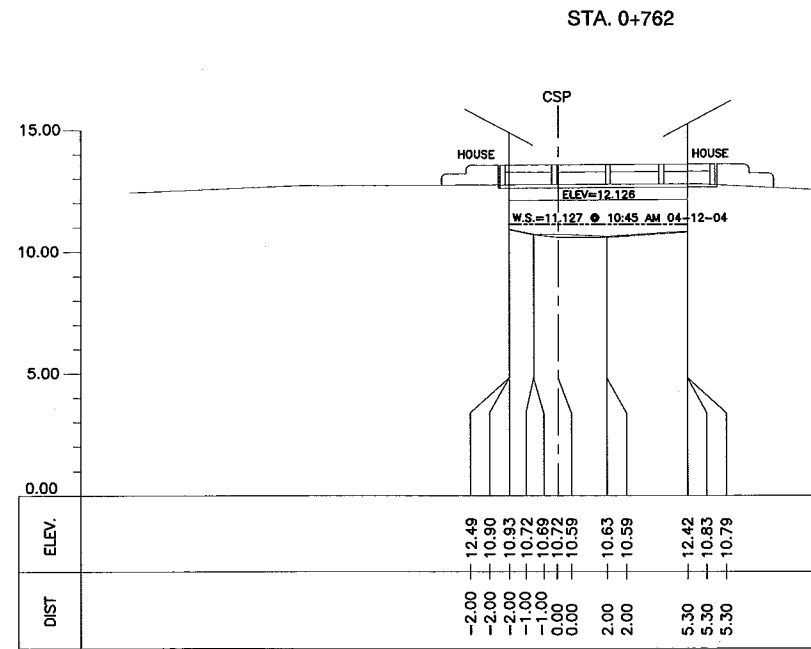
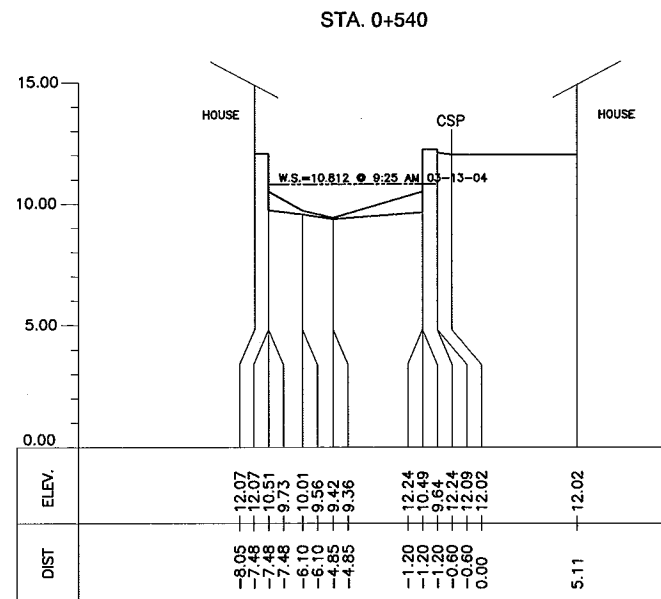
SHT. NO
LP-16
02 02



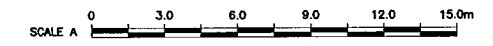
1 CROSS-SECTION
CS-16 SCALE : A



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO
 PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	 JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	 METROPOLITAN MANILA DEVELOPMENT AUTHORITY		THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	CROSS-SECTION ESTERO DE PANDACAN (SE08) (STA. 0+249 - STA. 0+338)	CS-16 01 06

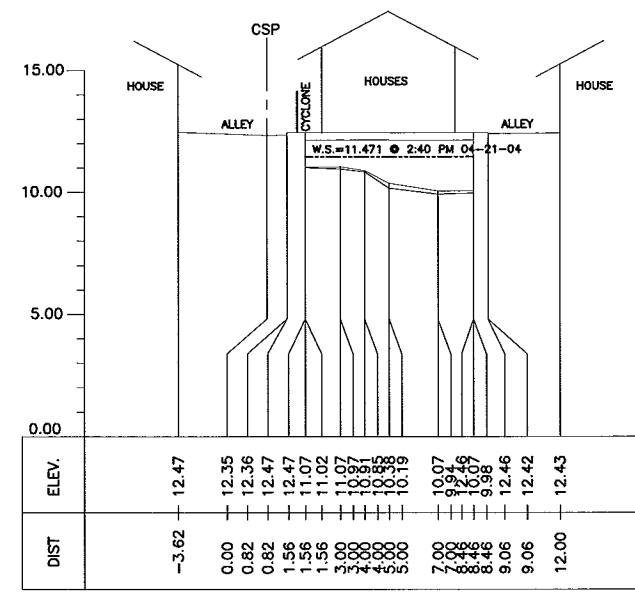
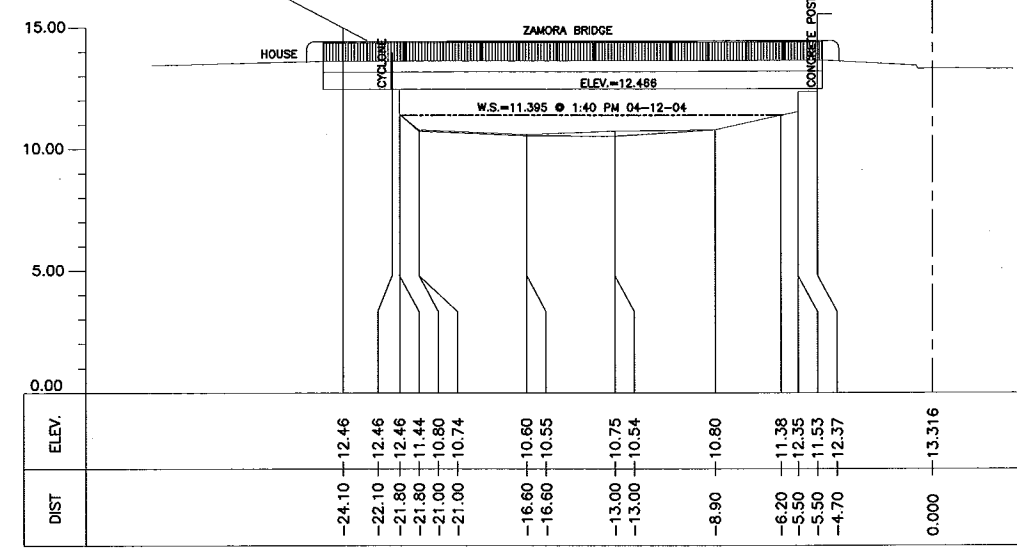


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CS-16 SCALE : A

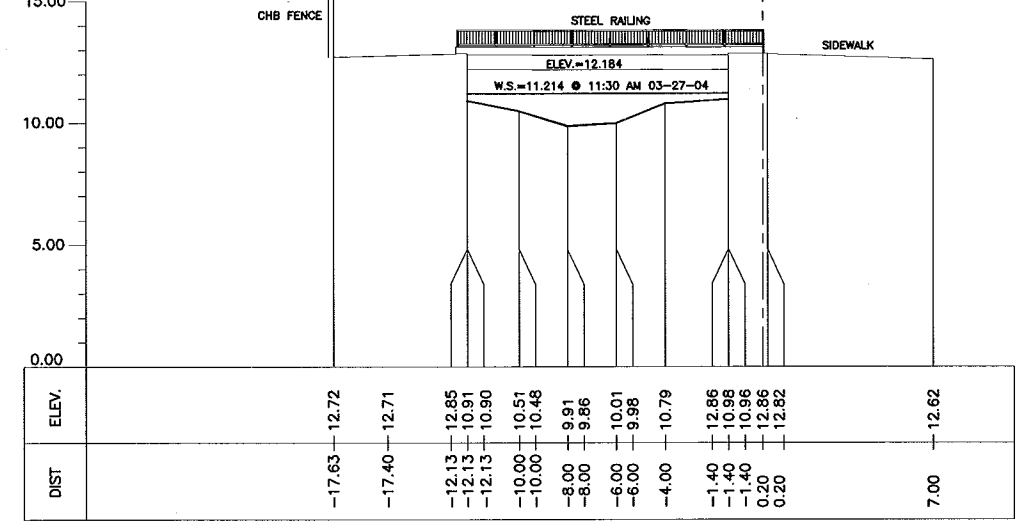


STA. 1+909

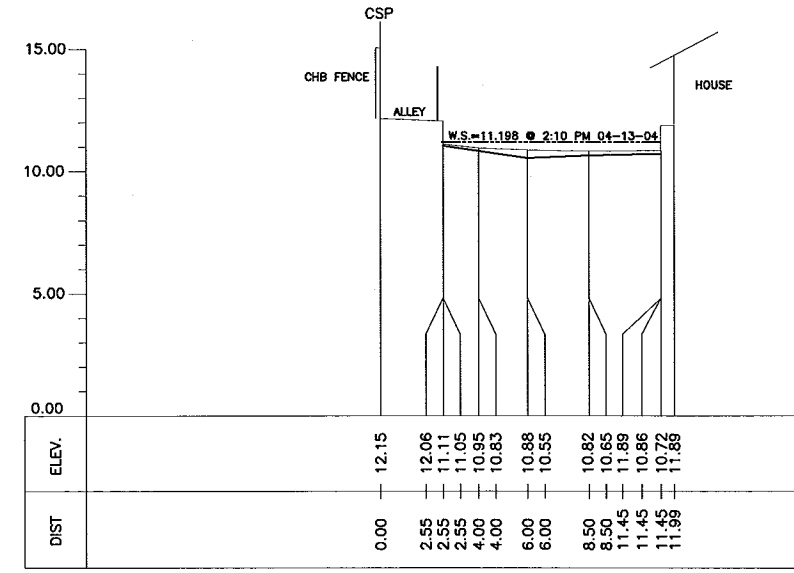
STA. 1+238



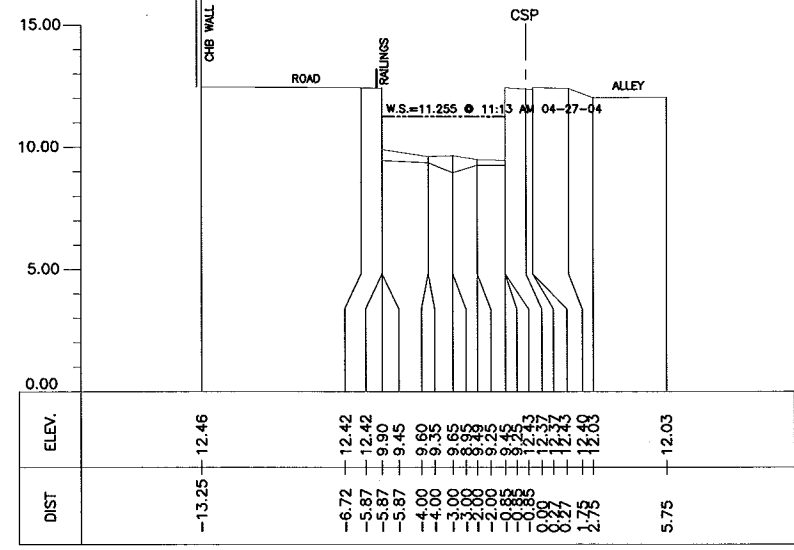
STA. 2+018



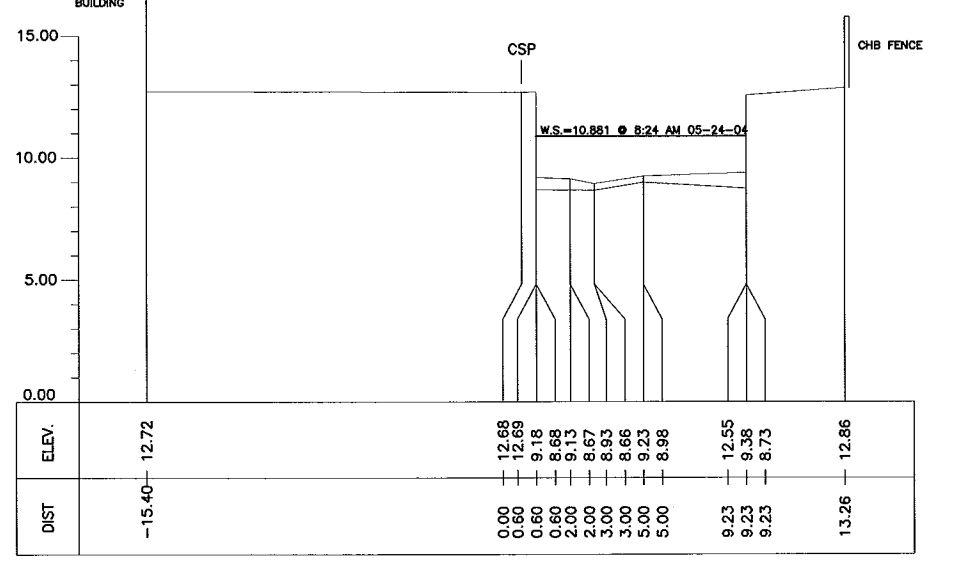
STA. 1+291



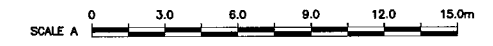
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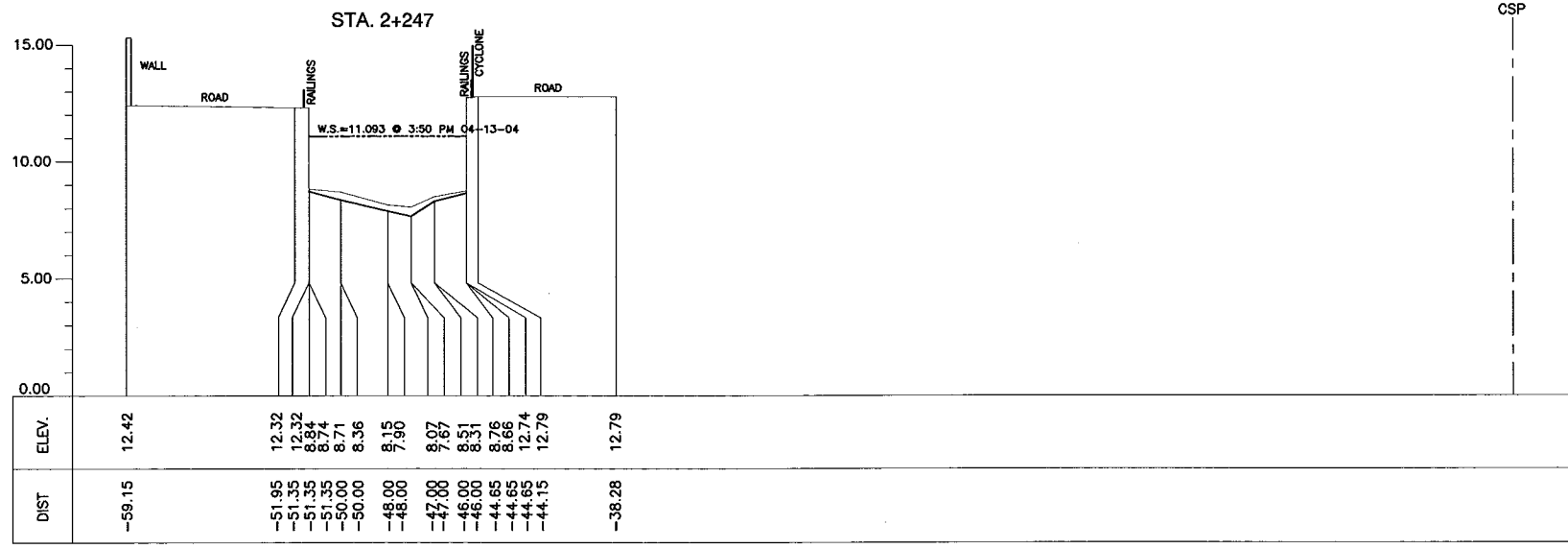


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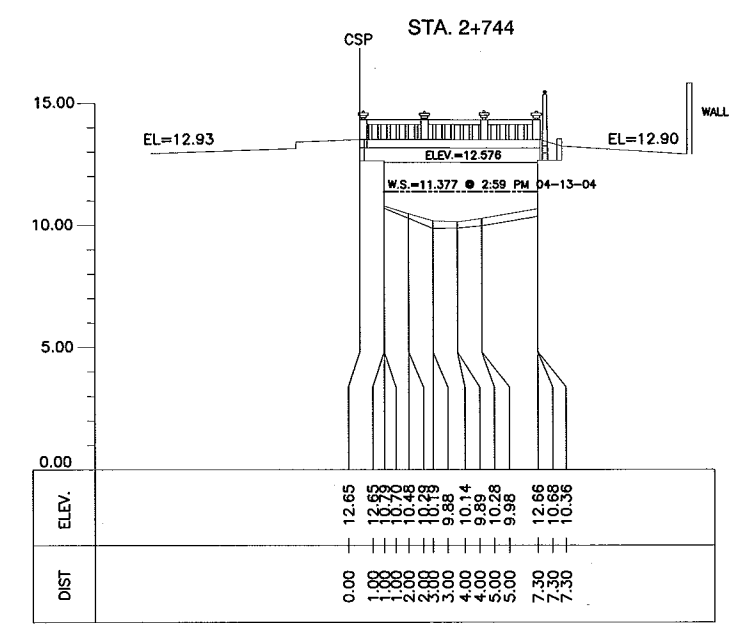
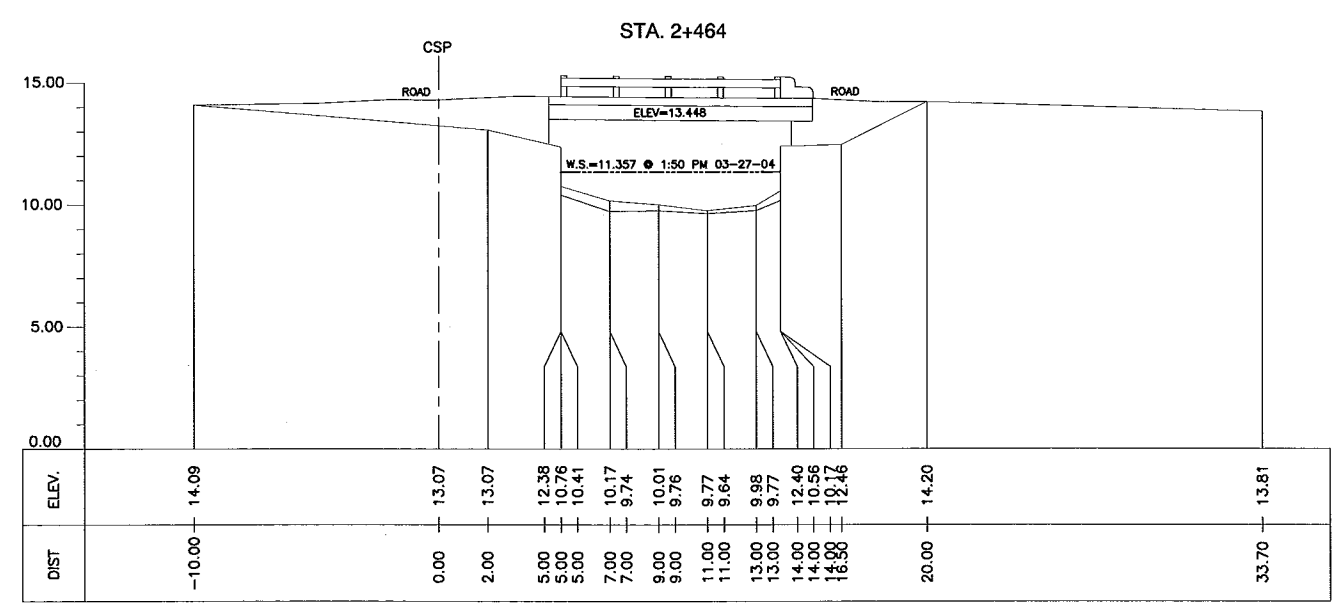
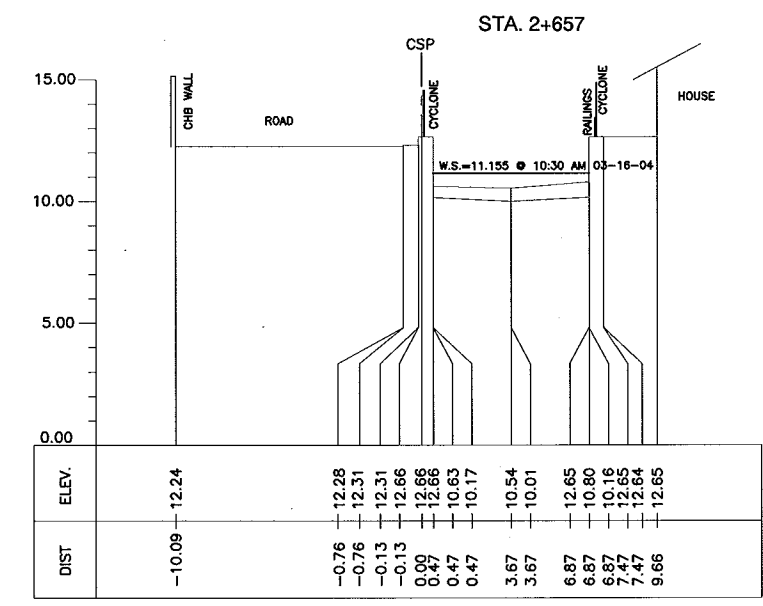


1 CROSS-SECTION
CS-16 SCALE : A

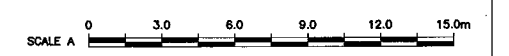




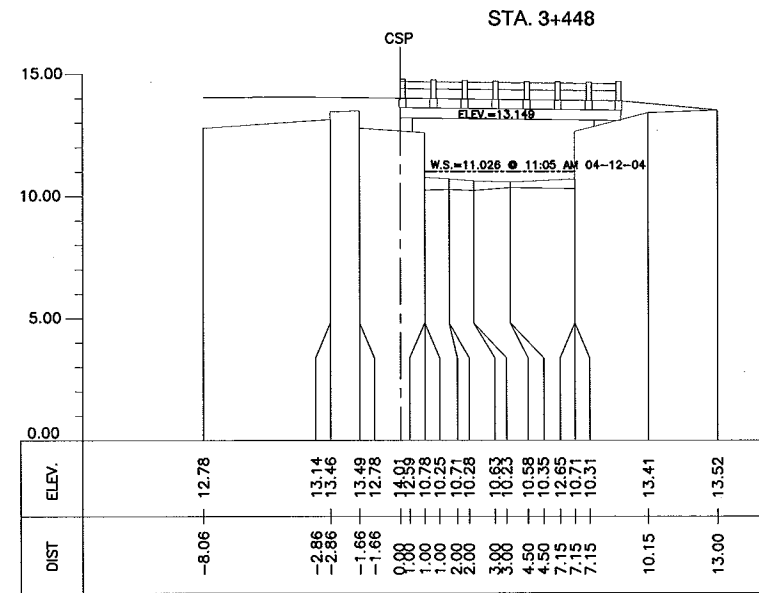
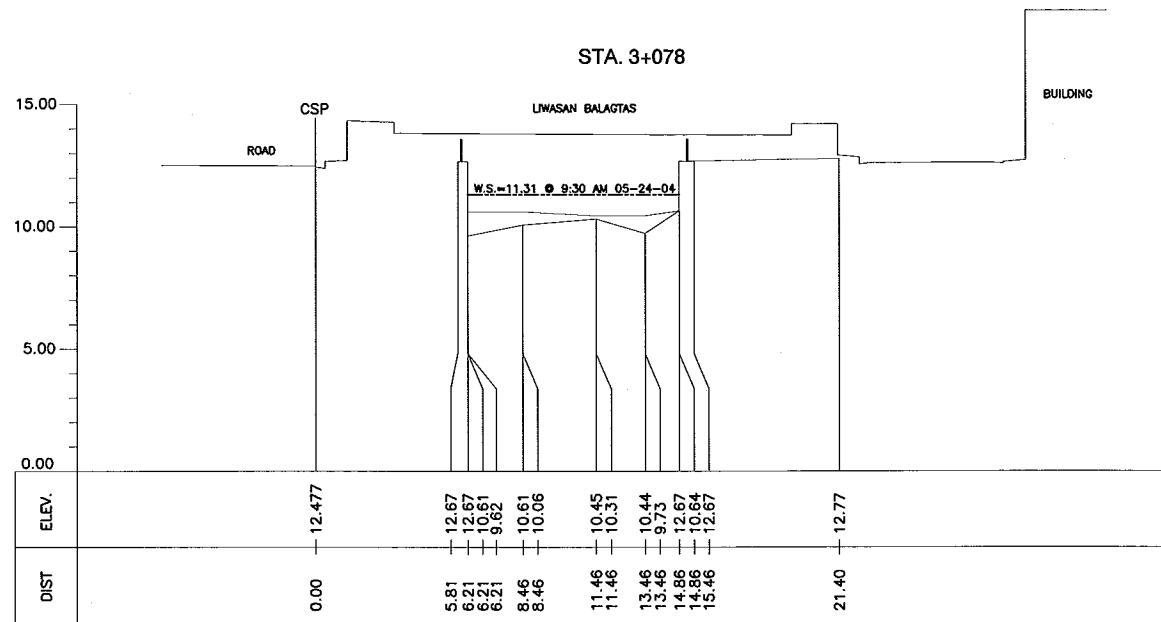
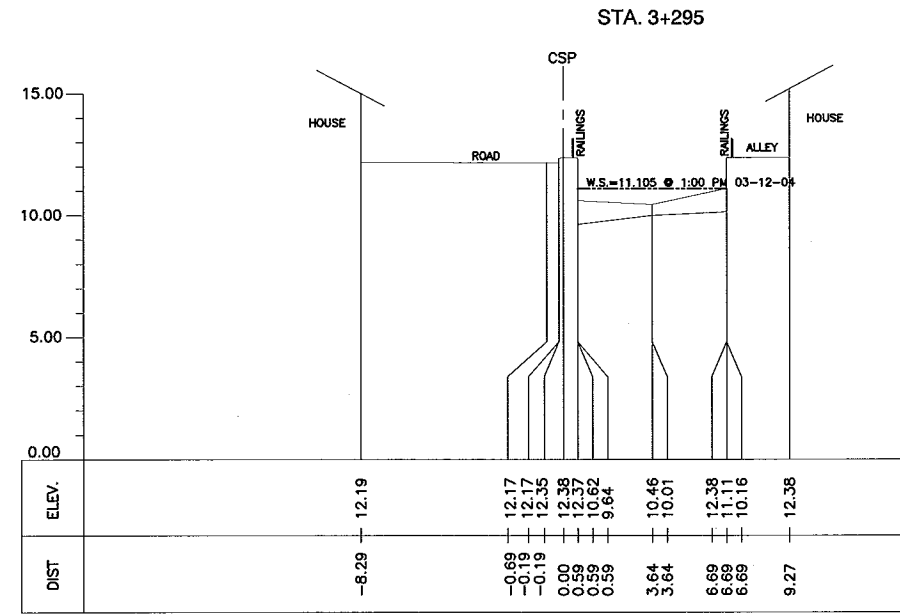
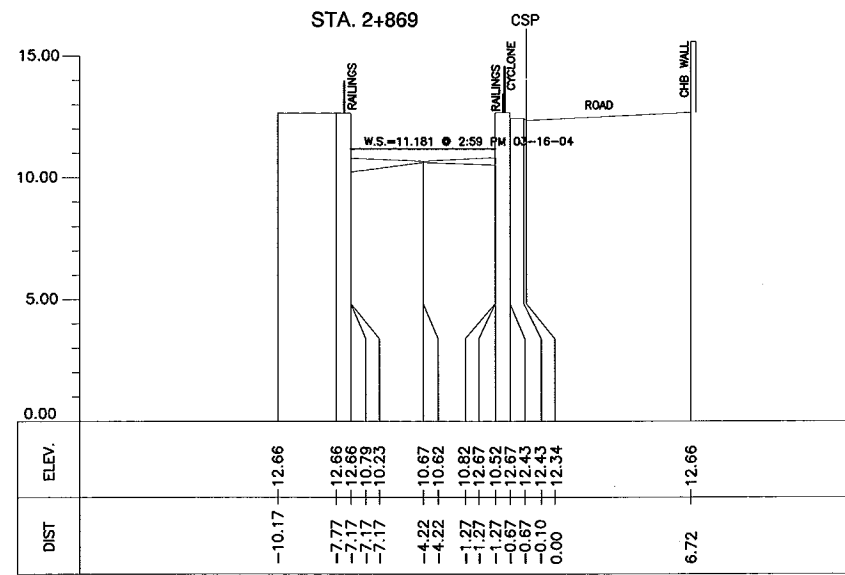
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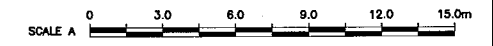
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CS-16 SCALE : A



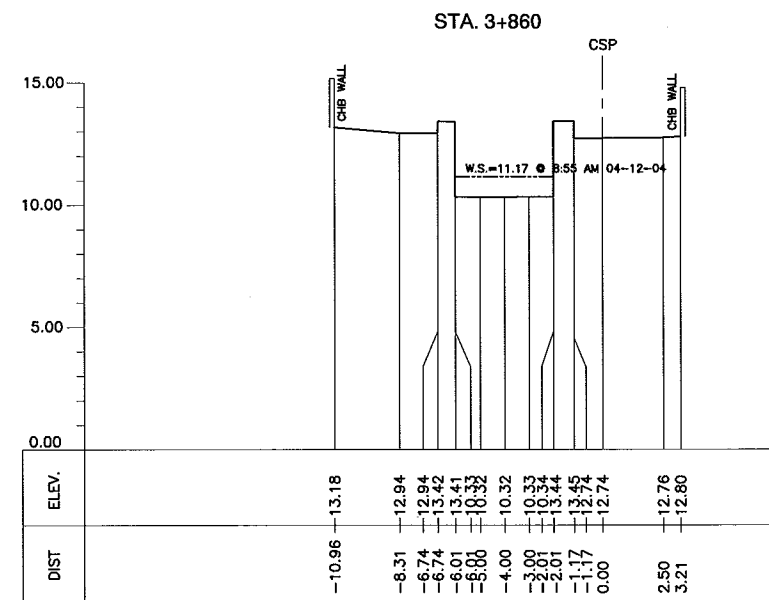
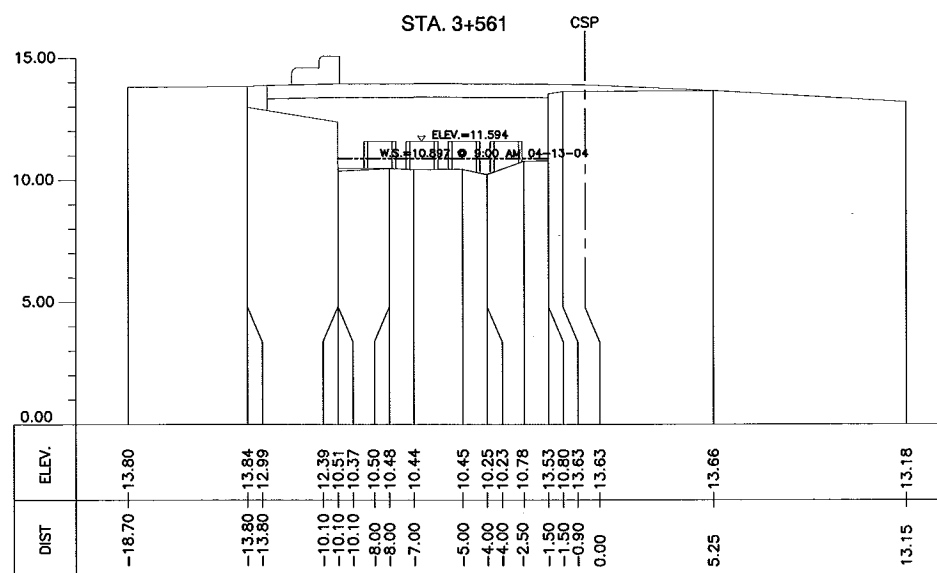
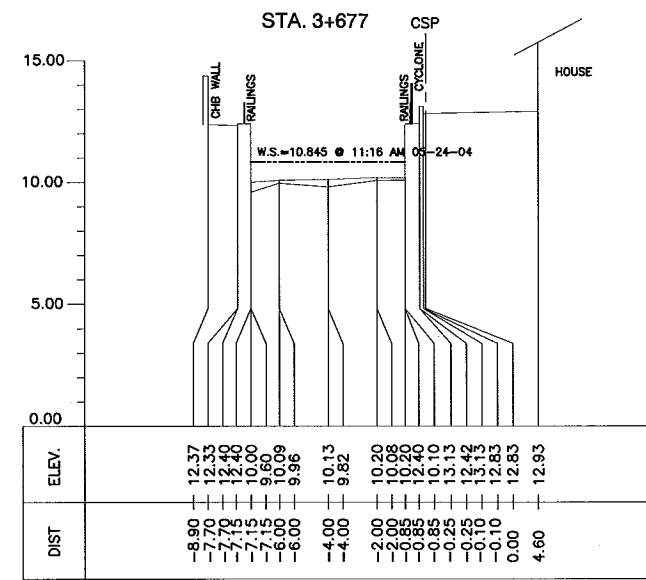
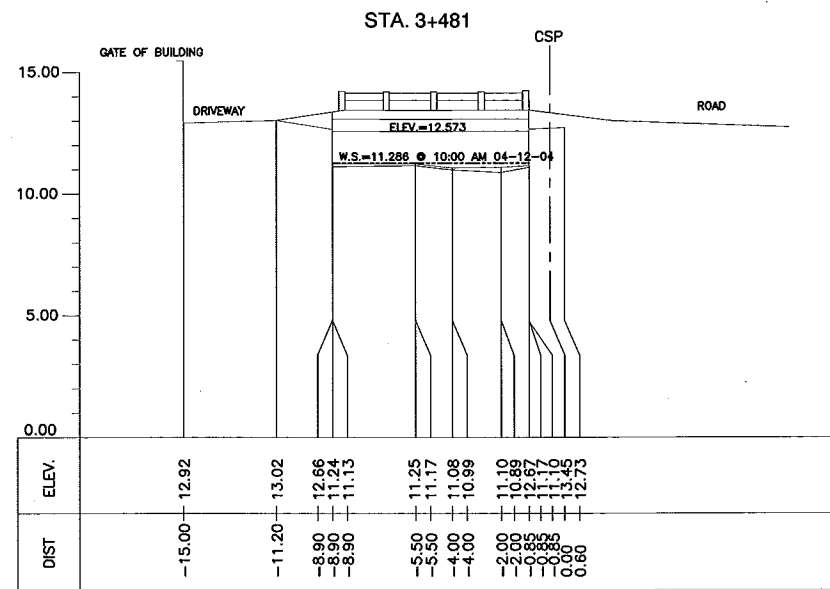
CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION ESTERO DE PANDACAN (SE08) (STA. 2+247 - STA. 2+744)	SHT. NO CS-16 04 06
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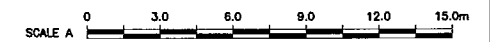
1 CROSS-SECTION
CS-16 SCALE : A



CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION ESTERO DE PANDACAN (SE08) (STA. 2+869 - STA. 3+448)	SHT. NO CS-16 05 06
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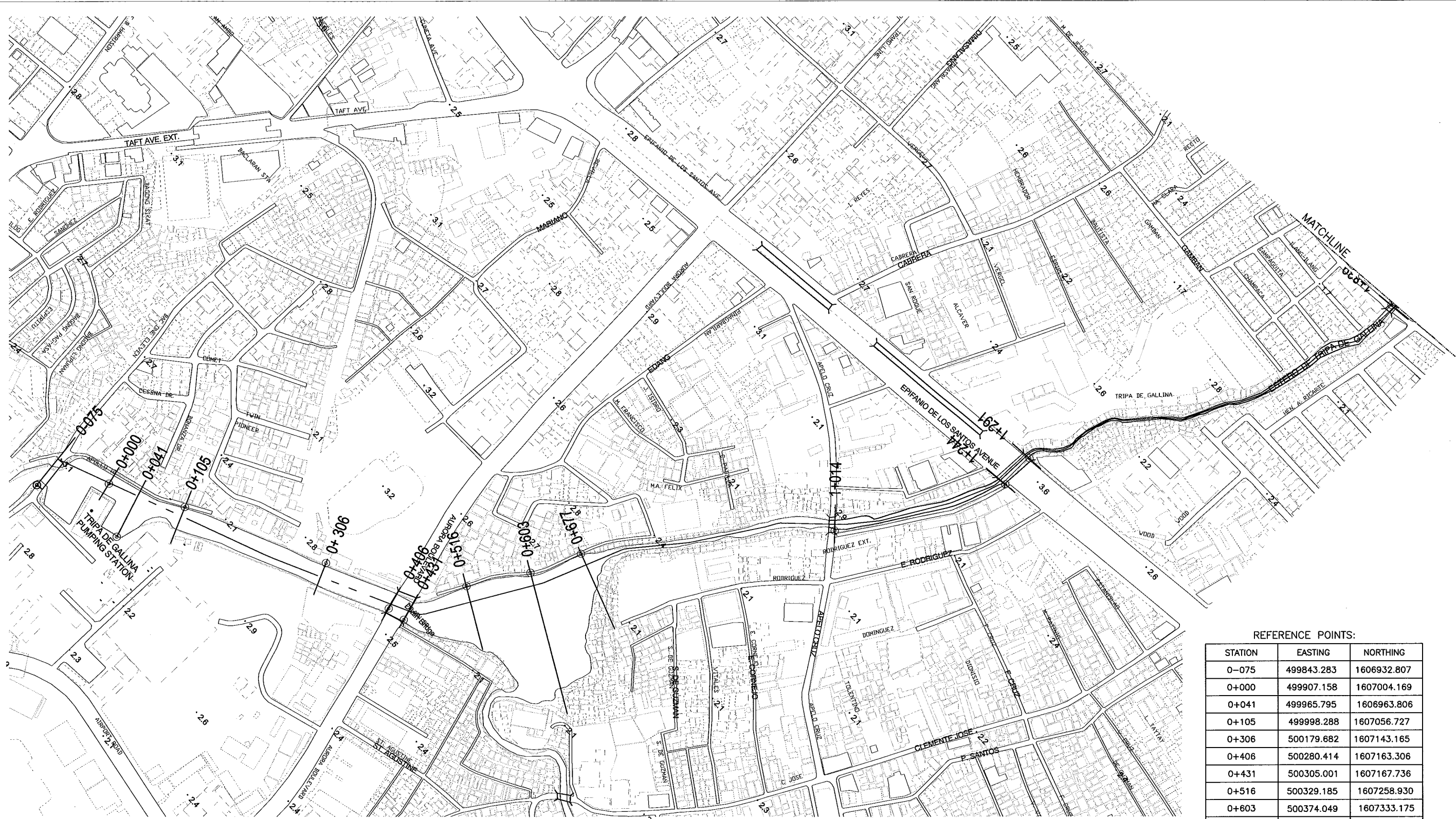
1 CROSS-SECTION
CS-16 SCALE : A



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO
 PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	 JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	 METROPOLITAN MANILA DEVELOPMENT AUTHORITY		THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	CROSS-SECTION ESTERO DE PANDACAN (SE08) (STA. 3+481 - STA. 3+860)	CS-16 06 06

ESTERO TRIPA DE GALLINA

(SE09)



CROSS-SECTION LOCATION

**ESTERO TRIPA DE GALLINA (SE09)
TOPOGRAPHIC MAP**

1
CL-17

SCALE : A

REFERENCE POINTS:

STATION	EASTING	NORTHING
0-075	499843.283	1606932.807
0+000	499907.158	1607004.169
0+041	499965.795	1606963.806
0+105	499998.288	1607056.727
0+306	500179.682	1607143.165
0+406	500280.414	1607163.306
0+431	500305.001	1607167.736
0+516	500329.185	1607258.930
0+603	500374.049	1607333.175
0+677	500401.130	1607399.255
1+014	500607.360	1607666.706
1+244	500716.718	1607874.006
1+291	500713.067	1607921.183
1+839	500892.107	1608411.670

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REPUBLIC OF THE PHILIPPINES

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FOR
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

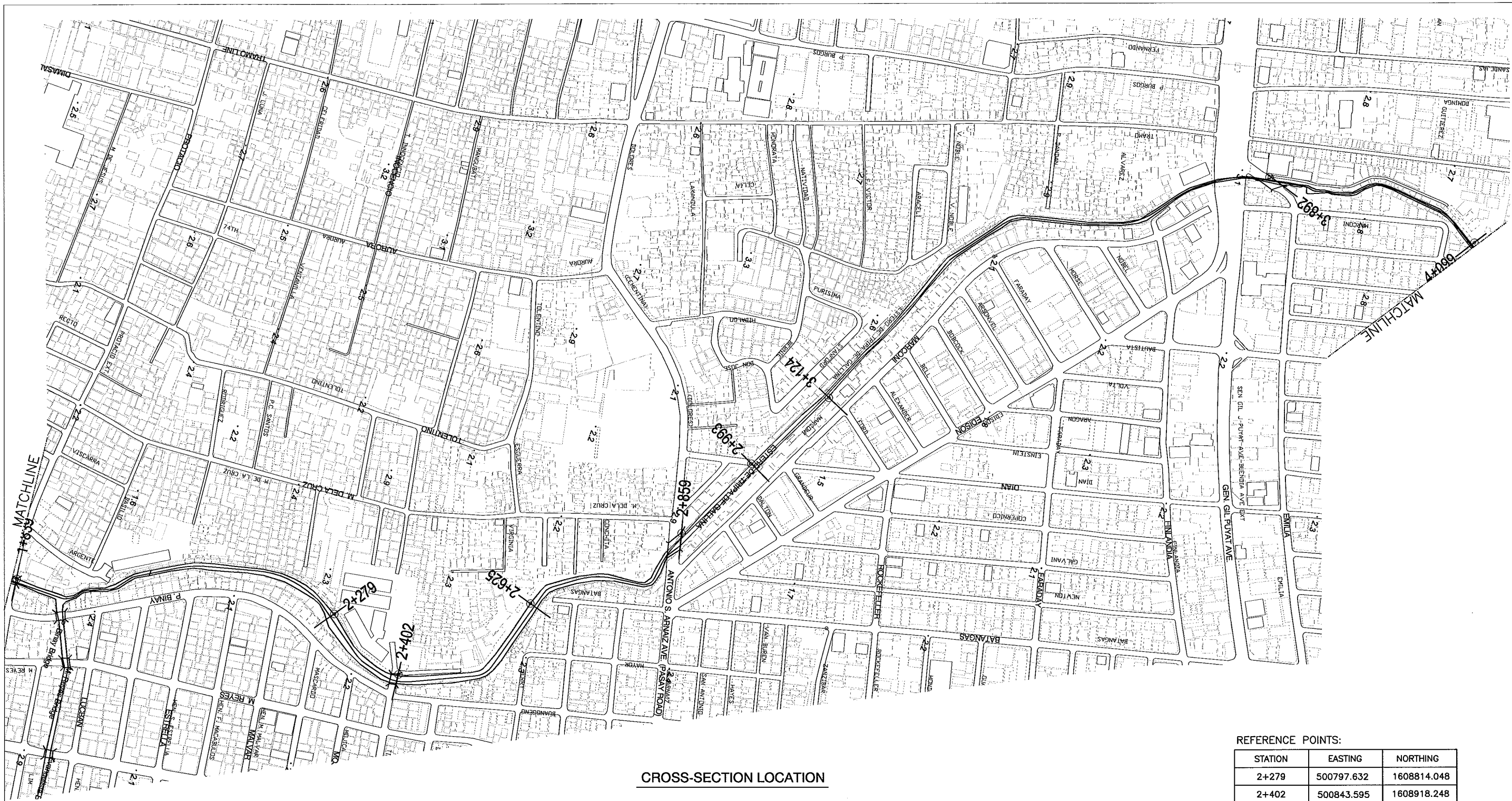
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
ESTERO TRIPA DE GALLINA (SE09)
(STA. 0-075 - STA. 1+839)

SHT. NO

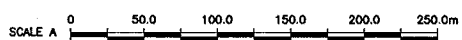
CL-17
01 04



CROSS-SECTION LOCATION

REFERENCE POINTS:

STATION	EASTING	NORTHING
2+279	500797.632	1608814.048
2+402	500843.595	1608918.248
2+625	500700.400	1609049.029
2+859	500549.424	1609203.205
2+993	500434.729	1609258.109
3+124	500320.805	1609324.410
3+892	499861.564	1609767.500
4+099	499853.234	1610046.740



ESTERO TRIPA DE GALLINA (SE09)
TOPOGRAPHIC MAP

1
CL-17

SCALE : A

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 METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
ESTERO TRIPA DE GALLINA (SE09)
(STA. 2+279 - STA. 4+099)

SHT. NO

CL-17
02 04



CROSS-SECTION LOCATION

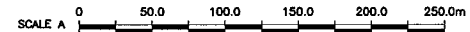
REFERENCE POINTS:

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4+369	499740.028	1610239.256
4+387	499733.851	1610258.831
4+670	499715.122	1610480.761
4+934	499636.434	1610727.782
5+154	499583.590	1610929.062
5+318	499589.922	1611094.428
5+573	499579.454	1611336.635
5+711	499670.899	1611438.814
5+833	499716.112	1611549.567
5+963	499702.768	1611671.140
6+060	499728.084	1611767.048
6+107	499744.376	1611817.155
6+145	499764.410	1611842.960
6+213	499767.548	1611906.650

ESTERO TRIPA DE GALLINA (SE09)
TOPOGRAPHIC MAP

1
CL-17

SCALE : A



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REPUBLIC OF THE PHILIPPINES

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

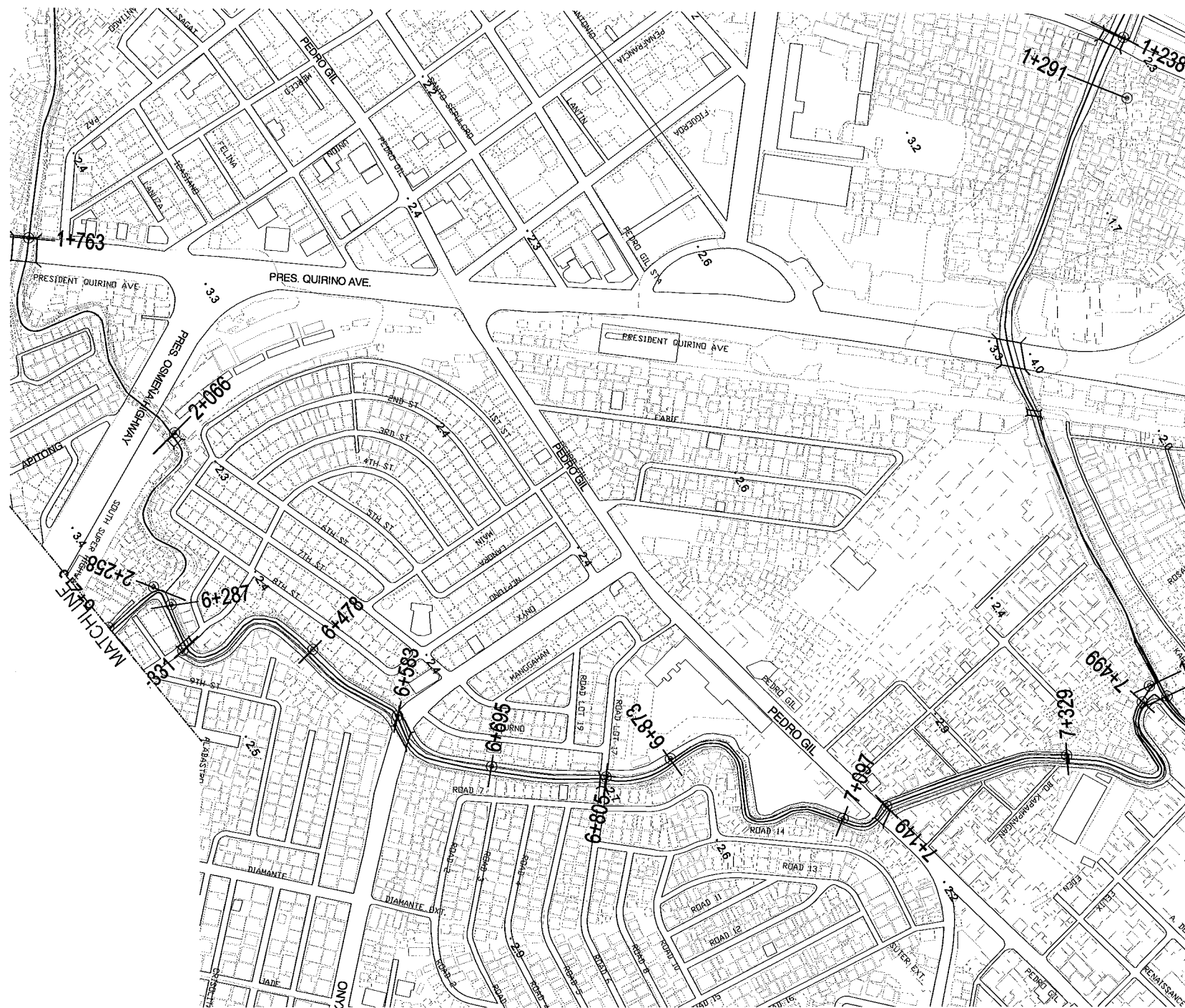
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
ESTERO TRIPA DE GALLINA (SE09)
(STA. 4+298 ~ STA. 6+213)

SHT. NO

CL-17
03 04



REFERENCE POINTS:

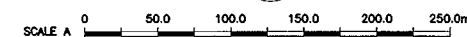
STATION	EASTING	NORTHING
6+287	499781.229	1611968.423
6+331	499824.063	1611954.354
6+478	499889.884	1612058.941
6+583	499986.579	1612092.928
6+695	500075.426	1612142.735
6+805	500142.610	1612229.432
6+873	500160.964	1612290.457
7+097	500297.516	1612398.225
7+149	500309.960	1612439.410
7+329	500361.561	1612610.324
7+499	500357.527	1612698.533

CROSS-SECTION LOCATION

ESTERO TRIPA DE GALLINA (SE09)
TOPOGRAPHIC MAP



SCALE : A



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JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

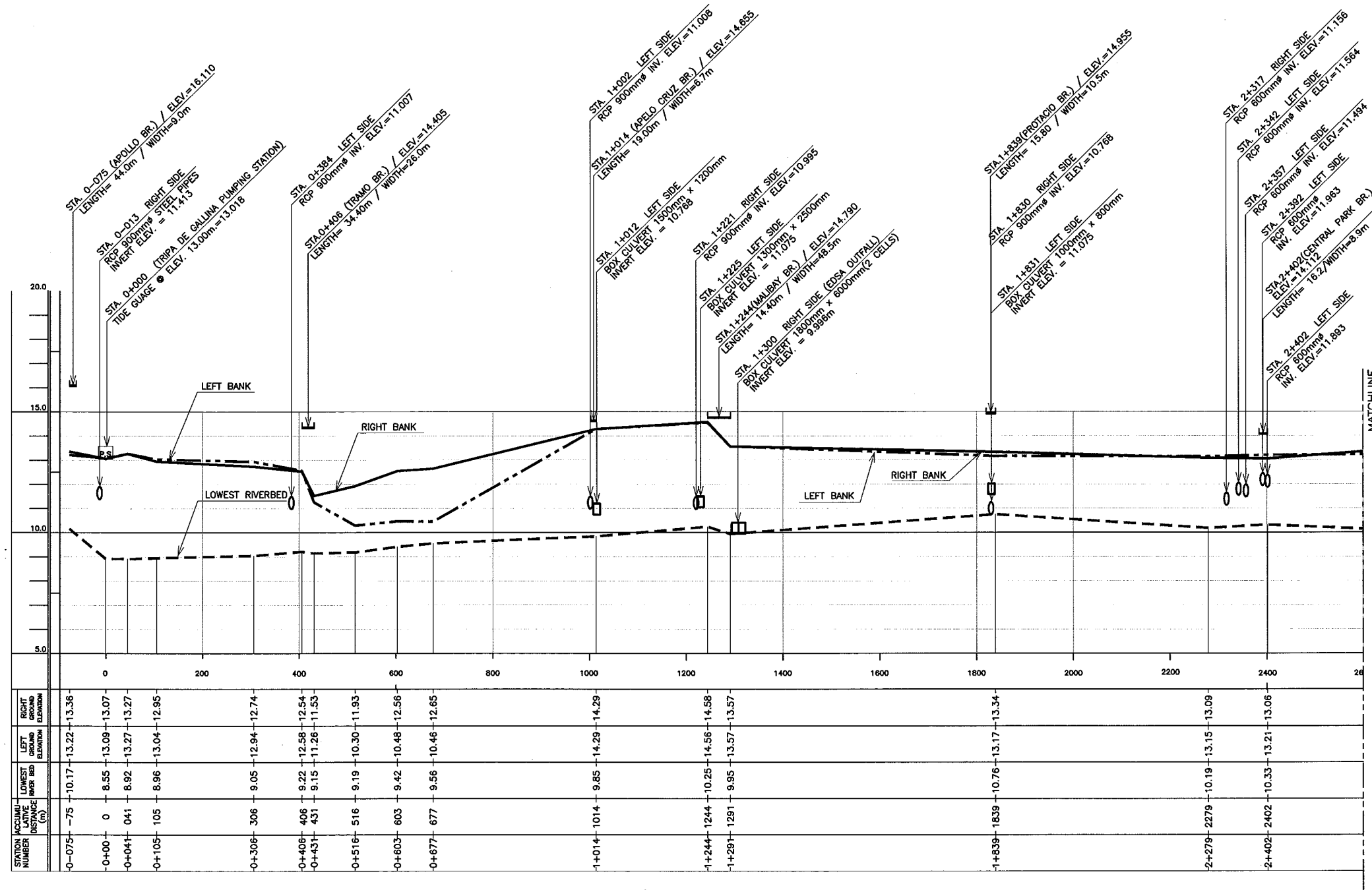
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
ESTERO TRIPA DE GALLINA (SE09)
(STA. 6+287 ~ STA. 7+499)

SHT. NO

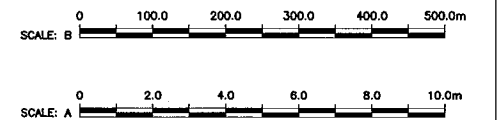
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04 | 04



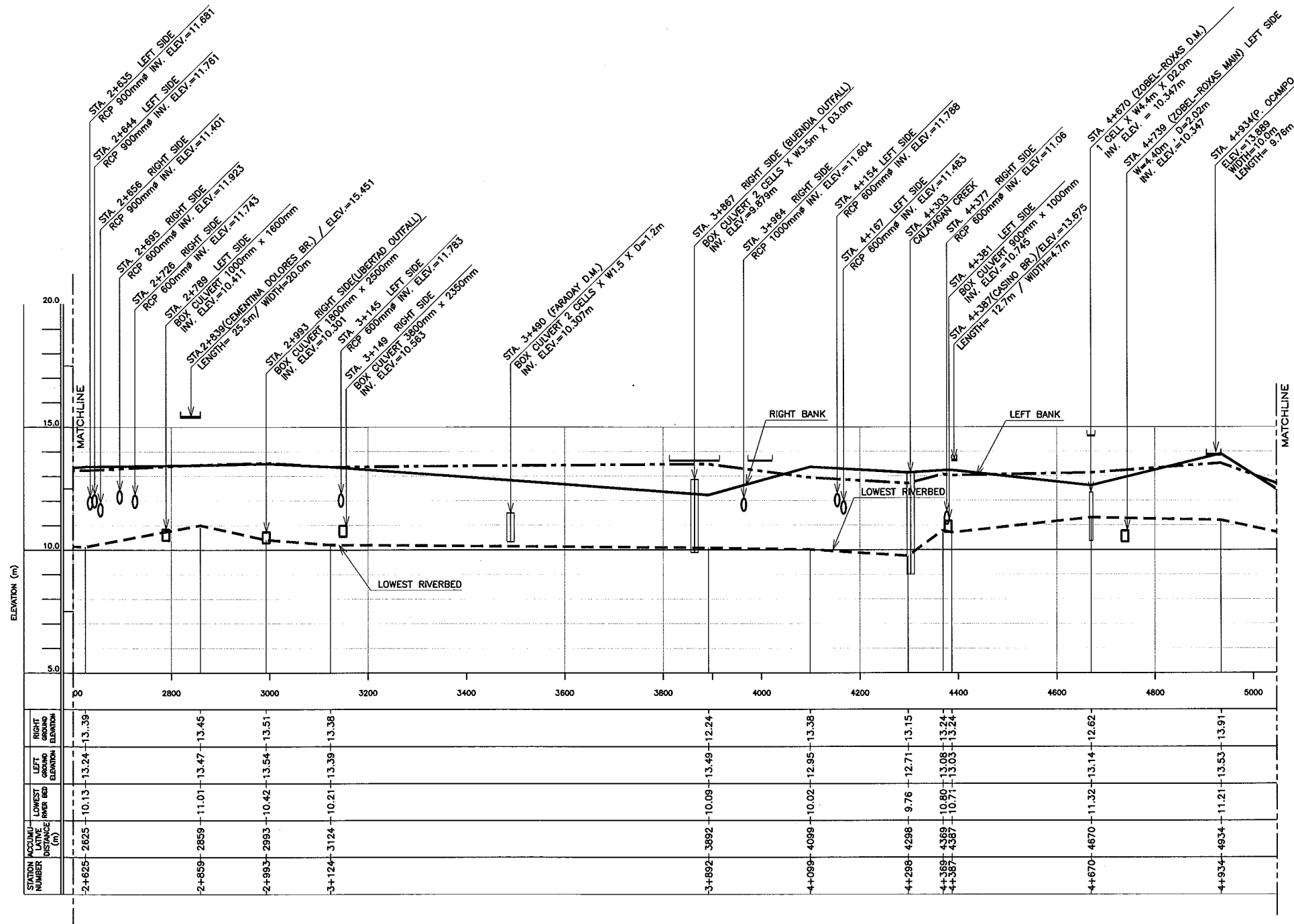
LEGEND:

- : RIGHT BANK
- - - : LEFT BANK
- - - : LOWEST RIVERBED
- : BOX CULVERT
- ⊔ : BRIDGE
- : REINFORCE CONCRETE PIPE
- PS : PUMPING STATION
- : CULVERT

1 LONGITUDINAL PROFILE
 LP-17 VER. = SCALE : A / HOR. = SCALE : B



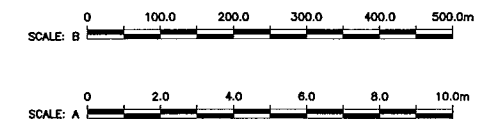
CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: LONGITUDINAL PROFILE ESTERO DE TRIPA DE GALLINA (SE09) (STA. 0-075- STA. 2+402)	SHT. NO LP-17 01 03
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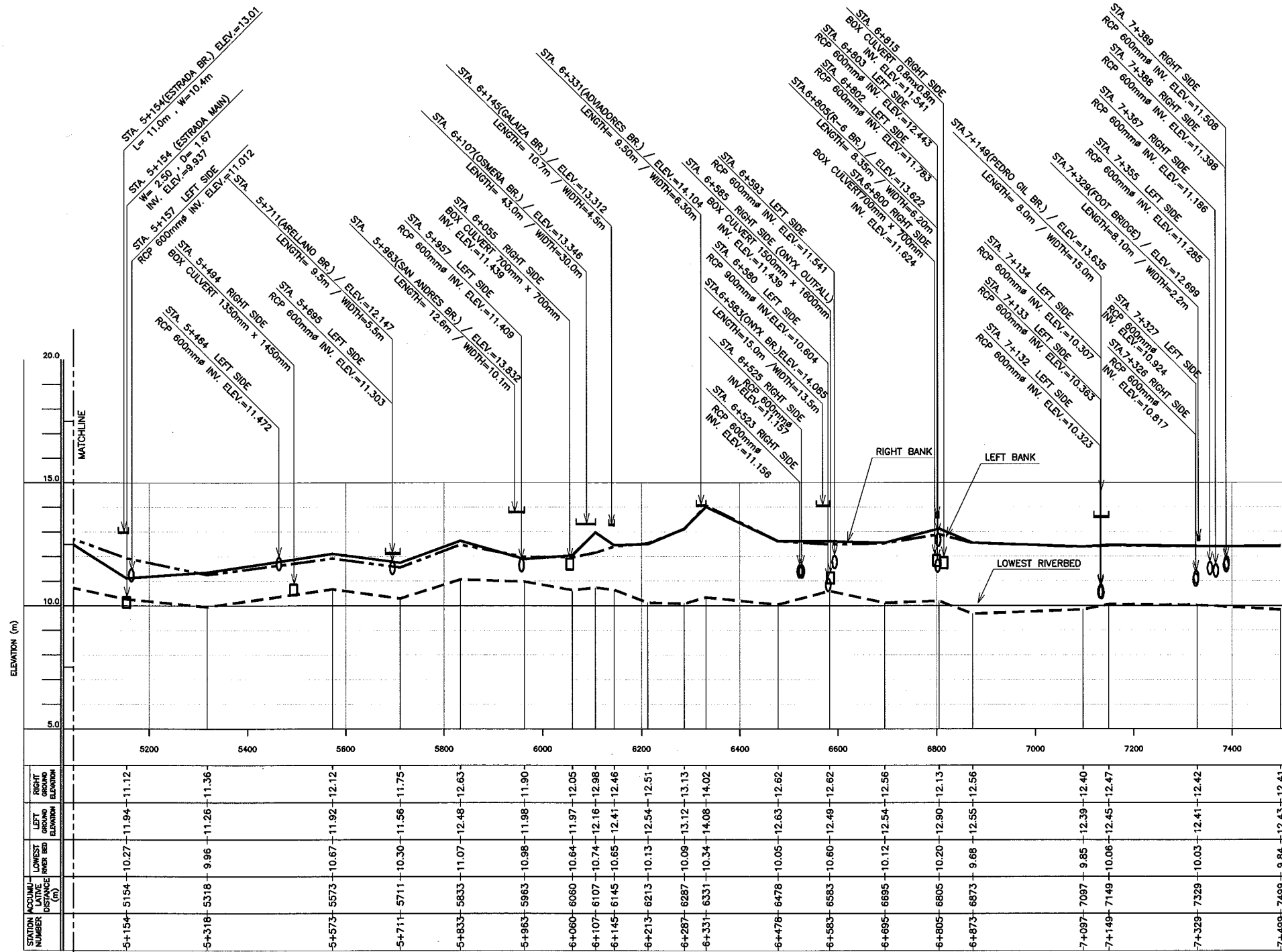
LEGEND:

- : RIGHT BANK
- - - : LEFT BANK
- - - : LOWEST RIVERBED
- : BOX CULVERT
- ⌊ : BRIDGE
- : REINFORCE CONCRETE PIPE
- P.S. : PUMPING STATION
- ▭ : CULVERT

1 LONGITUDINAL PROFILE
LP-17 VER. = SCALE : A / HOR. = SCALE : B



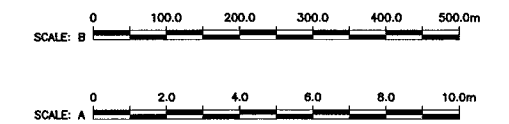
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LEGEND:

- : RIGHT BANK
- - - : LEFT BANK
- - - : LOWEST RIVERBED
- : BOX CULVERT
- ⌊ : BRIDGE
- : REINFORCE CONCRETE PIPE
- Ⓟ : PUMPING STATION
- Ⓜ : CULVERT

1 LONGITUDINAL PROFILE
LP-17 VER. = SCALE : A / HOR. = SCALE : B



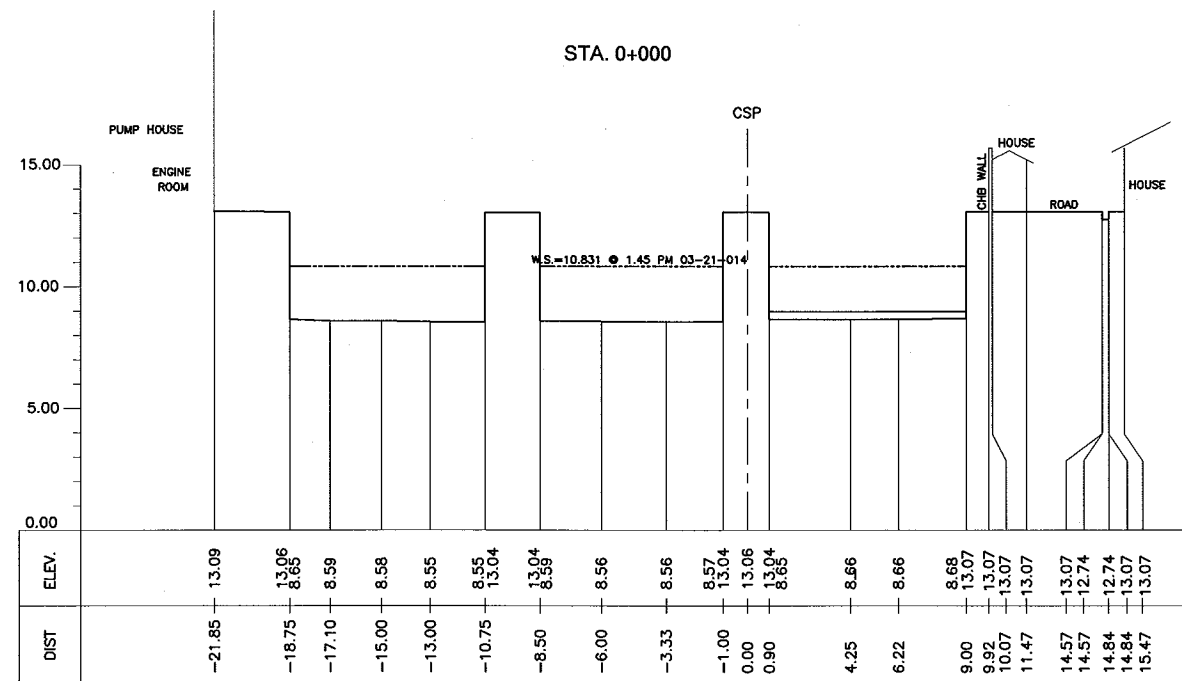
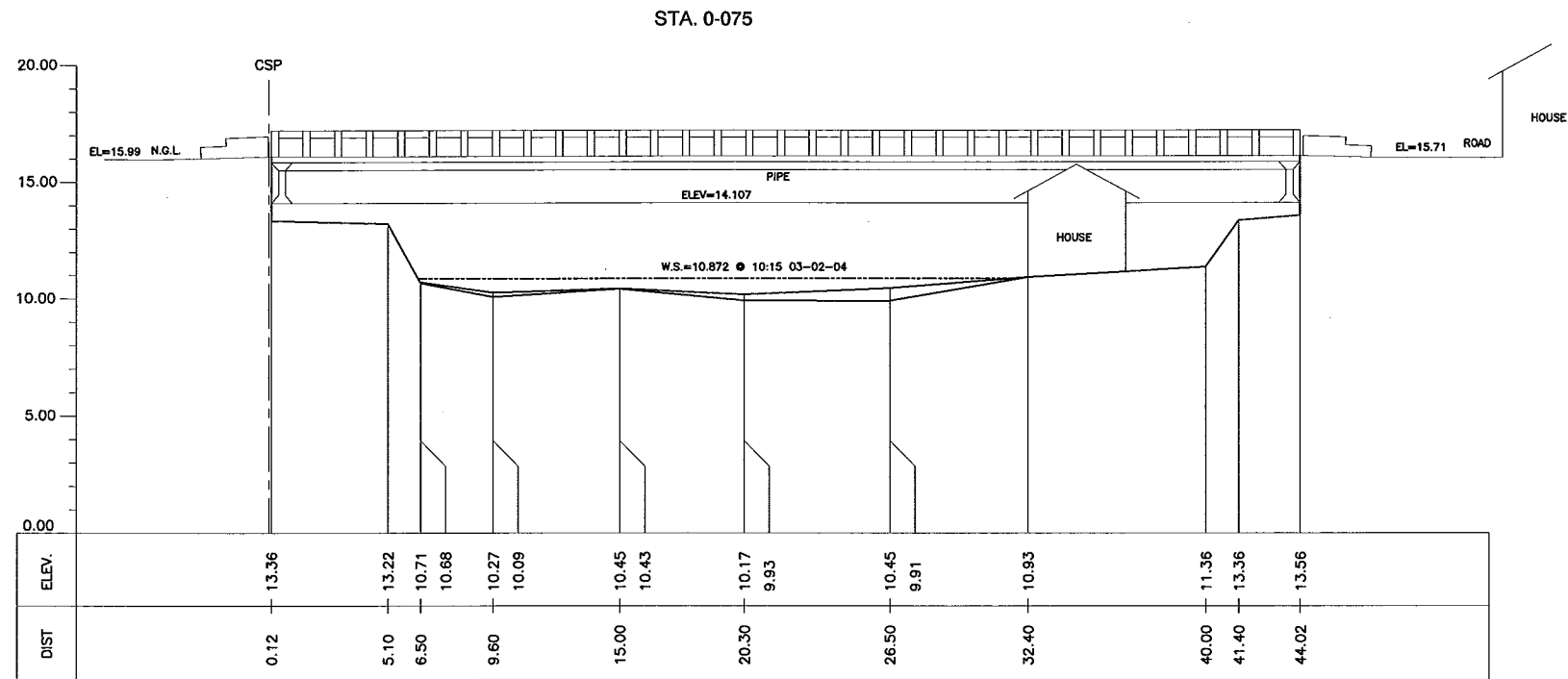
CONSULTANTS

REPUBLIC OF THE PHILIPPINES

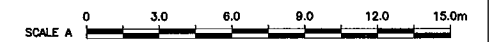
PROJECT & LOCATION:
**THE STUDY ON DRAINAGE IMPROVEMENT
 IN THE CORE AREA OF METROPOLITAN MANILA**

SHT. CONTENTS:
 LONGITUDINAL PROFILE
 ESTERO DE TRIPA DE GALLINA (SE09)
 (STA. 5+154- STA. 7+499)

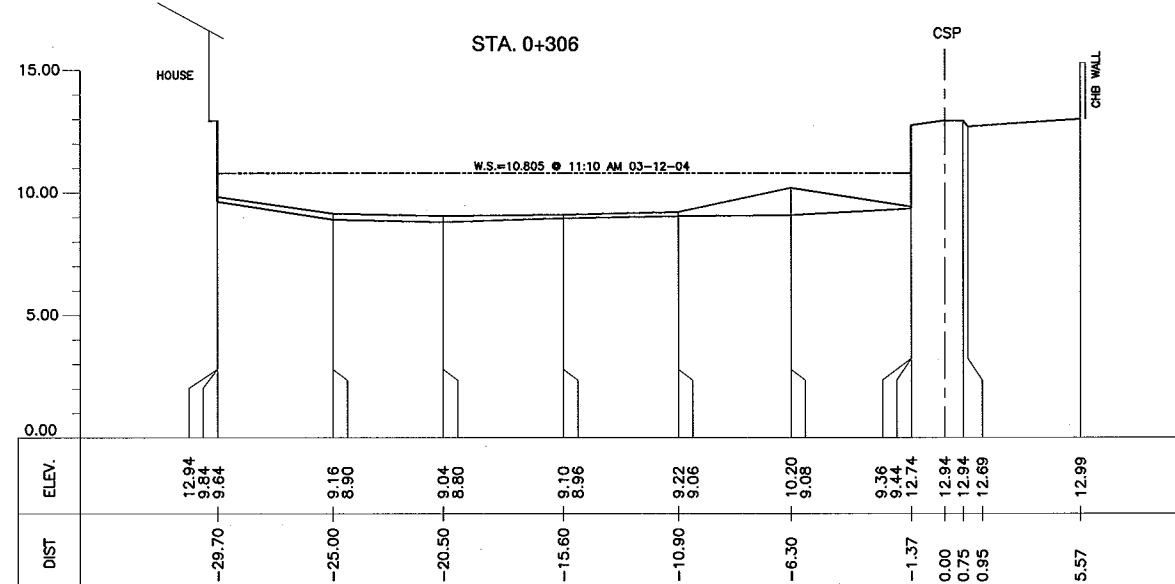
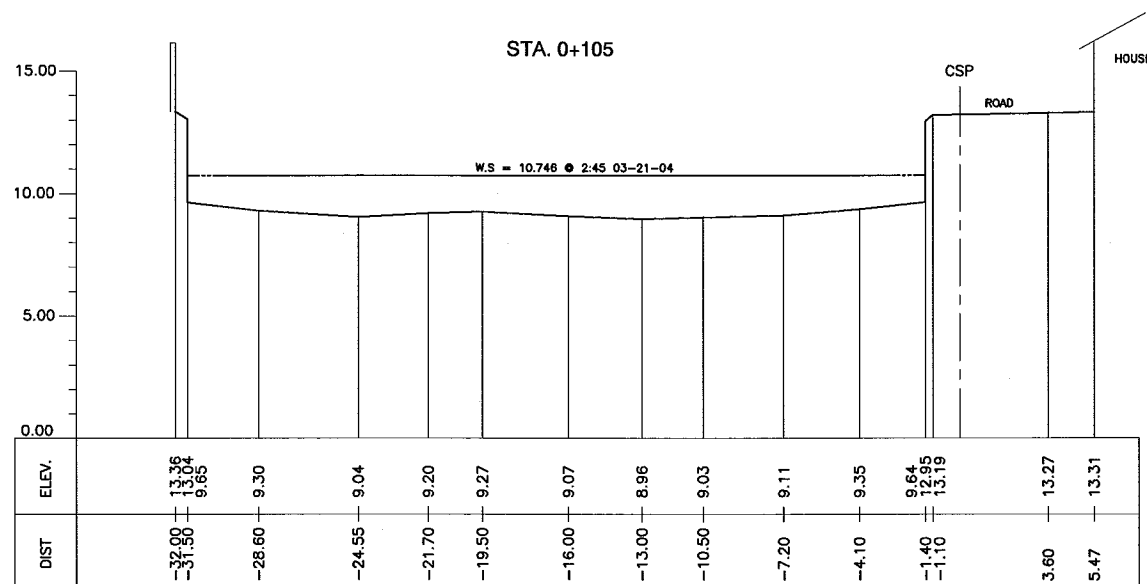
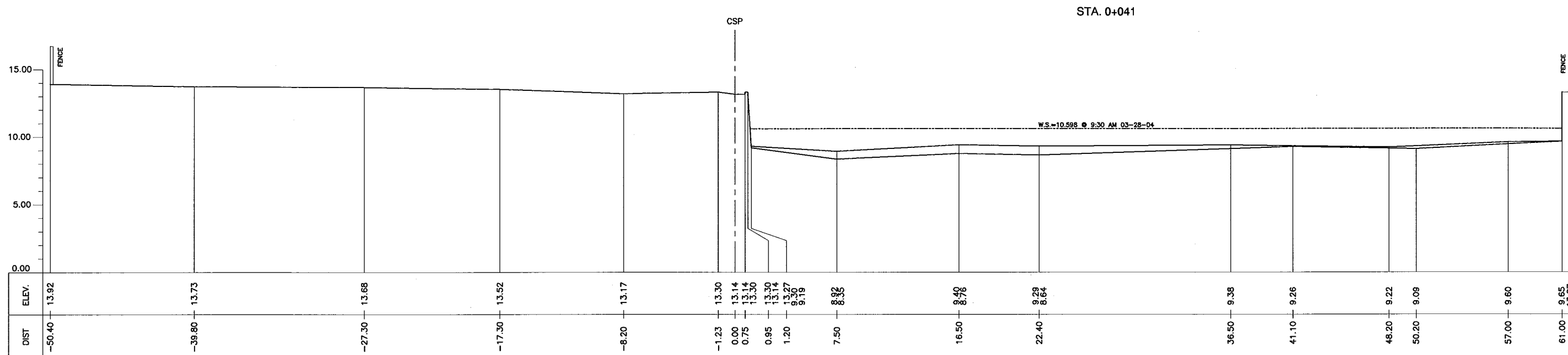
SHT. NO.
LP-17
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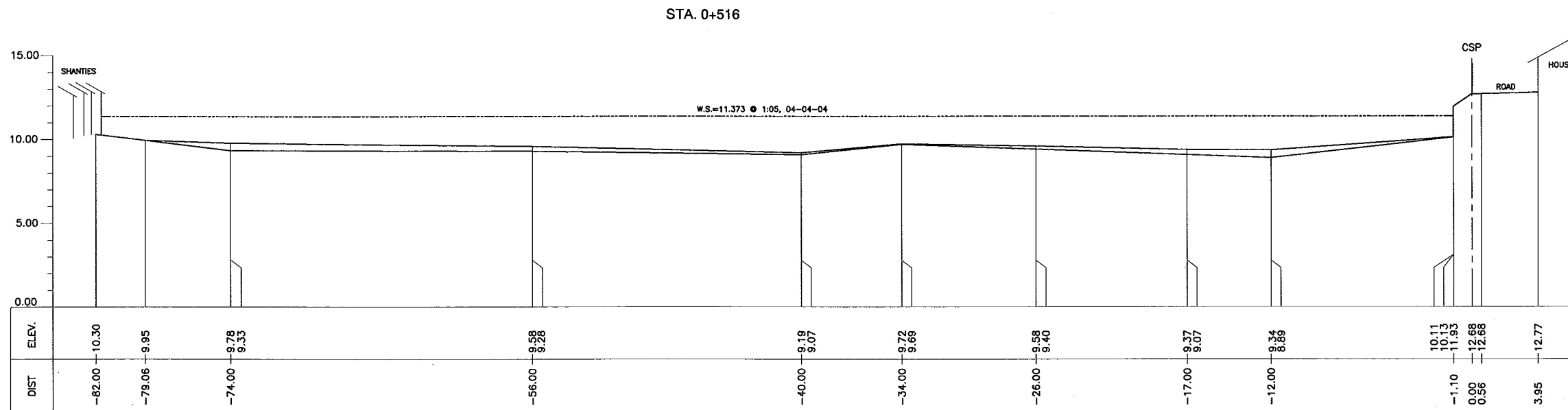
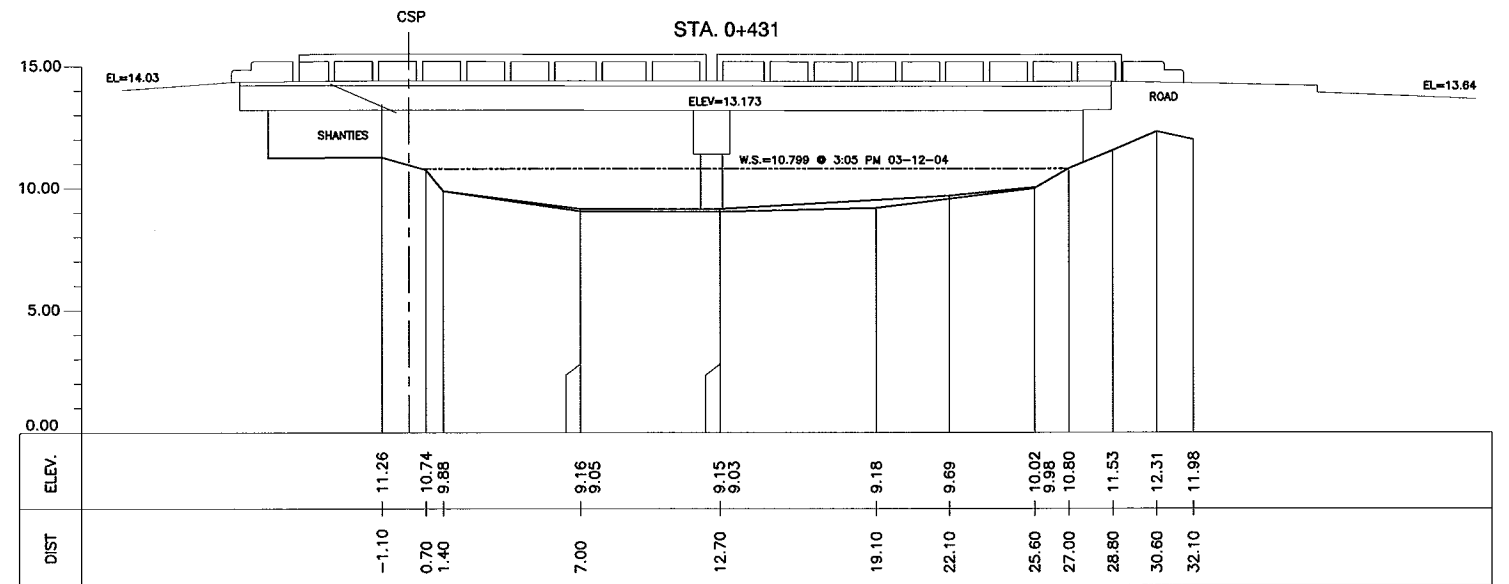
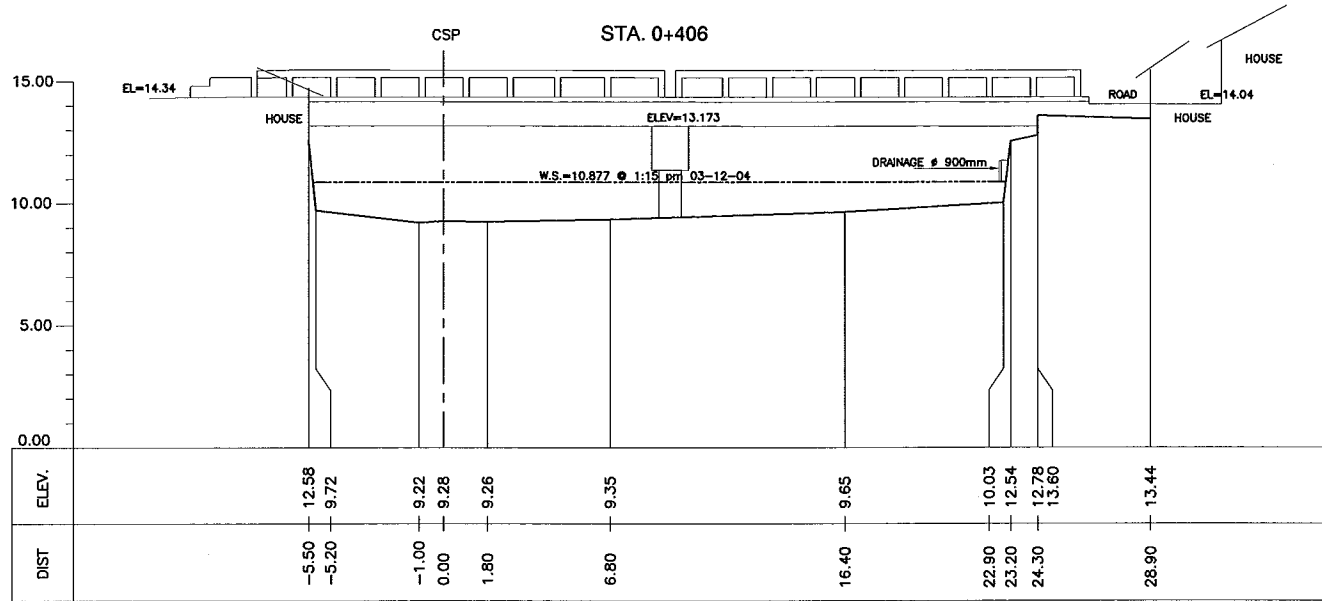


<p>CONSULTANTS</p>	<p style="text-align: center;">REPUBLIC OF THE PHILIPPINES</p> <p style="text-align: center;">JICA JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p> <p style="text-align: center;">METROPOLITAN MANILA DEVELOPMENT AUTHORITY</p>	<p>PROJECT & LOCATION:</p> <p style="text-align: center;">THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA</p>	<p>SHT. CONTENTS:</p> <p style="text-align: center;">CROSS-SECTION ESTERO DE TRIPA DE GALLINA (SE09) (STA. 0-075 - STA. 0+000)</p>	<p>SHT. NO</p> <p style="text-align: center;">CS-17 01 13</p>
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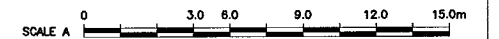


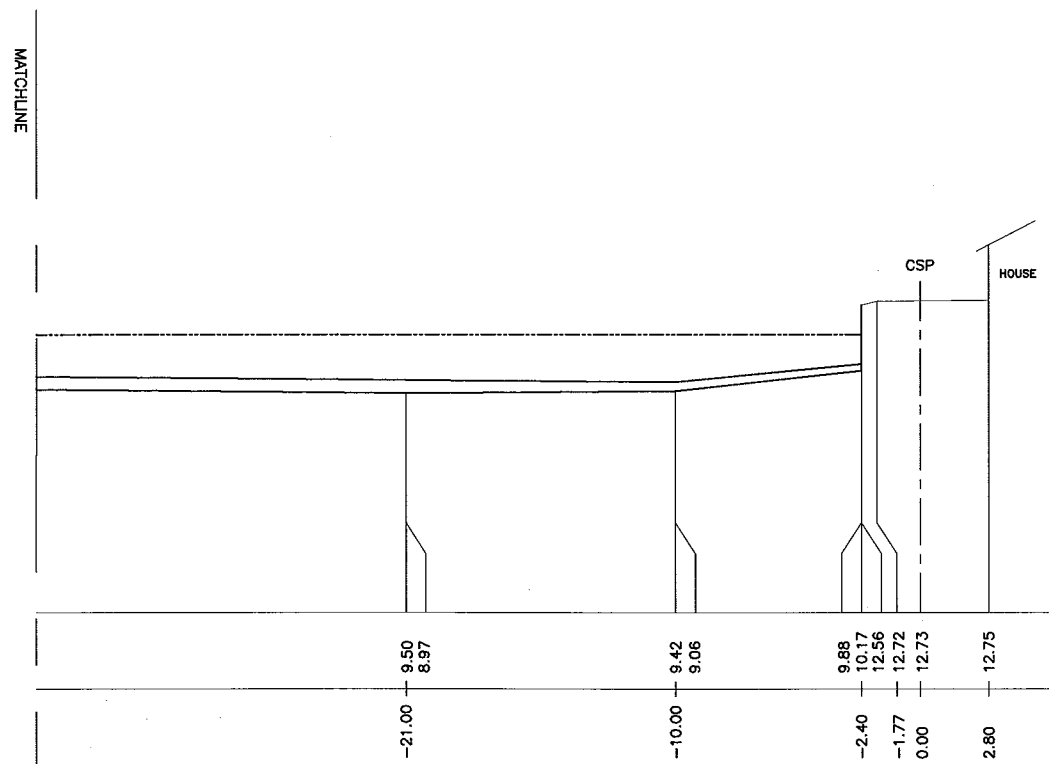
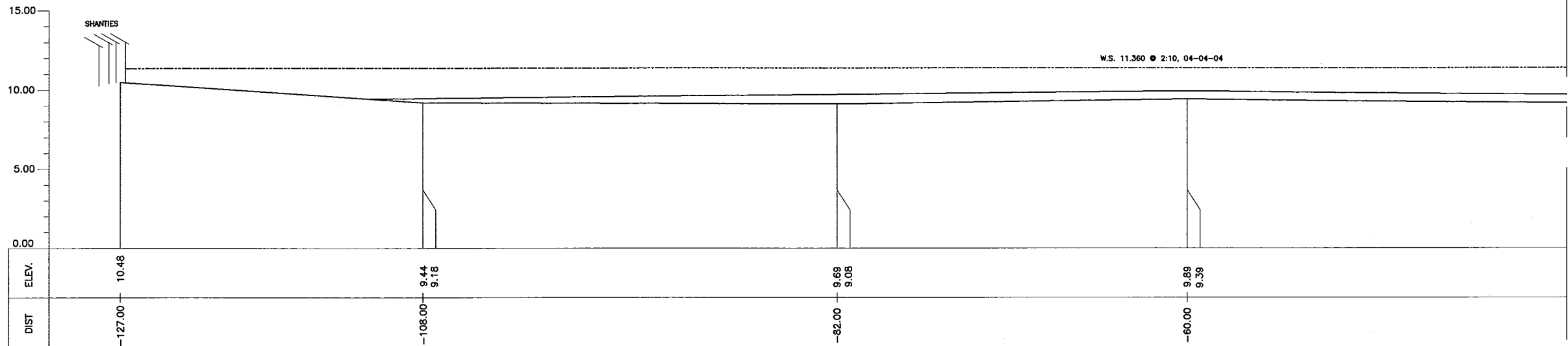
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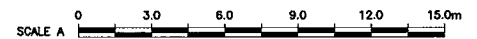


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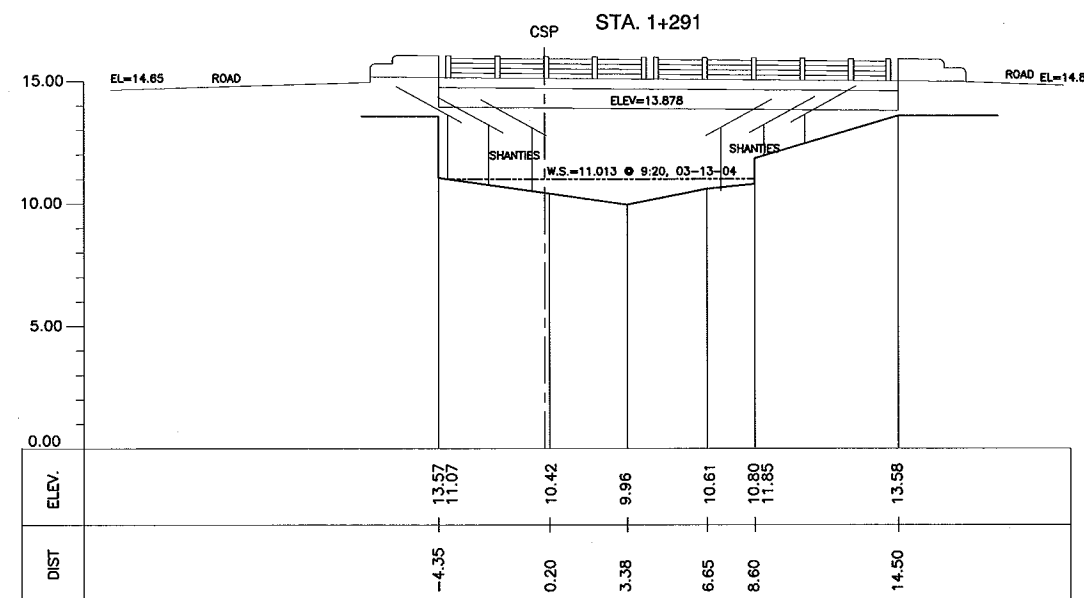
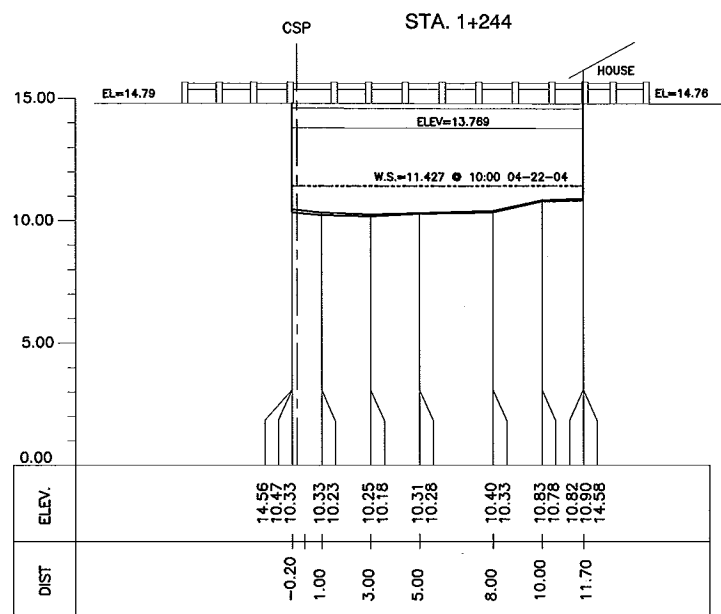
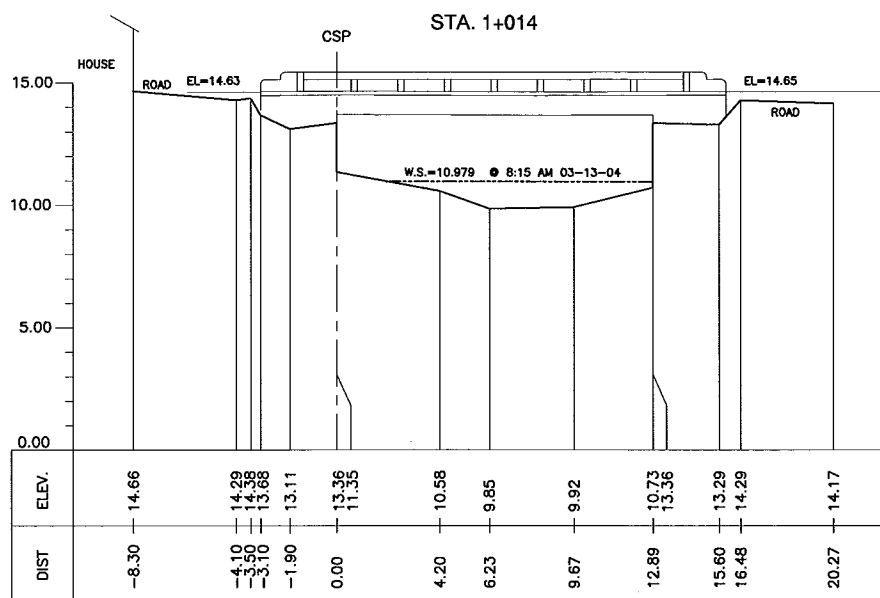
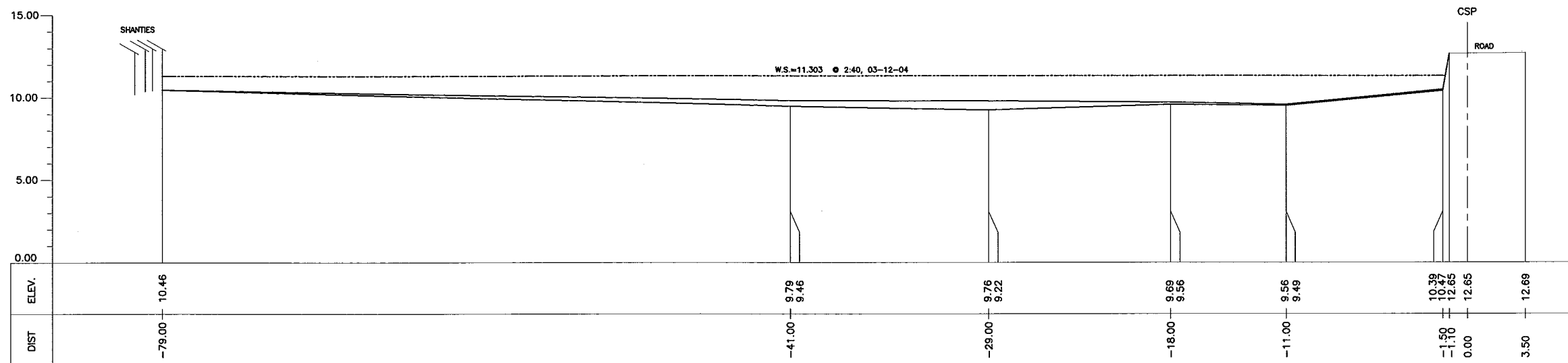


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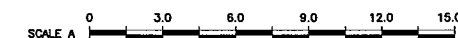


CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO
 PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	 JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	 METROPOLITAN MANILA DEVELOPMENT AUTHORITY	THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA		CROSS-SECTION ESTERO DE TRIPA DE GALLINA (SE09) (STA. 0+603)	 CS-17 04 13

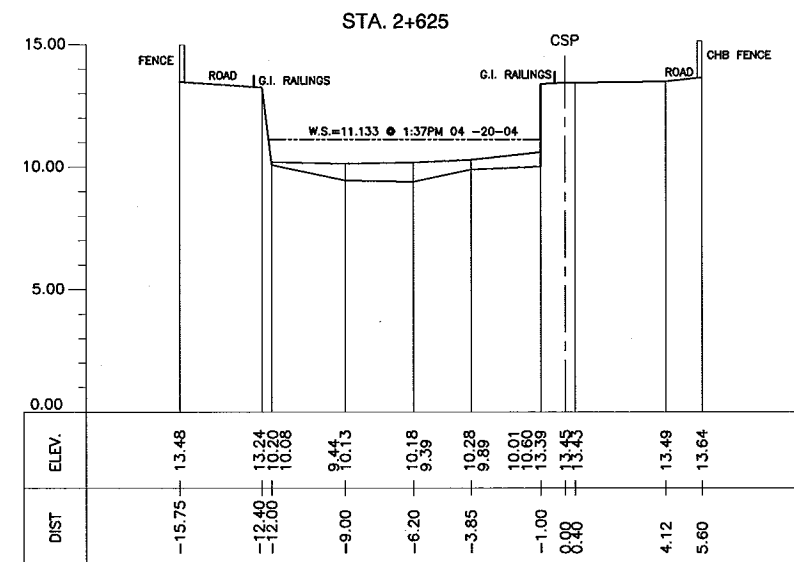
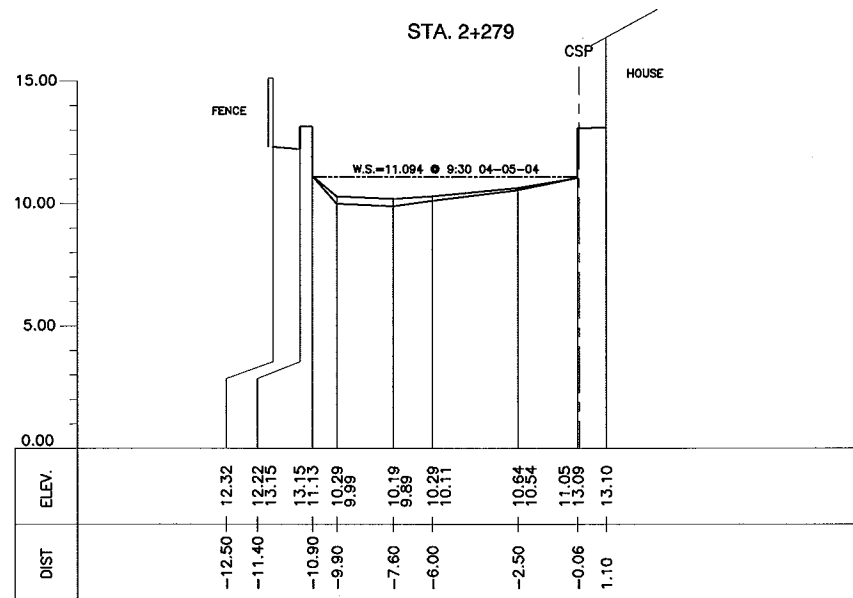
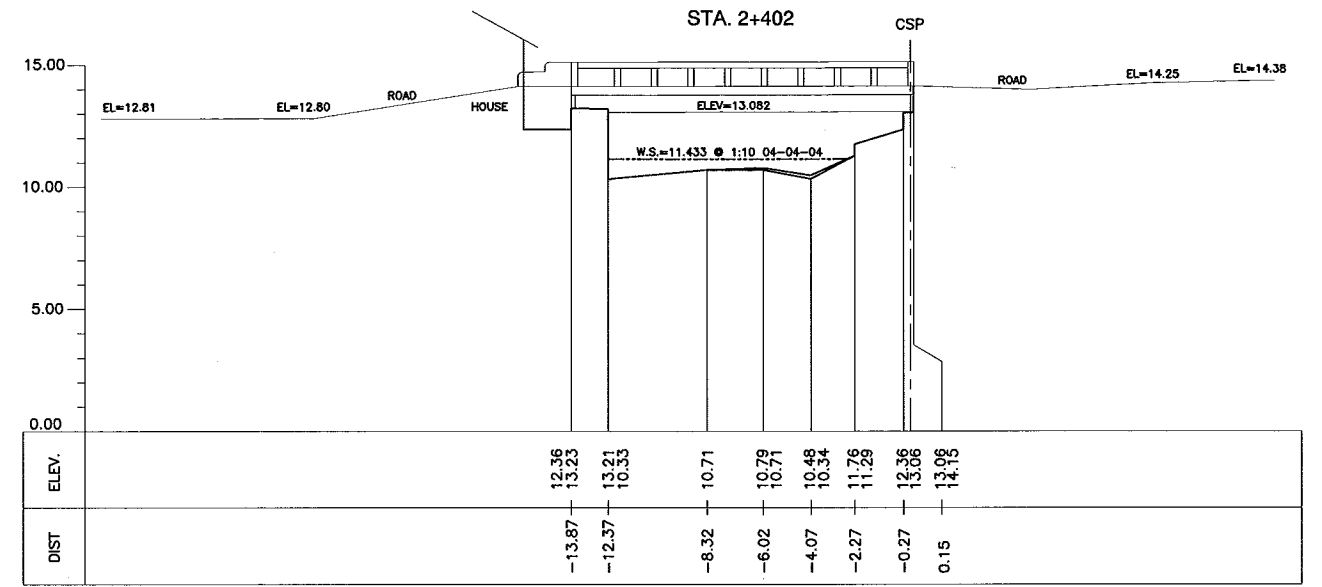
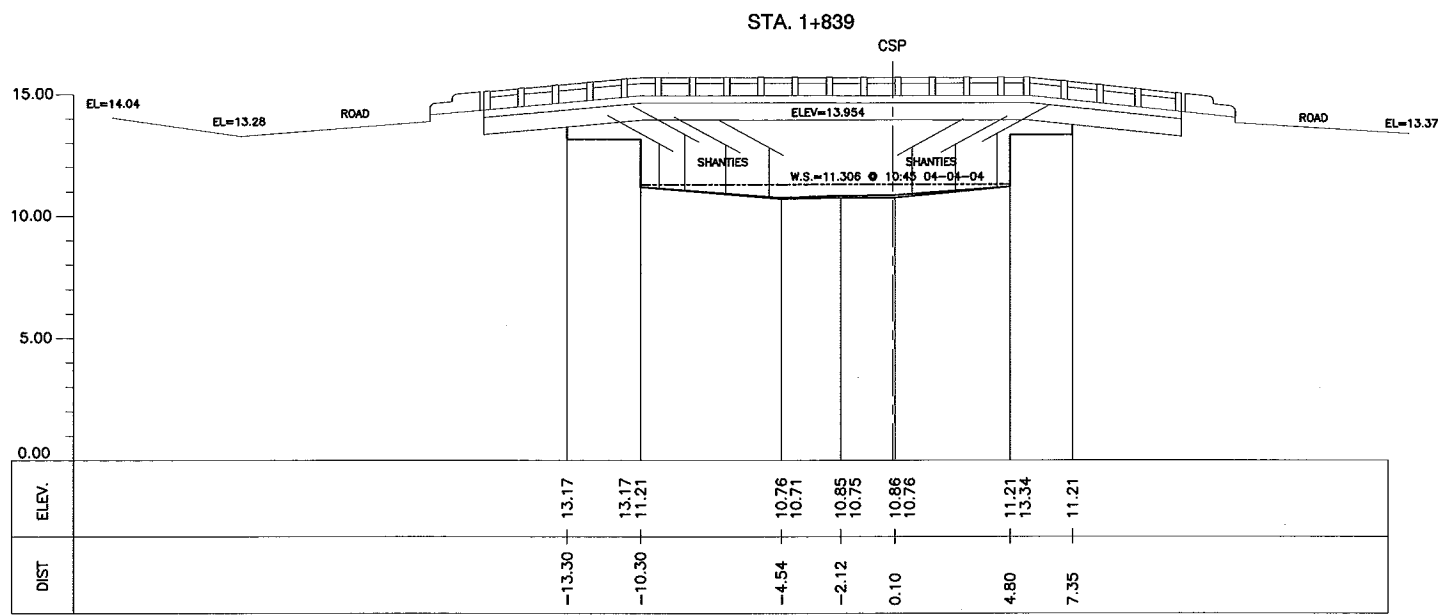
STA. 0+677



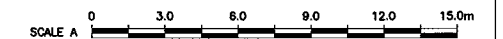
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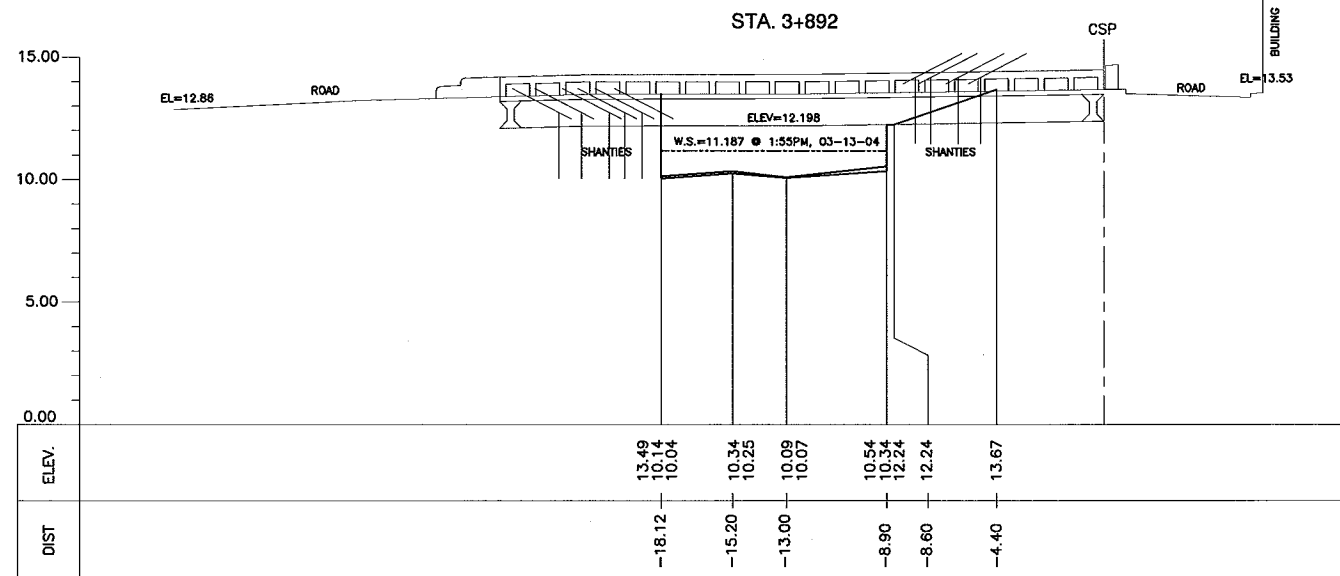
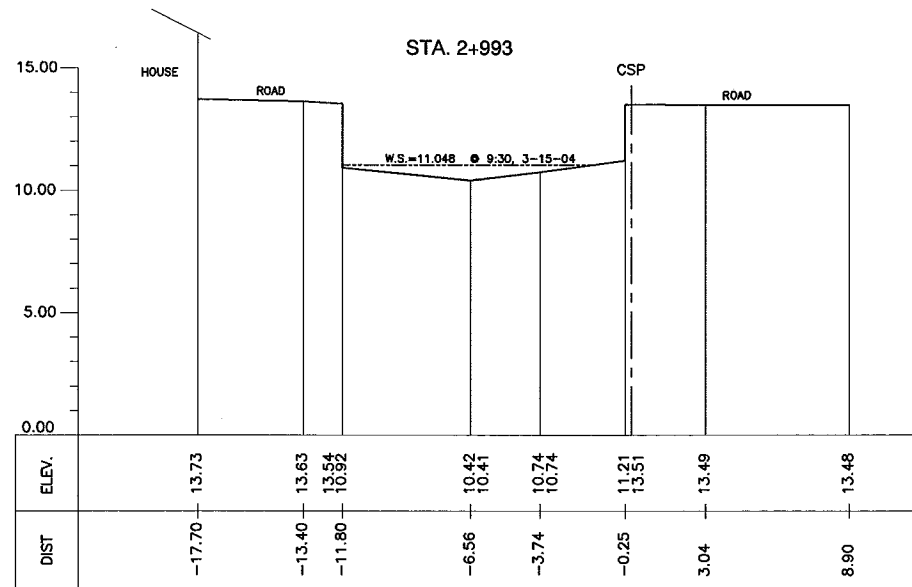
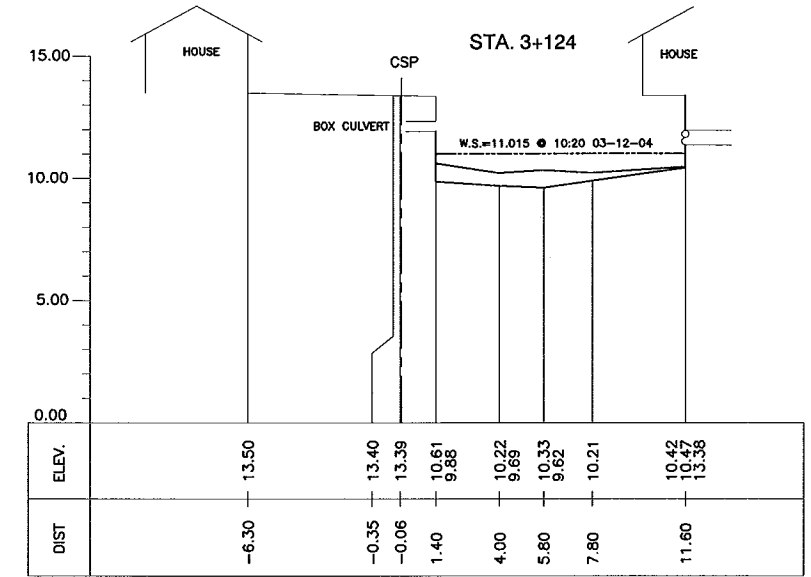
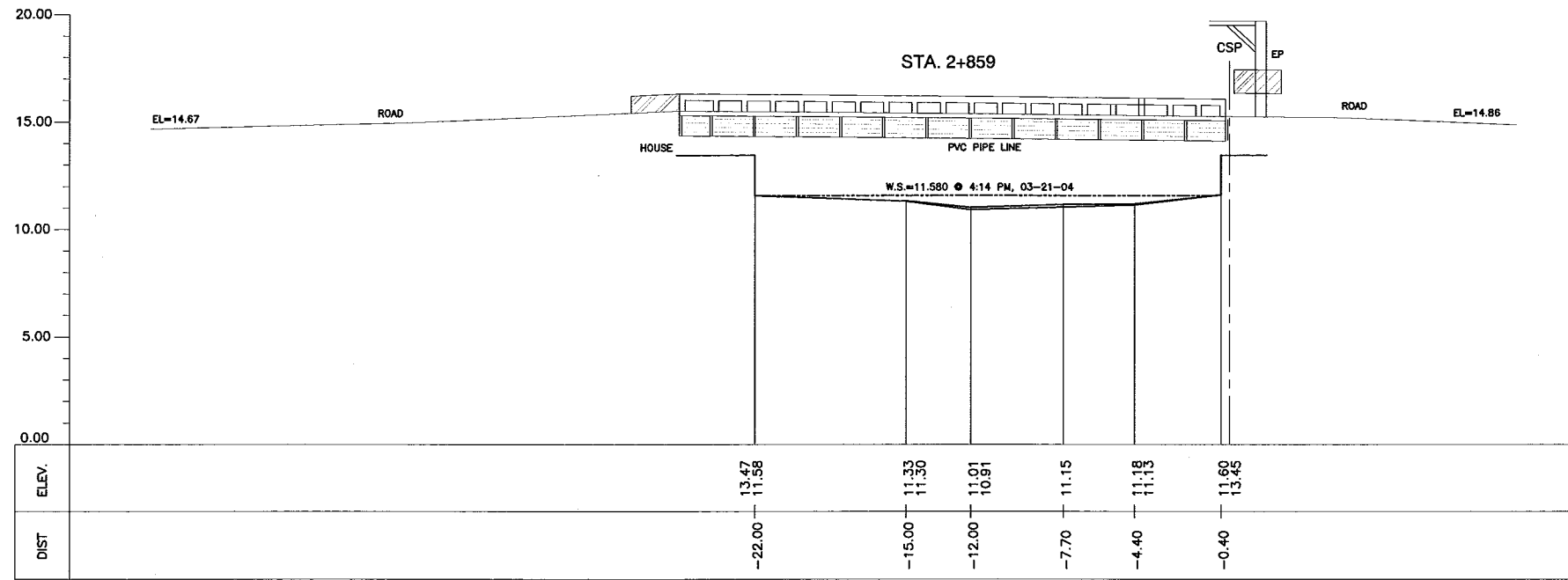
CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION ESTERO DE TRIPA DE GALLINA (SE09) (STA. 0+677 ~ STA. 1+291)	SHT. NO CS-17 05 13
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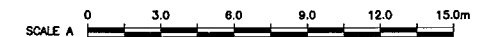
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CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO
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1 CROSS-SECTION
CS-17 SCALE : A



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REPUBLIC OF THE PHILIPPINES

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

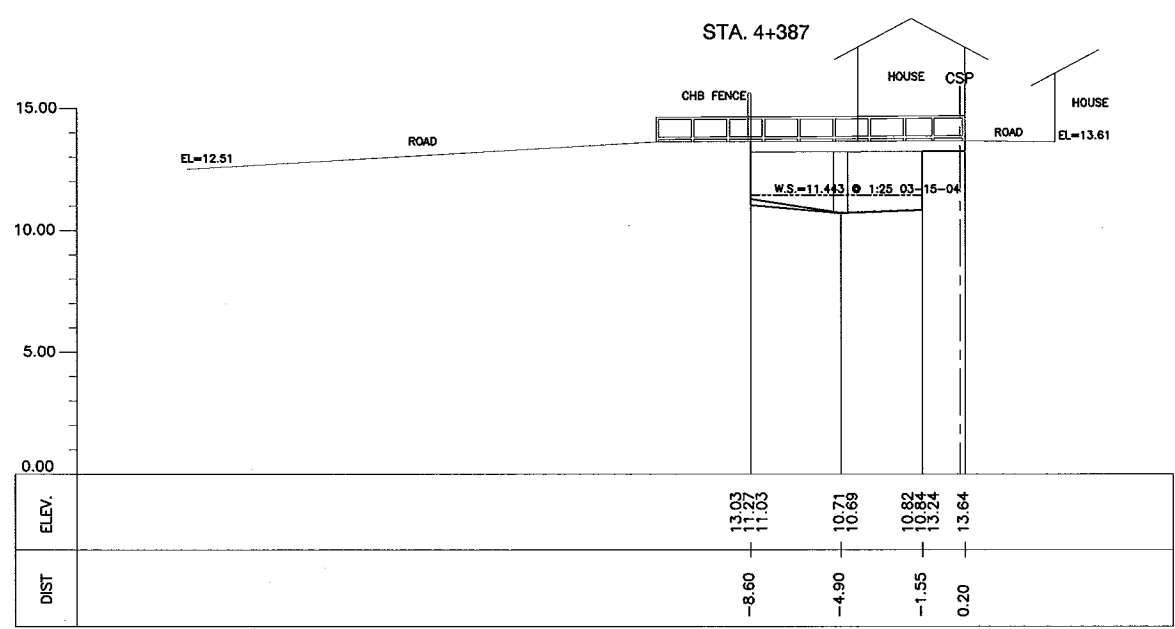
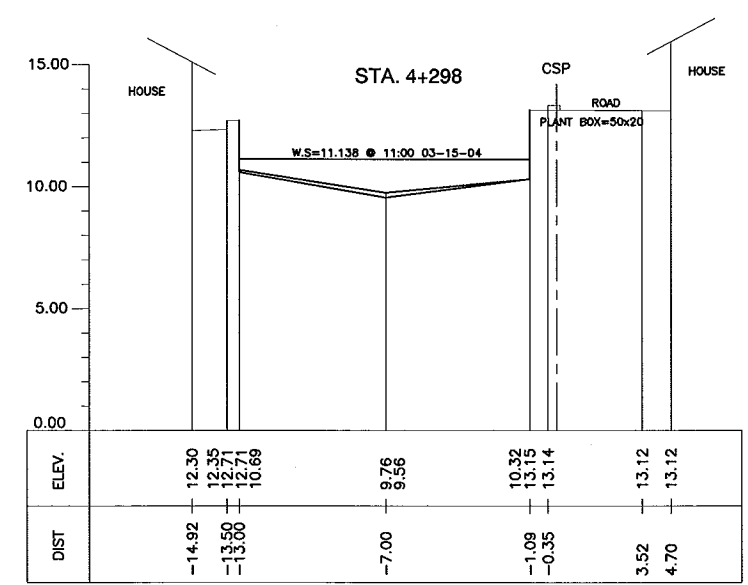
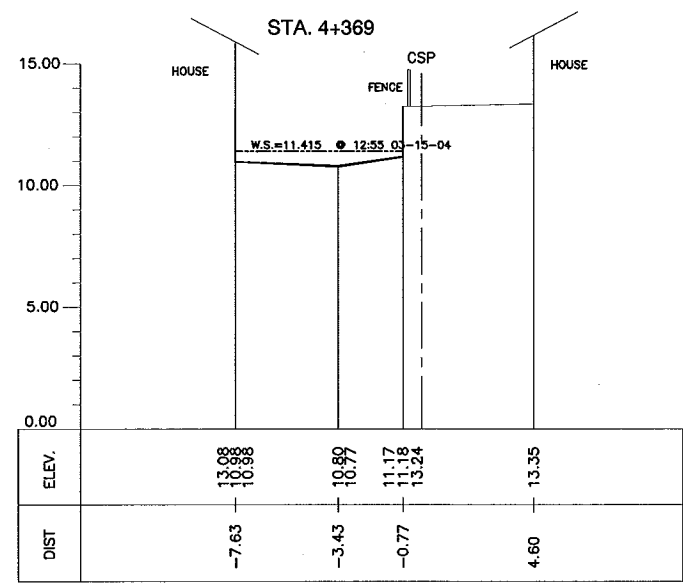
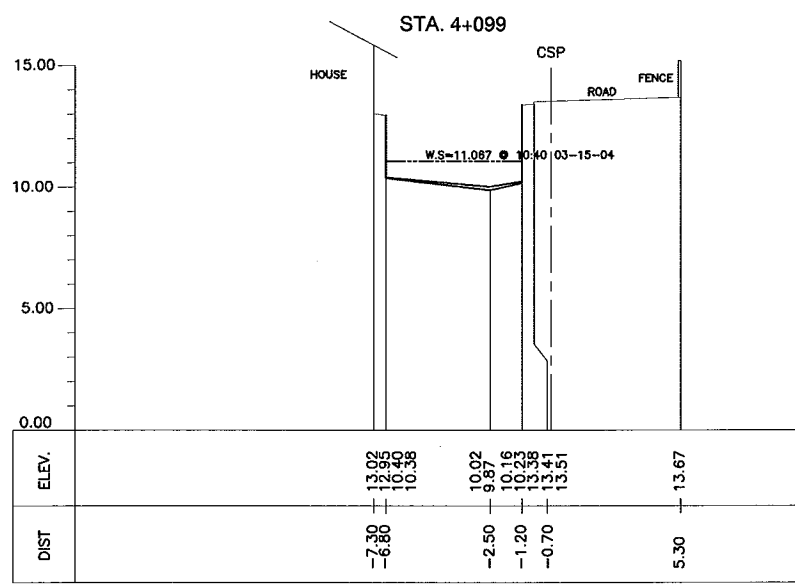
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

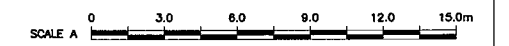
CROSS-SECTION
ESTERO DE TRIPA DE GALLINA (SE09)
(STA. 2+859 - STA. 3+892)

SHT. NO

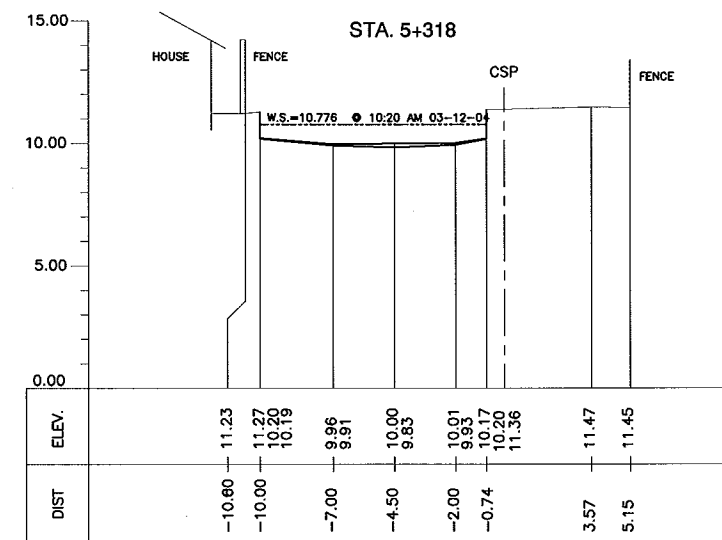
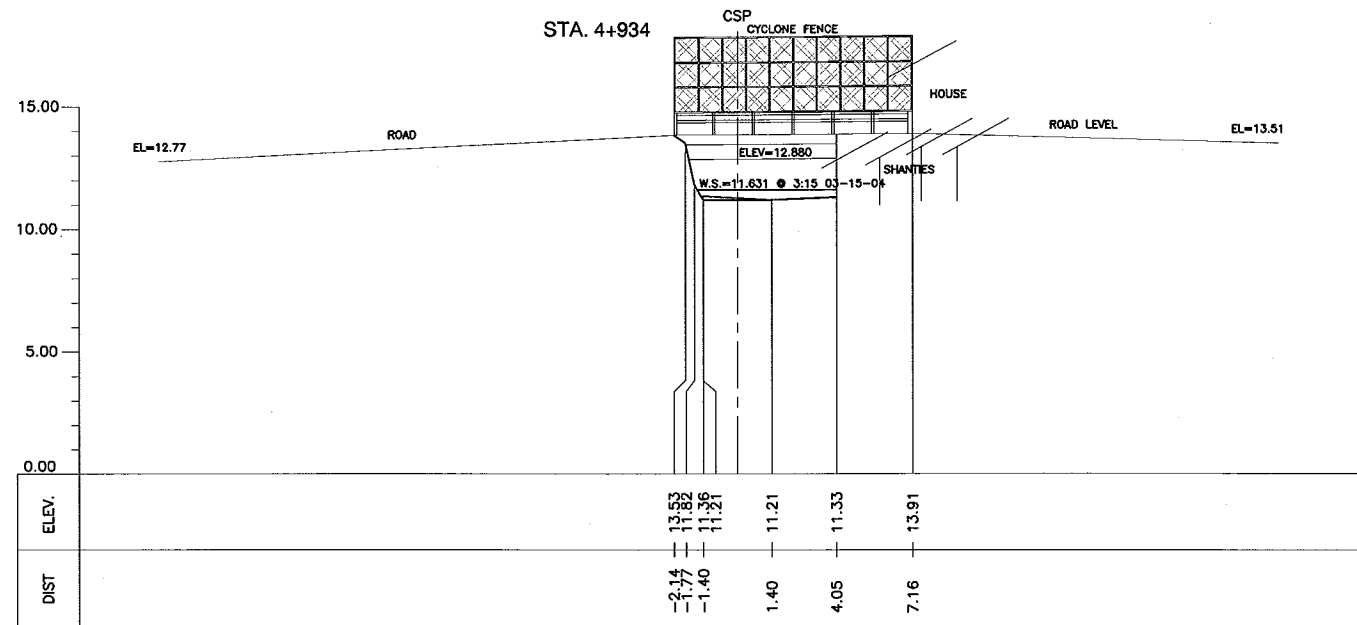
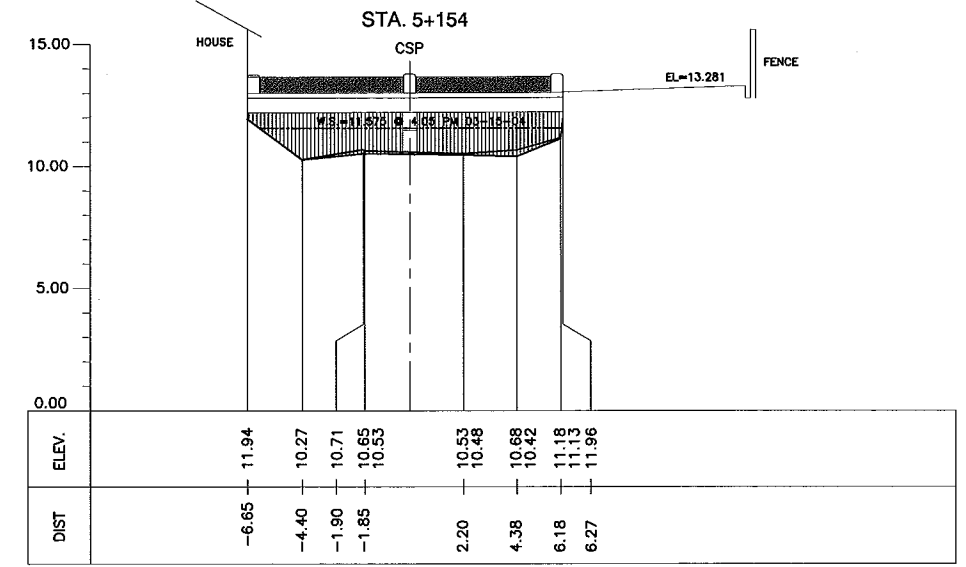
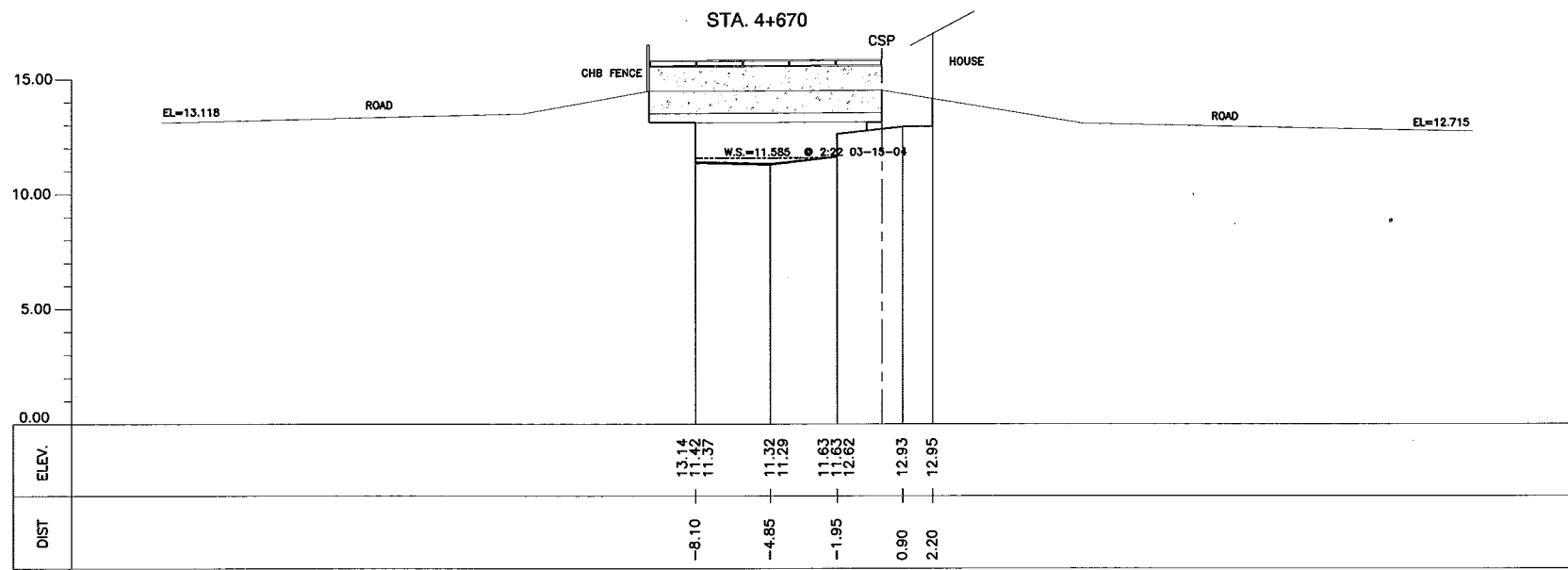
CS-17
07 | 13



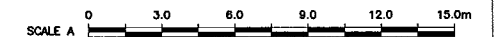
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<p>CONSULTANTS</p> <p> PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.</p>	<p>REPUBLIC OF THE PHILIPPINES</p> <p> JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p> <p> METROPOLITAN MANILA DEVELOPMENT AUTHORITY</p>	<p>PROJECT & LOCATION:</p> <p style="text-align: center;">THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA</p>	<p>SHT. CONTENTS:</p> <p style="text-align: center;">CROSS-SECTION ESTERO DE TRIPA DE GALLINA (SE09) (STA. 4+099 - STA. 4+387)</p>	<p>SHT. NO</p> <p style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">CS-17 08 13</p>
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1 CROSS-SECTION
CS-17 SCALE : A



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IN ASSOCIATION WITH
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REPUBLIC OF THE PHILIPPINES

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

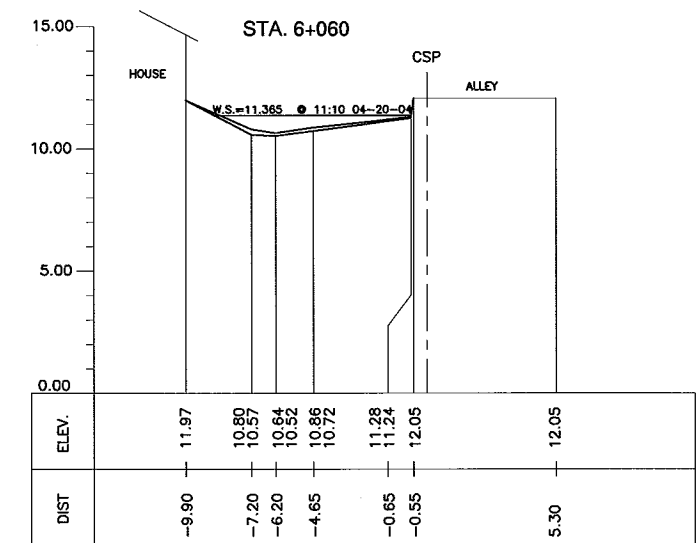
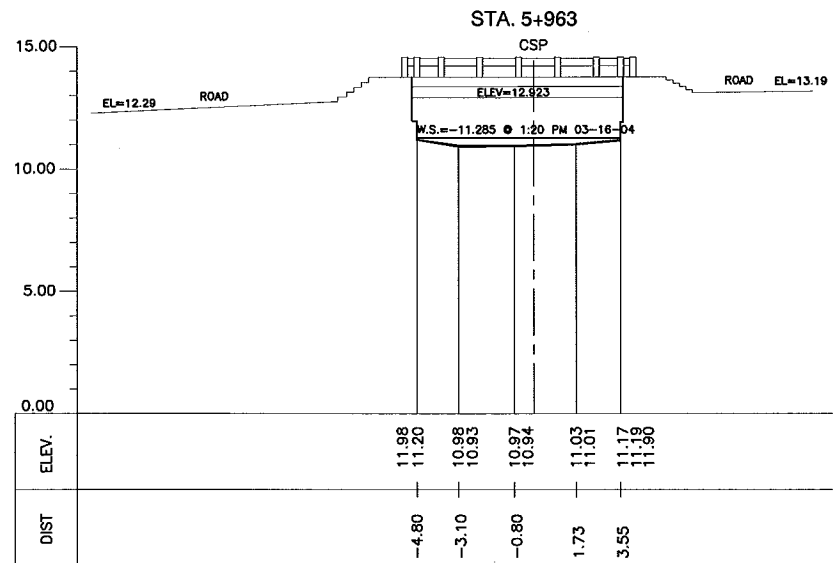
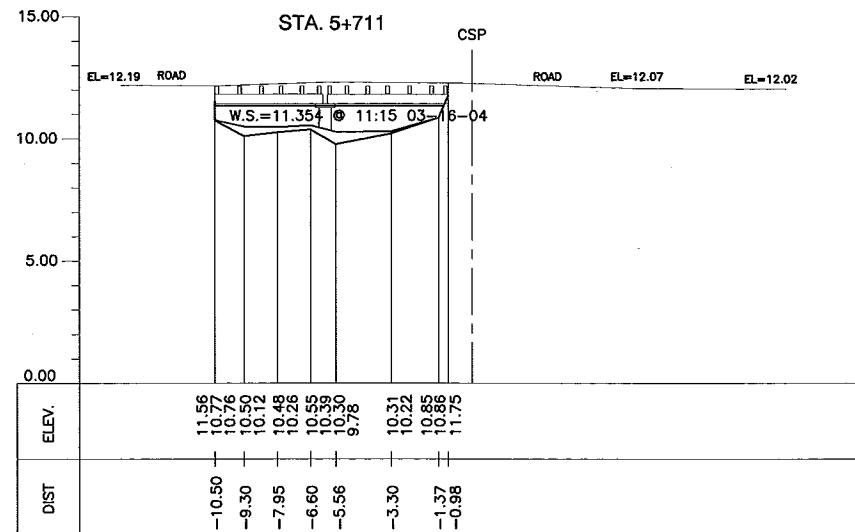
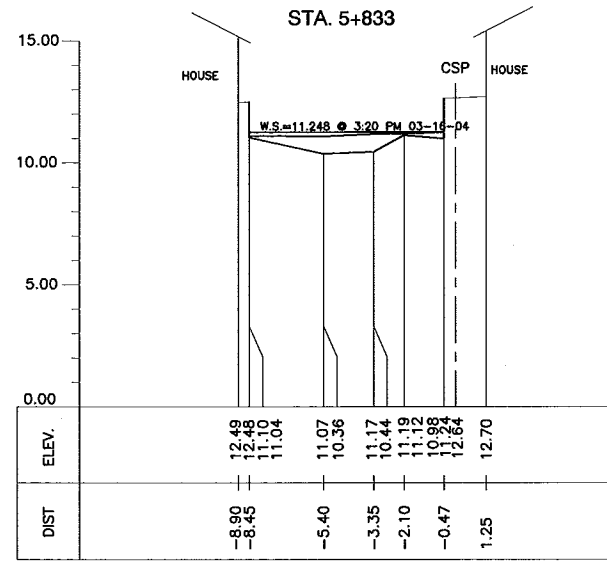
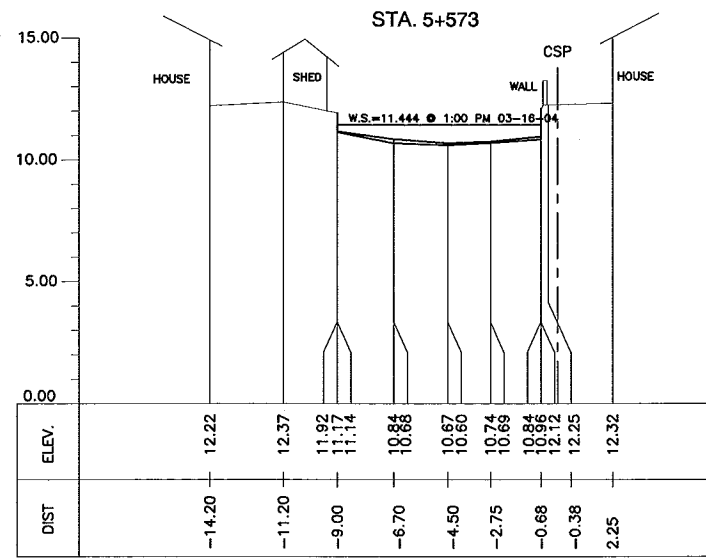
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

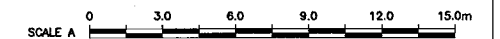
CROSS-SECTION
ESTERO DE TRIPA DE GALLINA (SE09)
(STA. 4+670 - STA. 5+318)

SHT. NO

CS-17
09 13



1 CROSS-SECTION
CS-17 SCALE : A



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FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

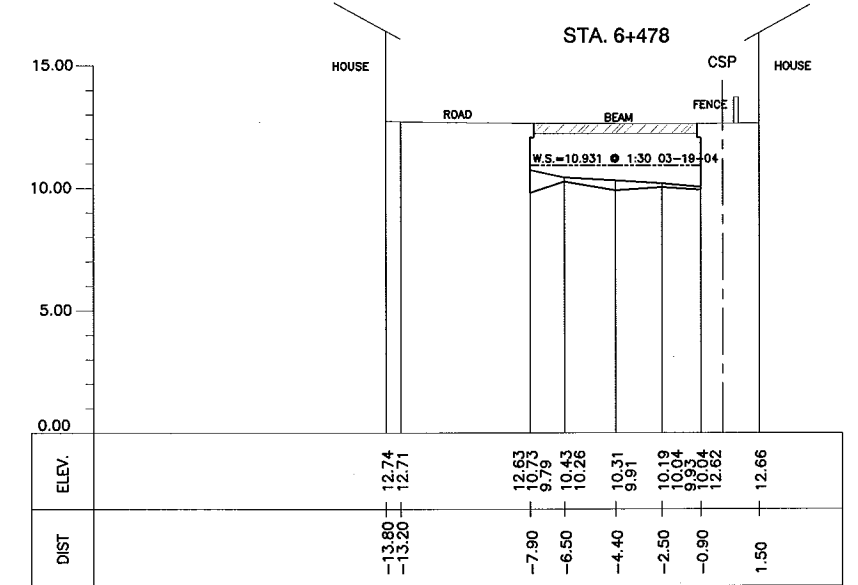
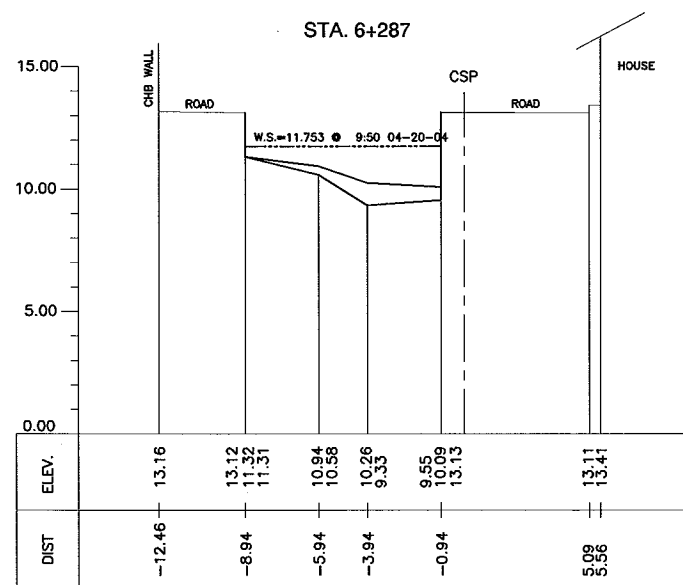
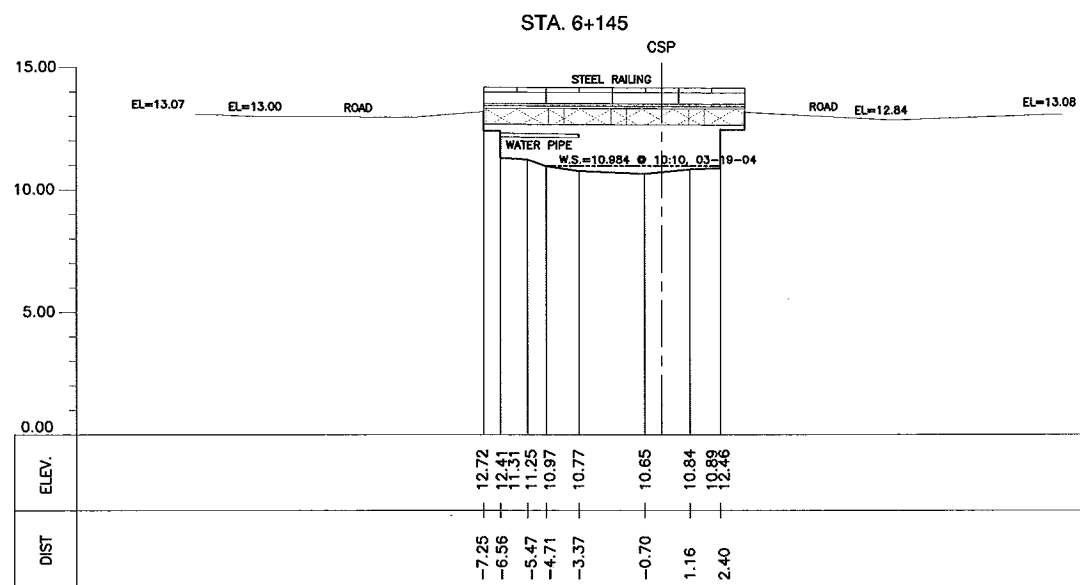
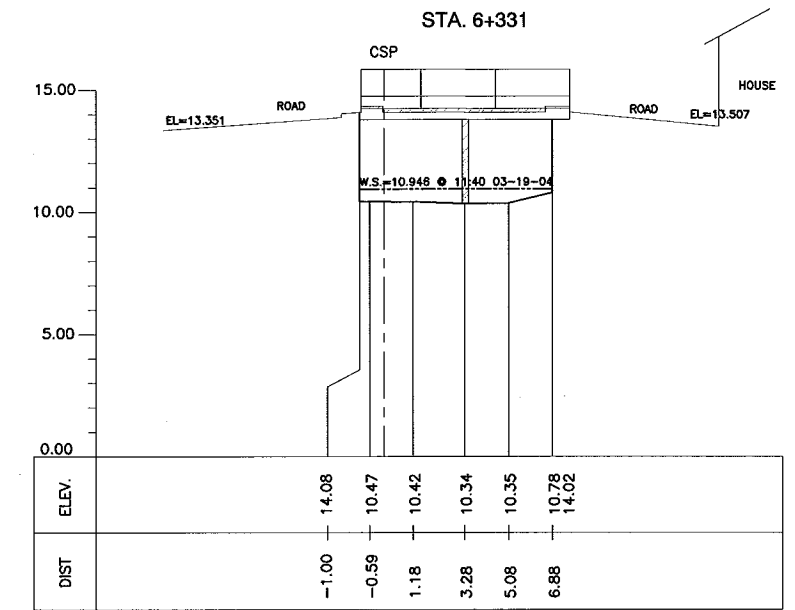
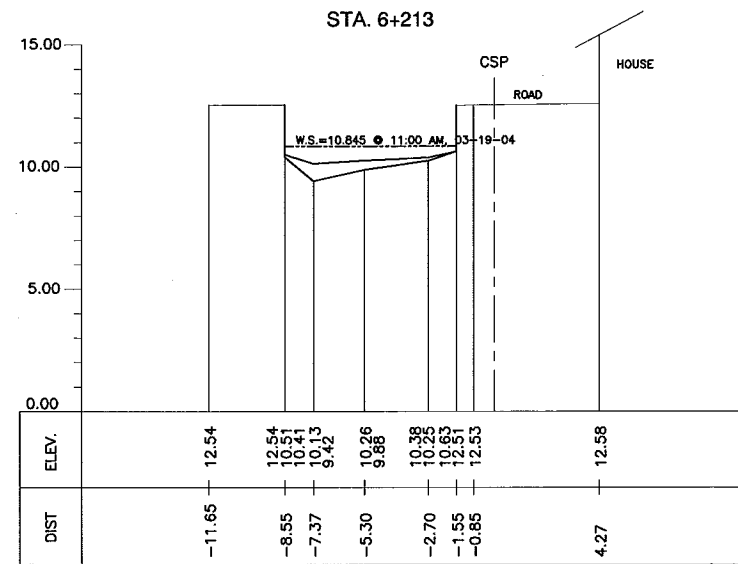
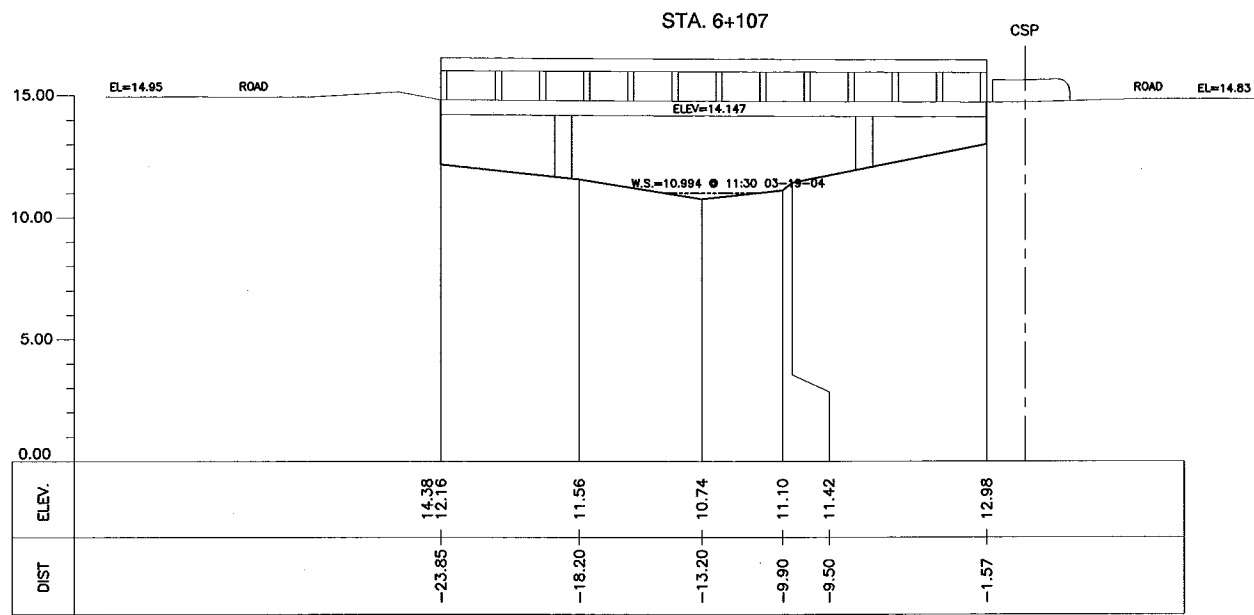
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

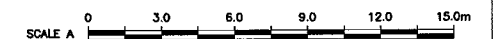
CROSS-SECTION
ESTERO DE TRIPA DE GALLINA (SE09)
(STA. 5+573 ~ STA. 6+060)

SHT. NO

CS-17
10 13



1 CROSS-SECTION
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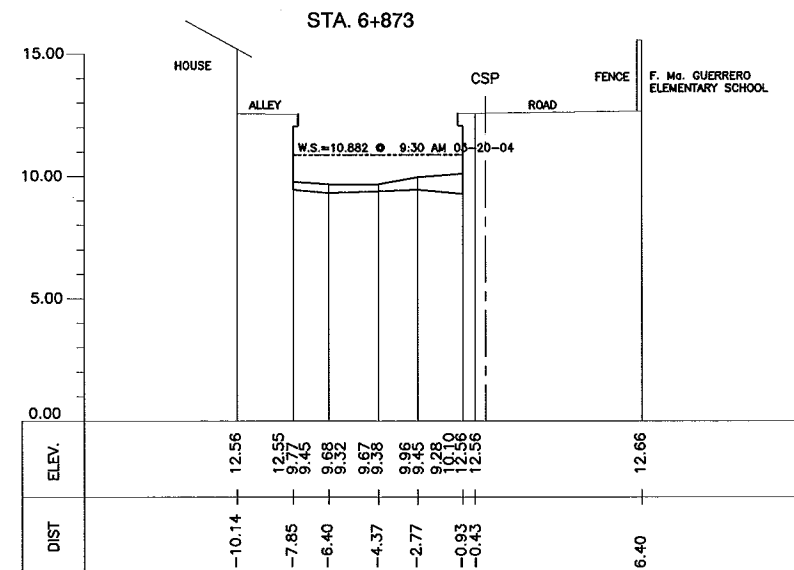
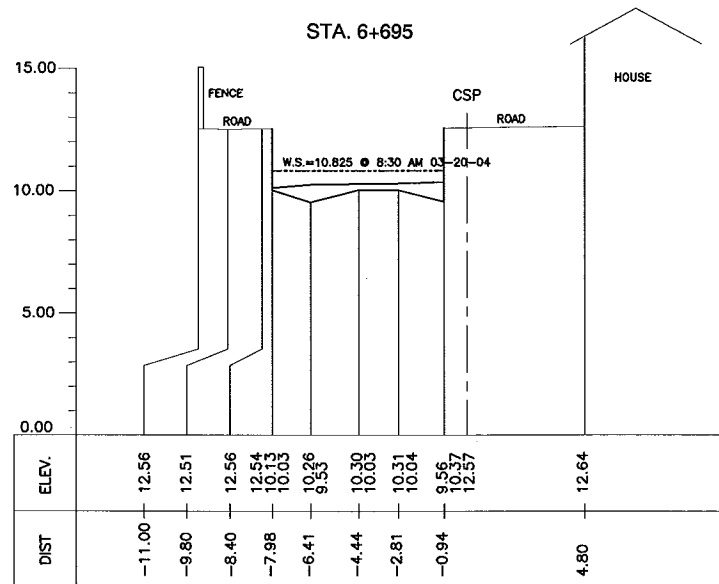
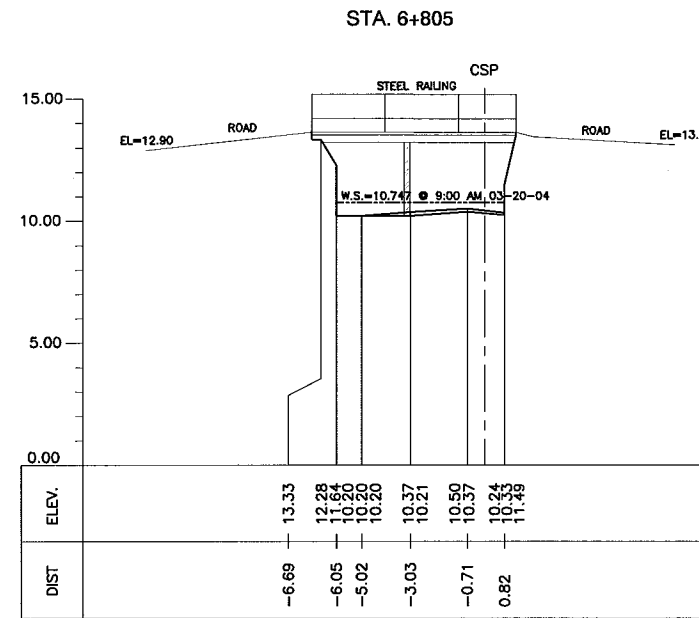
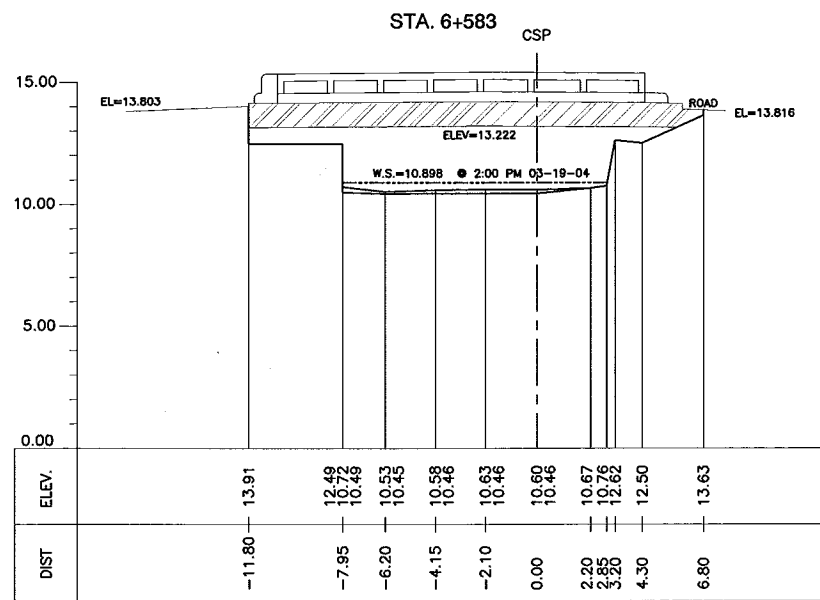
CONSULTANTS
PACIFIC CONSULTANTS INTERNATIONAL
IN ASSOCIATION WITH
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REPUBLIC OF THE PHILIPPINES
jica JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

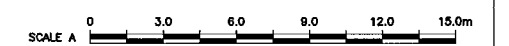
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THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

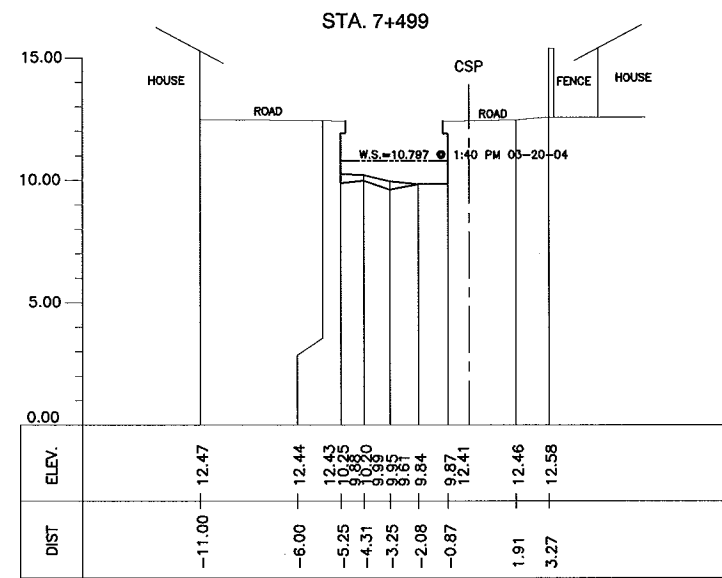
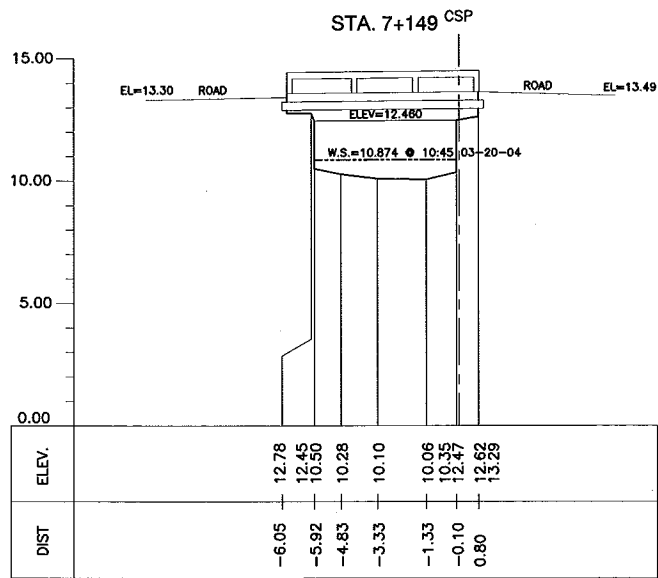
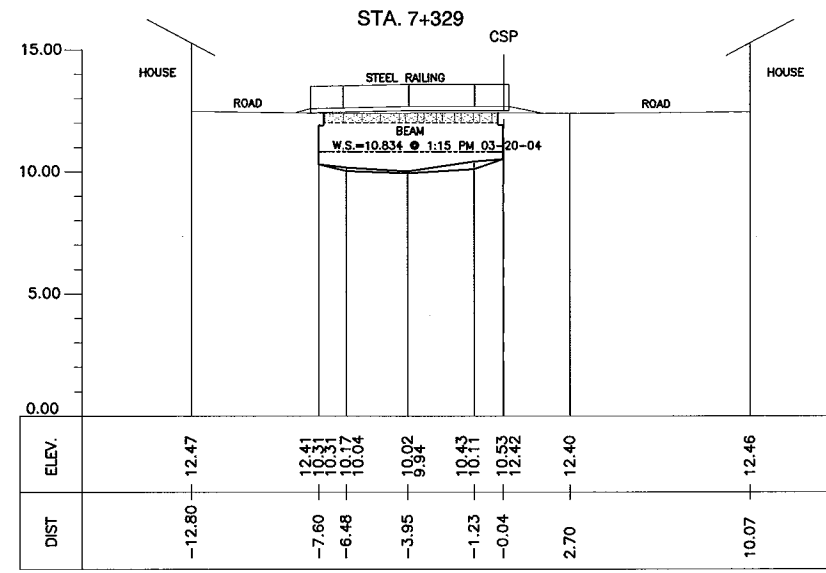
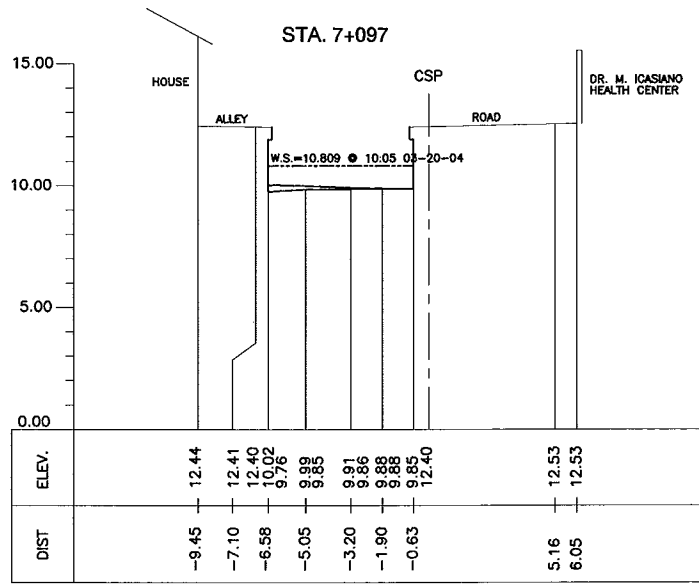
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CROSS-SECTION
ESTERO DE TRIPA DE GALLINA (SE09)
(STA. 6+107 - STA. 6+478)

SHT. NO
CS-17
11 13

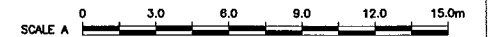


1 CROSS-SECTION
CS-17 SCALE : A





1 CROSS-SECTION
CS-17 SCALE : A



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO.
	PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH		JAPAN INTERNATIONAL COOPERATION AGENCY FOR	THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	CROSS-SECTION ESTERO DE TRIPA DE GALLINA (SE09) (STA. 7+097~ STA. 7+499)	CS-17 13 13
	NIKKEN CONSULTANTS, INC.		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			

ZANZIBAR CREEK (SE15)

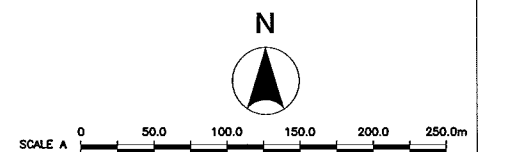


CROSS-SECTION LOCATION

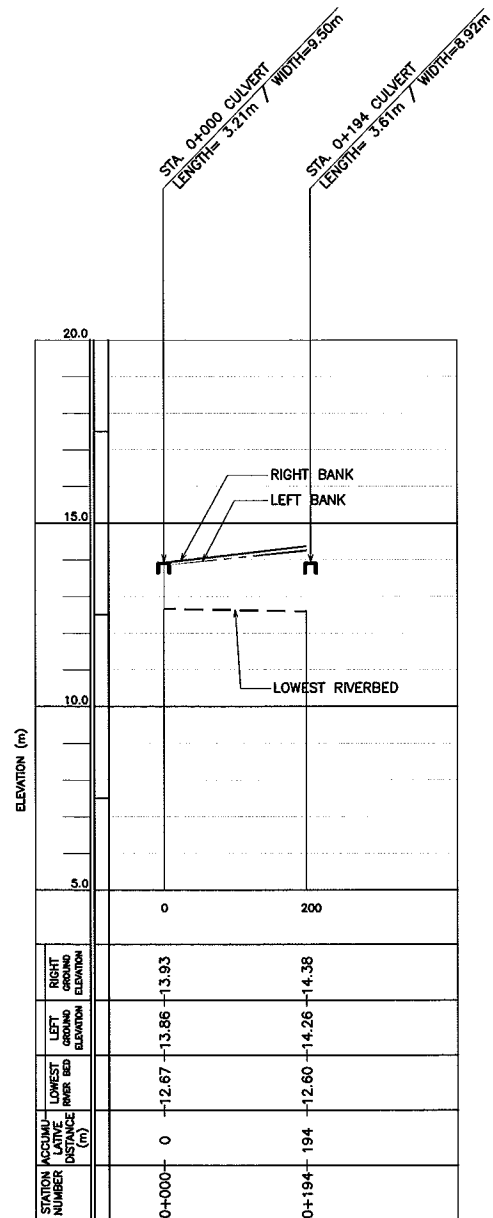
REFERENCE POINTS:

STATION	EASTING	NORTHING
STA. 0+000	500931.03	1609476.13
STA. 0+194	500743.26	1609425.95

1
ZANZIBAR CREEK (SE15)
TOPOGRAPHIC MAP
 SCALE : A

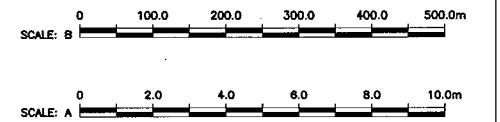


<p>CONSULTANTS</p>	<p>REPUBLIC OF THE PHILIPPINES</p>	<p>PROJECT & LOCATION:</p> <p style="text-align: center;">THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA</p>	<p>SHT. CONTENTS:</p> <p style="text-align: center;">CROSS-SECTION LOCATION ZANZIBAR CREEK (SE15) (STA. 0+000 - STA. 0+194)</p>	<p>SHT. NO</p> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; width: 30px; margin: 0 auto;"> CL-18 01 01 </div>
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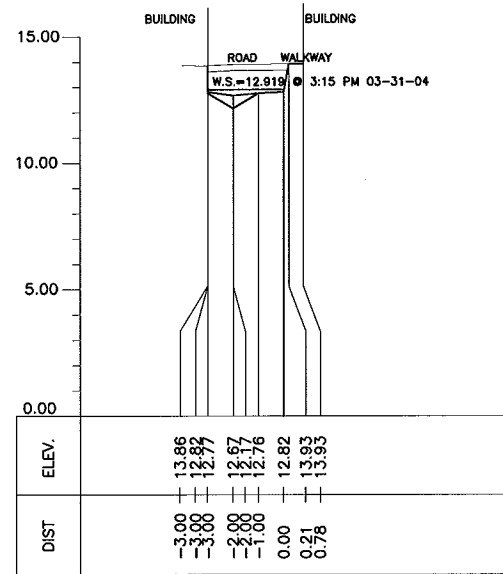
LEGEND:
 ———: RIGHT BANK
 - - - - : LEFT BANK
 - - - - : LOWEST RIVERBED
 □ : CULVERT

1 LONGITUDINAL PROFILE
 LP-18 VER. = SCALE : A / HOR. = SCALE : B

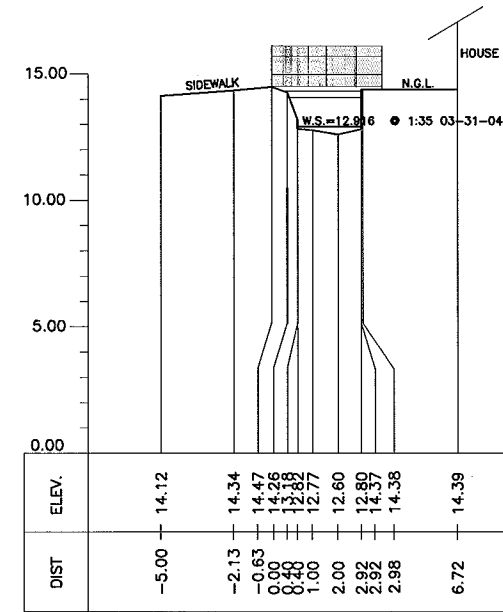


CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO		
	PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.		JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		METROPOLITAN MANILA DEVELOPMENT AUTHORITY	THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	LONGITUDINAL PROFILE ZANZIBAR CREEK (SE15) (STA. 0+000- STA. 0+194)	LP-18 01 01

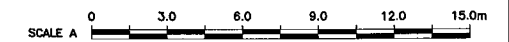
STA. 0+000



STA. 0+194



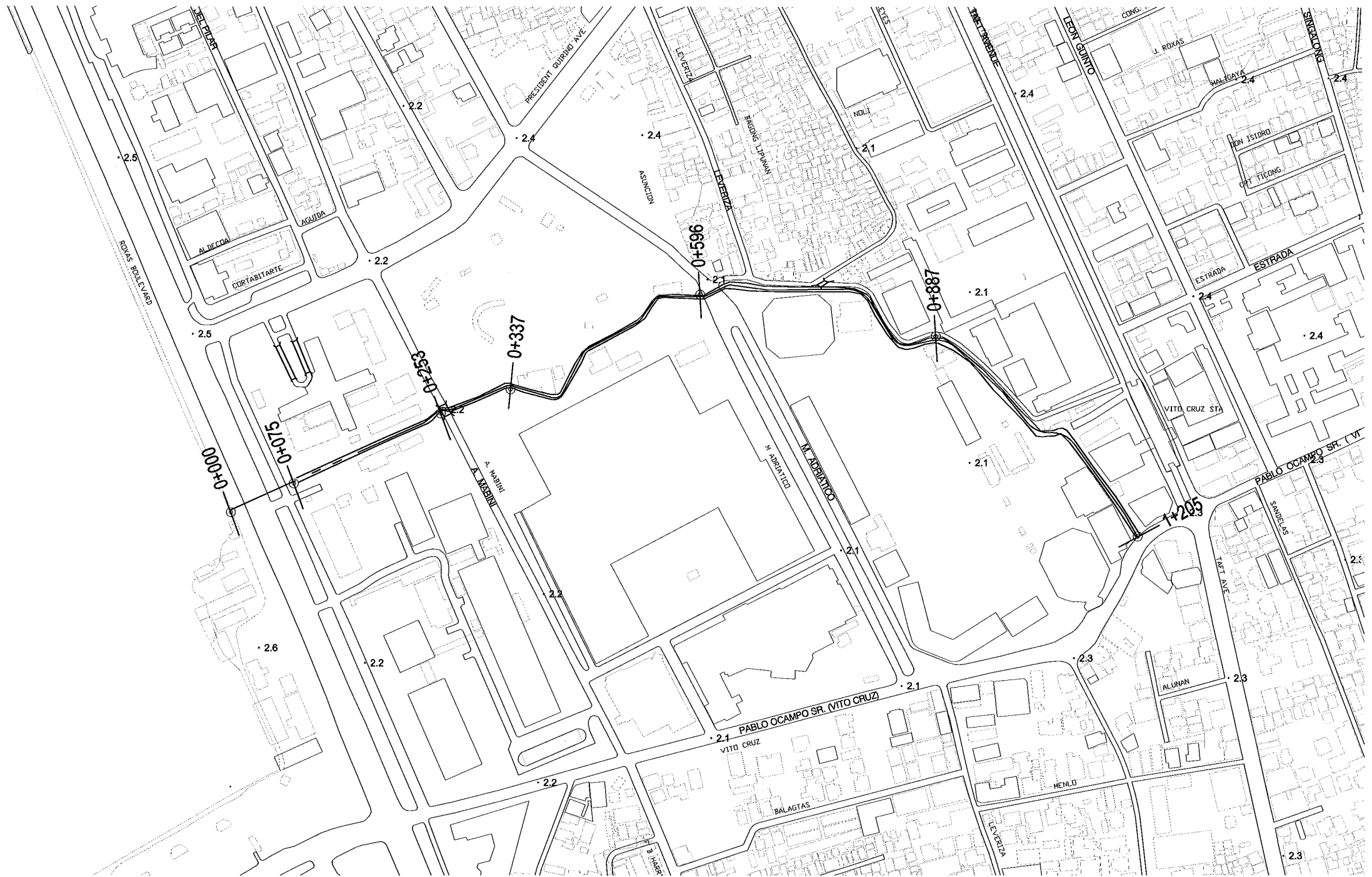
1 CROSS-SECTION
CS-18 SCALE : A



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO.
 PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	 JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	 METROPOLITAN MANILA DEVELOPMENT AUTHORITY	THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA		CROSS-SECTION ESTERO DE ZANSIBAR (SE15) (STA. 0+000 ~ STA. 0+194)	CS-18 01 01

ESTERO DE SAN ANTONIO

ABAD (SE20)



CROSS-SECTION LOCATION

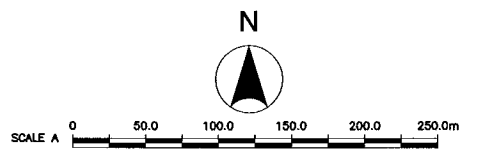
REFERENCE POINTS:

STATION	EASTING	NORTHING
STA. 0+000	498284.91	1610579.49
STA. 0+075	498353.40	1610610.7
STA. 0+253	498513.77	1610686.75
STA. 0+337	498590.02	1610713.17
STA. 0+596	498796.62	1610816.76
STA. 0+887	499053.65	1610770.87
STA. 1+205	499273.76	1610552.54

1
CL-19

ESTERO DE SAN ANTONIO ABAD (SE20)
TOPOGRAPHIC MAP

SCALE : A



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PACIFIC CONSULTANTS INTERNATIONAL
IN ASSOCIATION WITH
 NIKKEN CONSULTANTS, INC.

REPUBLIC OF THE PHILIPPINES

JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

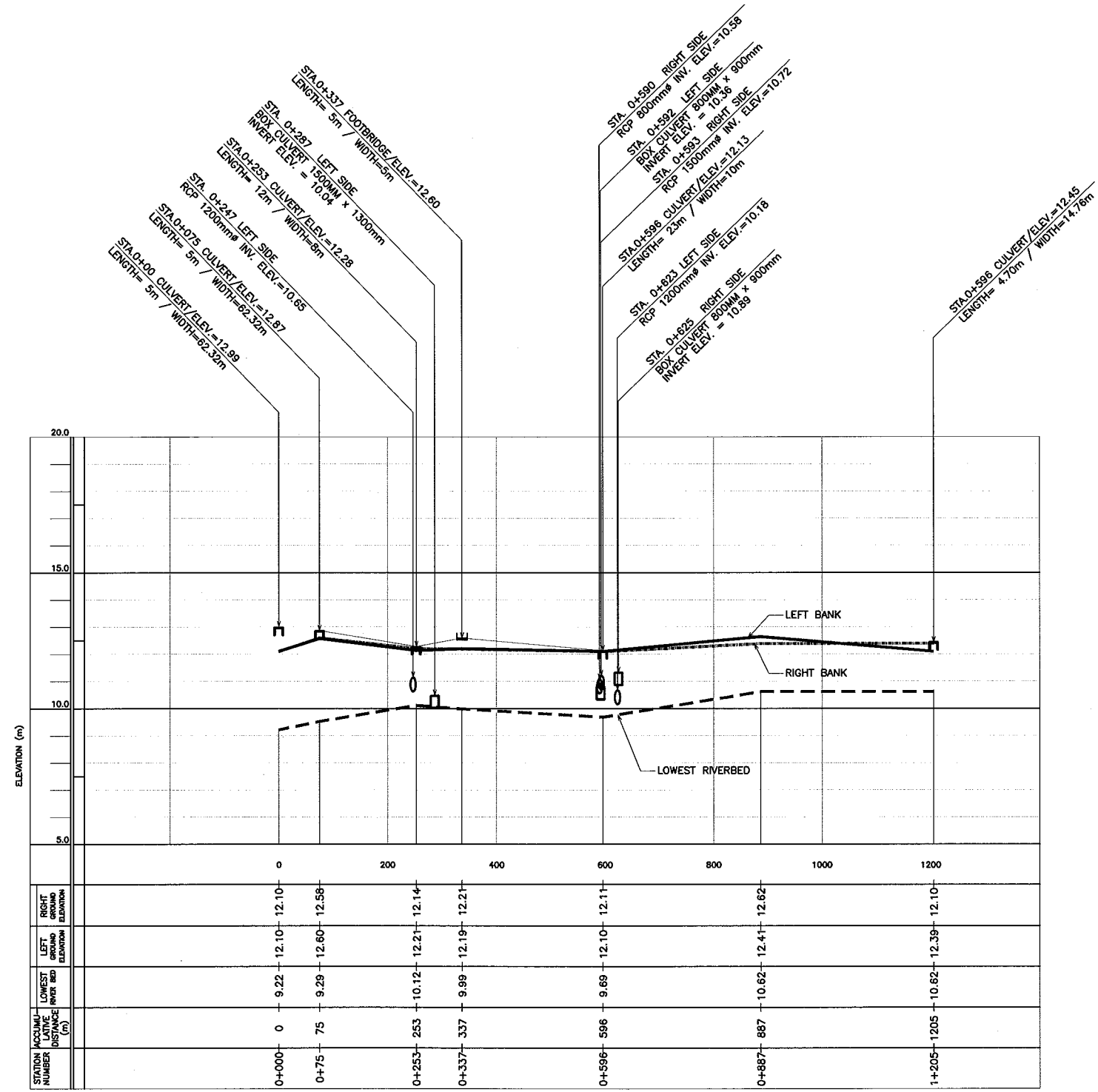
THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
ESTERO DE SAN ANTONIO ABAD (SE20)
(STA. 0+000 ~ STA. 1+205)

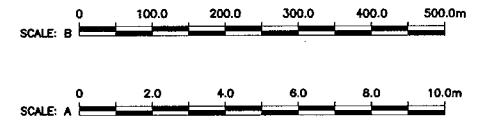
SHT. NO

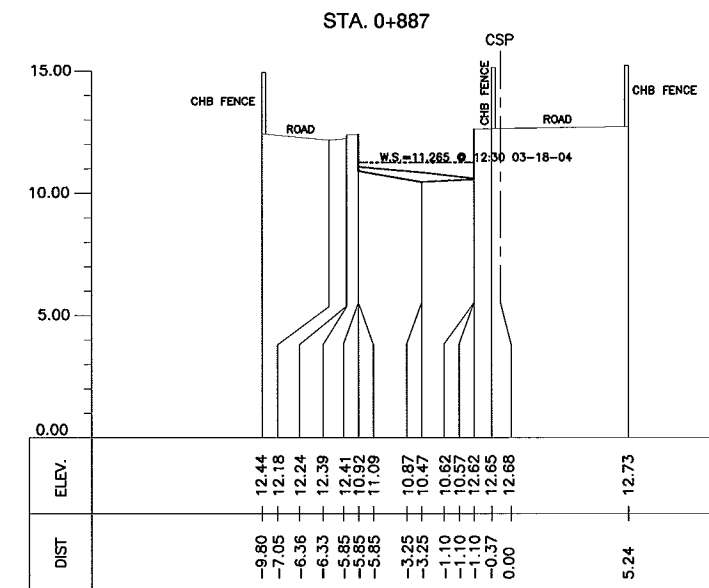
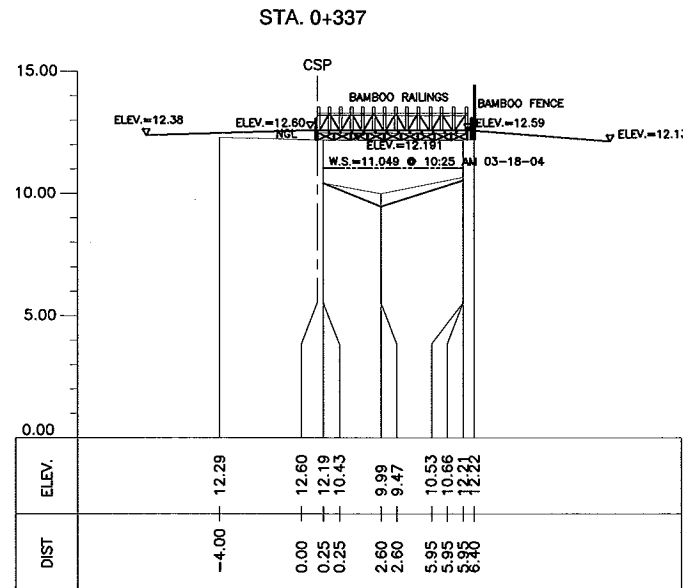
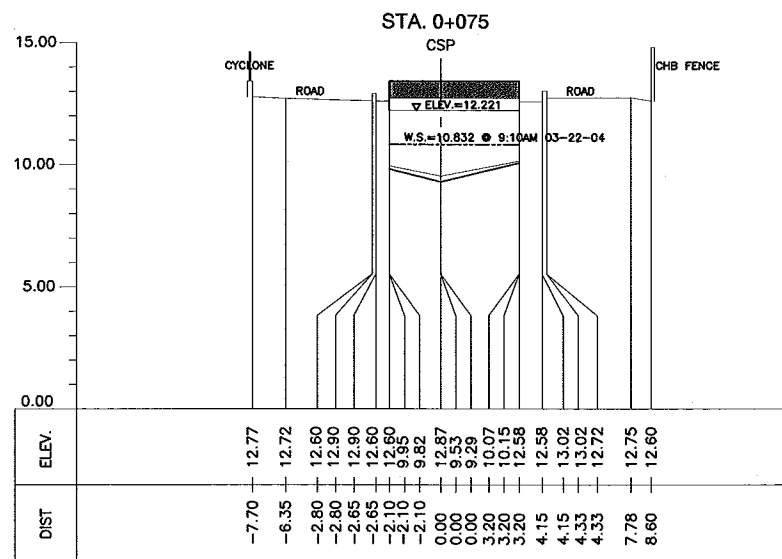
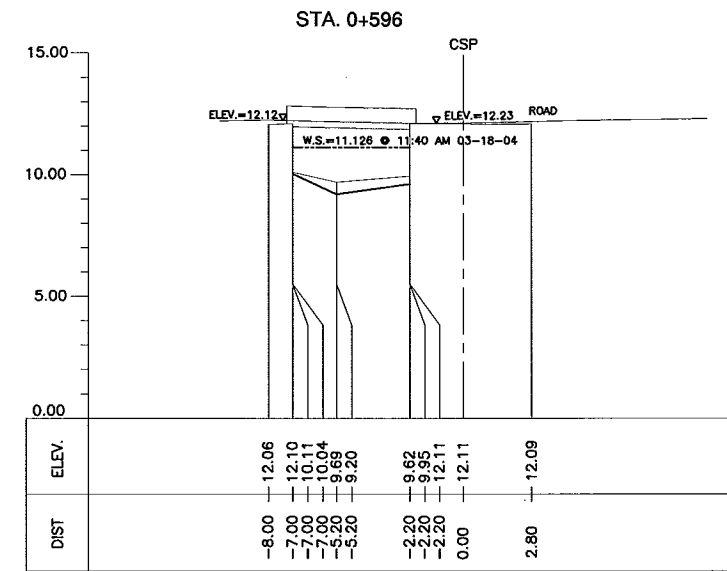
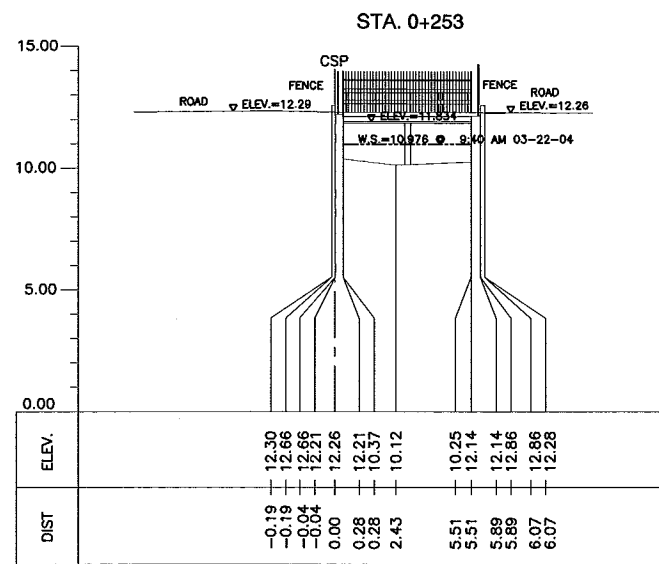
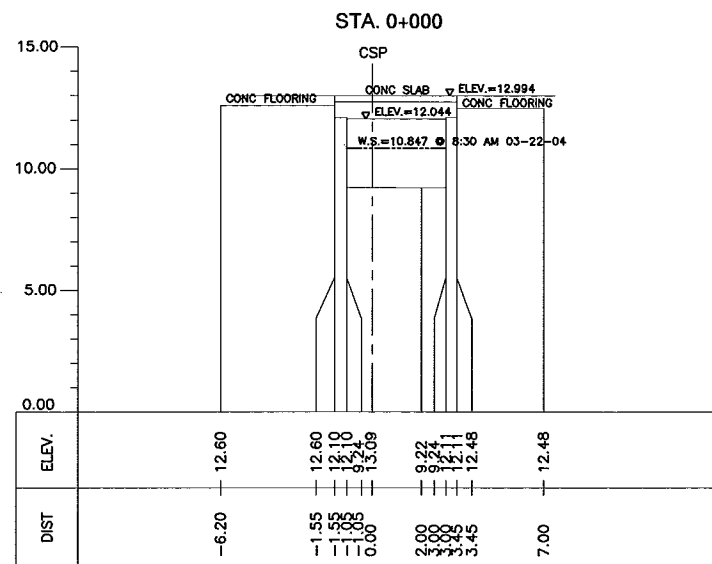
CL-19
01 01



- LEGEND:
- : RIGHT BANK
 - - - : LEFT BANK
 - - - : LOWEST RIVERBED
 - : BOX CULVERT
 - ┌ : BRIDGE
 - : REINFORCE CONCRETE PIPE
 - ▭ : CULVERT

1 LONGITUDINAL PROFILE
 LP-19 VER. = SCALE : A / HOR. = SCALE : B

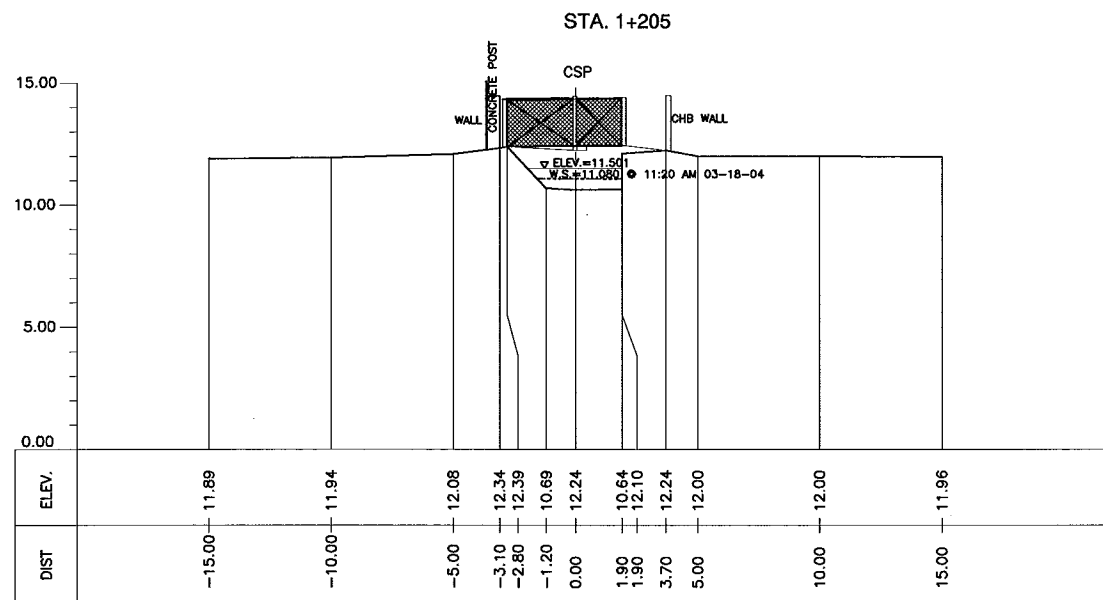




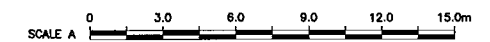
1 CROSS-SECTION
CS-19 SCALE : A



CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION ESTERO DE SAN ANTONIO ABAD (SE20) (STA. 0+000 ~ STA. 0+887)	SHT. NO CS-19 01 02
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1
CROSS-SECTION
 CS-19 SCALE : A



CONSULTANTS PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	REPUBLIC OF THE PHILIPPINES JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS METROPOLITAN MANILA DEVELOPMENT AUTHORITY	PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION ESTERO DE SAN ANTONIO ABAD (SE20) (STA. 1+205)	SHT. NO CS-19 02 02
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LIBERTAD CHANNEL (SE21)



REFERENCE POINTS:

STATION	EASTING	NORTHING
0-886	498039.241	1608384.154
0-351	498559.378	1608510.525
0+000	498900.806	1608593.073
0+191	498933.609	1608404.241
0+400	498966.095	1608197.894
0+583	498993.100	1608016.703
0+836	499020.627	1607774.482
0+881	499026.718	1607721.702
0+901	499029.202	1607702.230

CROSS-SECTION LOCATION

1
GL-20

LIBERTAD CHANNEL (SE21)
TOPOGRAPHIC MAP

SCALE : A

CONSULTANTS

PACIFIC CONSULTANTS INTERNATIONAL
IN ASSOCIATION WITH
 NIKKEN CONSULTANTS, INC.

REPUBLIC OF THE PHILIPPINES

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
FOR
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 METROPOLITAN MANILA DEVELOPMENT
AUTHORITY

PROJECT & LOCATION:

THE STUDY ON DRAINAGE IMPROVEMENT
IN THE CORE AREA OF METROPOLITAN MANILA

SHT. CONTENTS:

CROSS-SECTION LOCATION
LIBERTAD CHANNEL (SE21)
(STA. 0-881 - STA. 0+901)

SHT. NO

CL-20
01 02

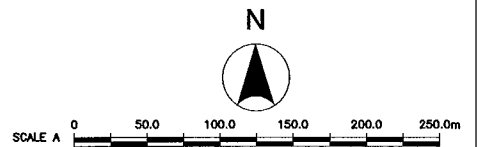


CROSS-SECTION LOCATION

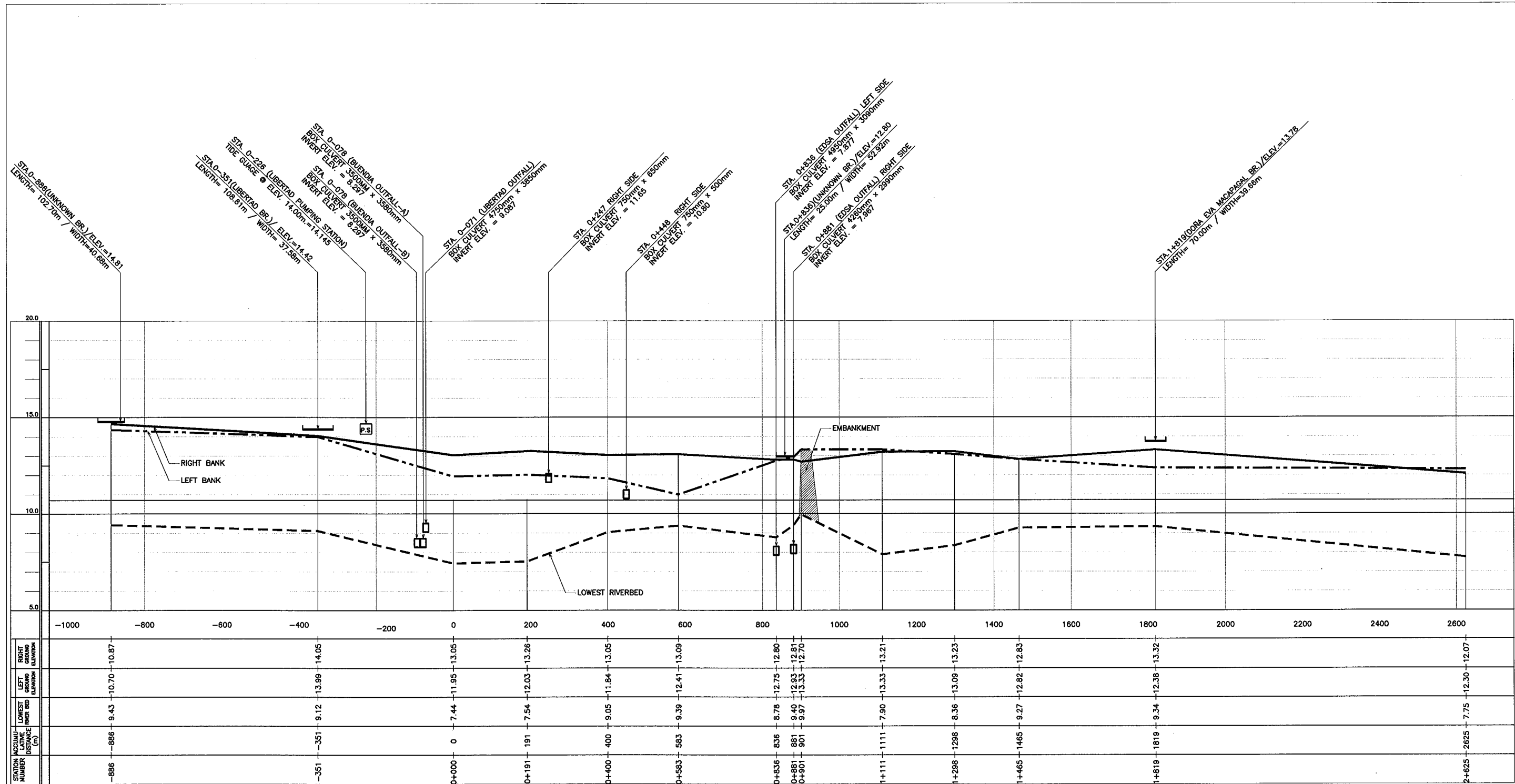
REFERENCE POINTS:

STATION	EASTING	NORTHING
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1+298	499073.558	1607305.142
1+465	499092.261	1607139.208
1+819	498755.001	1607105.955
2+625	497954.452	1607014.620

1
CL-20
LIBERTAD CHANNEL (SE21)
TOPOGRAPHIC MAP
SCALE : A

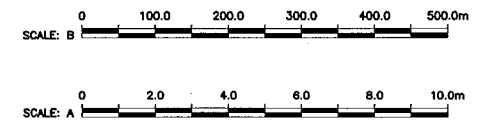


CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION LOCATION LIBERTAD CHANNEL (SE21) (STA. 1+111 ~ STA. 2+625)	SHT. NO CL-20 02 02
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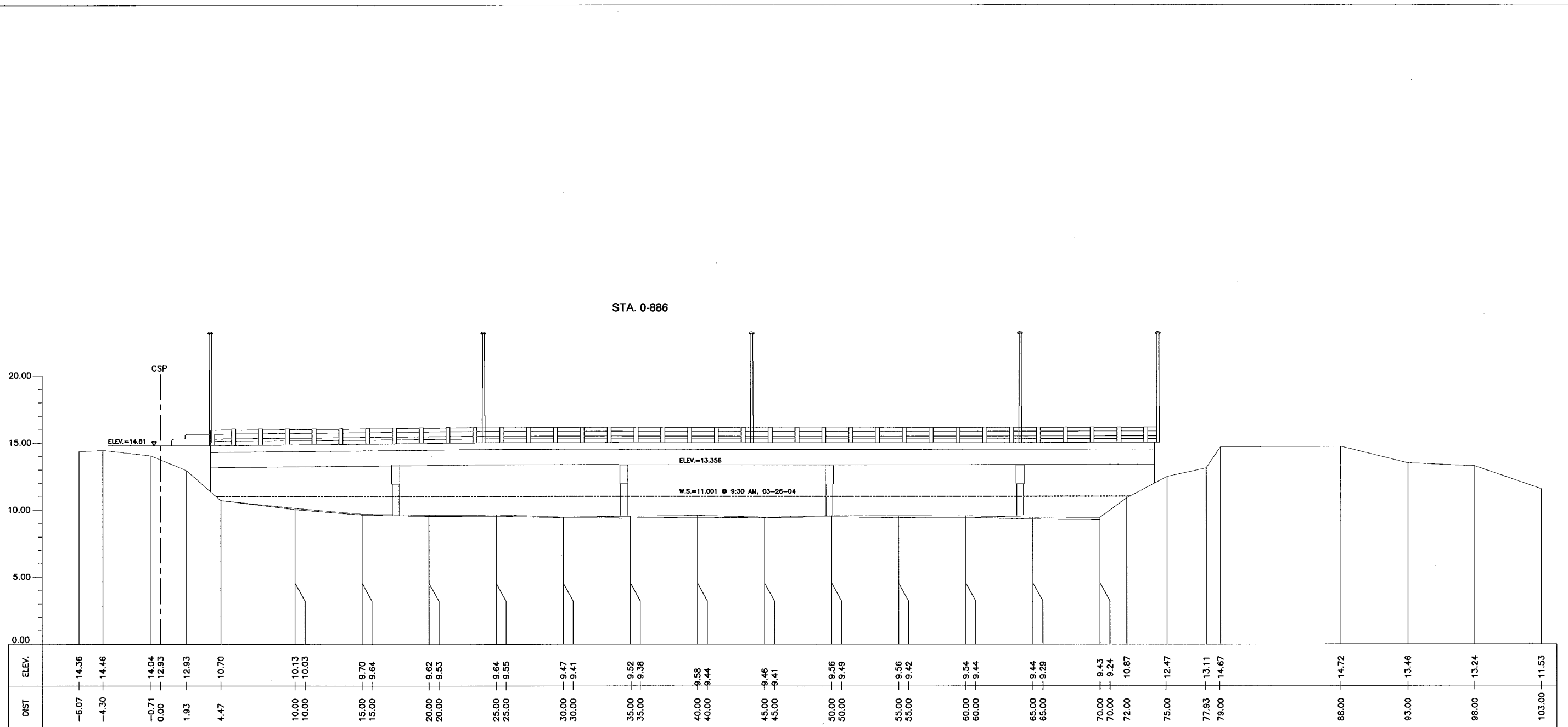


- LEGEND:
- : RIGHT BANK
 - : LEFT BANK
 - - - : LOWEST RIVERBED
 - : BOX CULVERT
 - ⌊ : BRIDGE
 - PS : PUMPING STATION

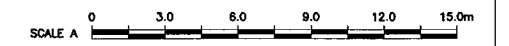
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LONGITUDINAL PROFILE
LP-20 VER. = SCALE : A / HOR. = SCALE : B



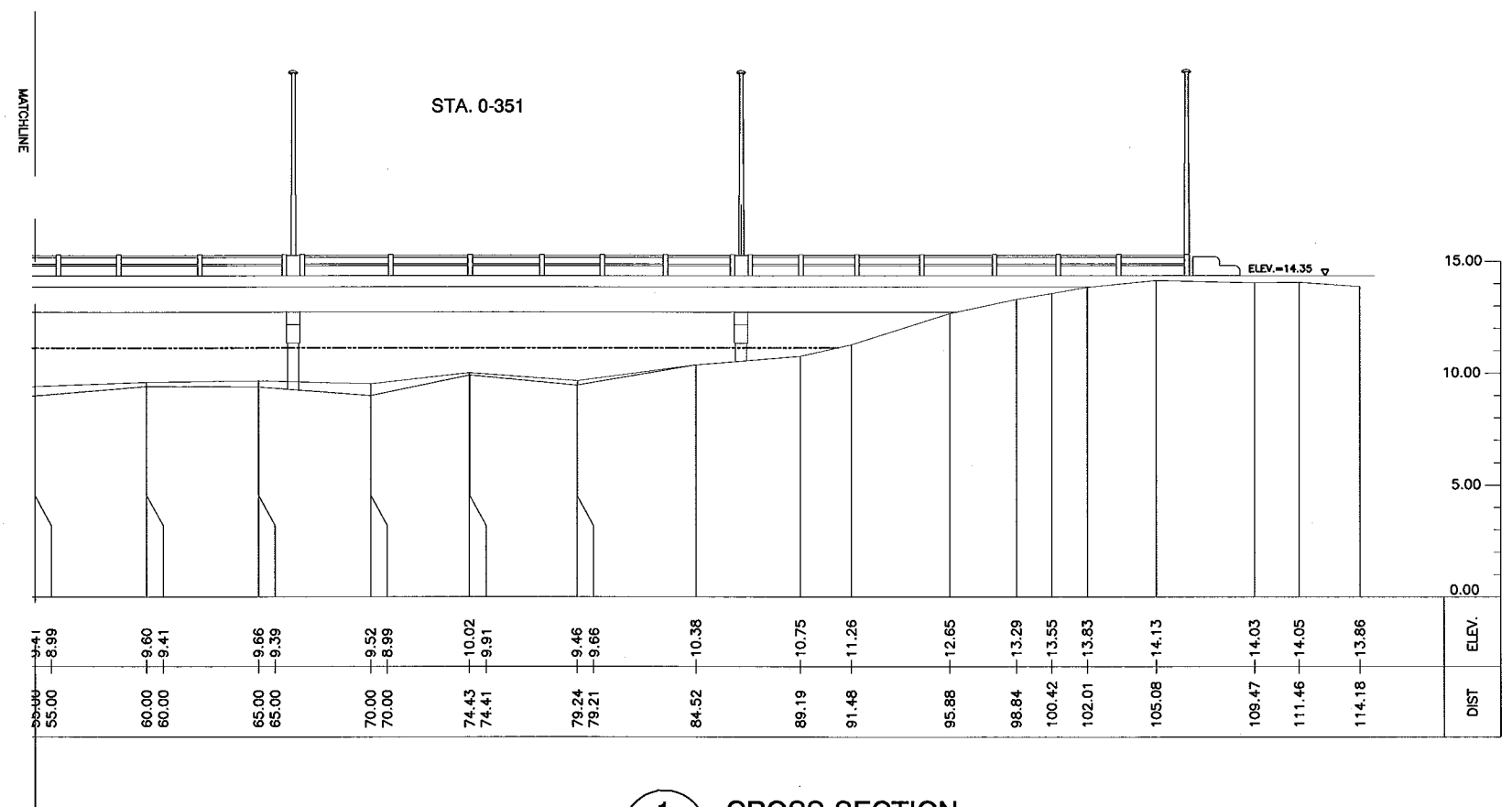
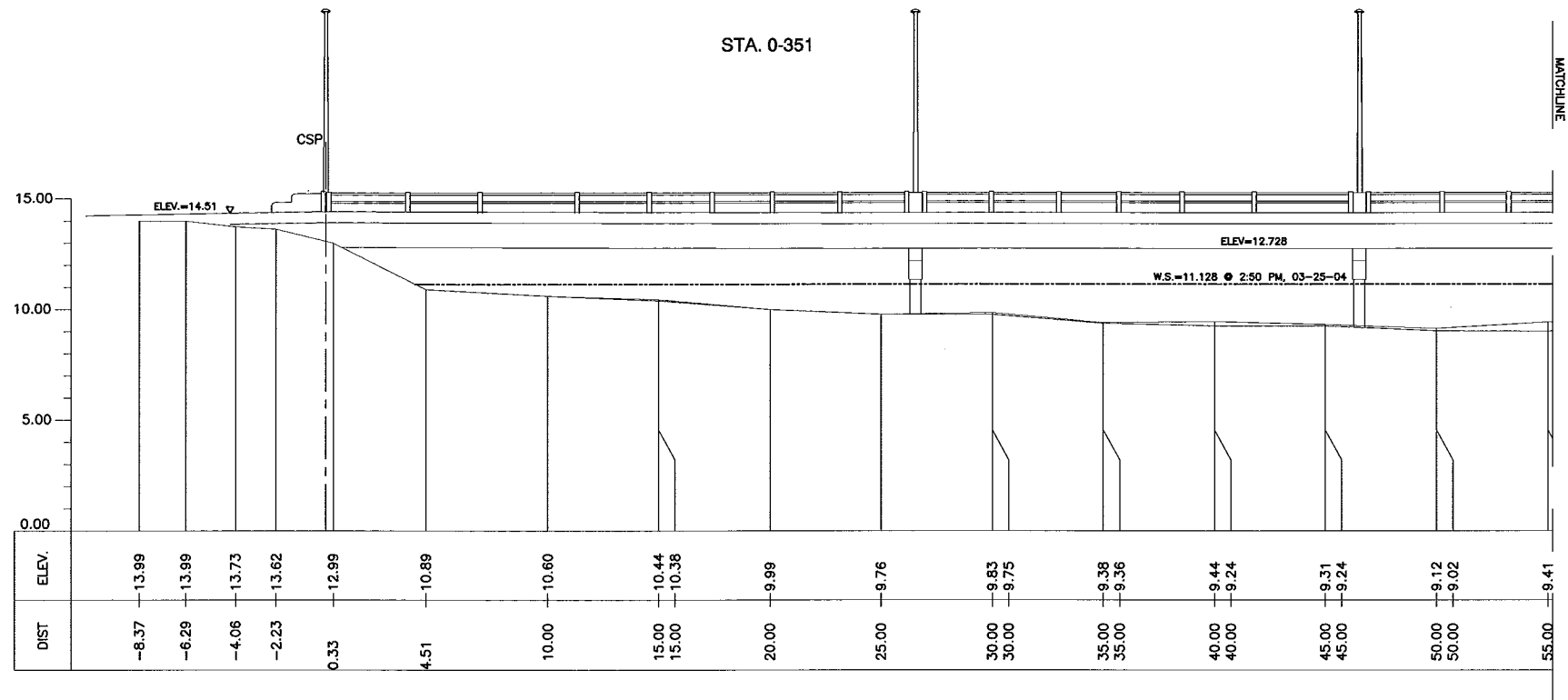
CONSULTANTS 	REPUBLIC OF THE PHILIPPINES 	PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: LONGITUDINAL PROFILE LIBERTAD CHANNEL (SE21) (STA. 0-886- STA. 2+625)	SHT. NO. <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="border: 1px solid black; border-radius: 50%; width: 15px; height: 15px; display: flex; align-items: center; justify-content: center;"> LP-20 </div> <div style="margin: 0 5px;">01</div> <div style="border: 1px solid black; border-radius: 50%; width: 15px; height: 15px; display: flex; align-items: center; justify-content: center;"> 01 </div> </div>
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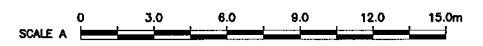
1 CROSS-SECTION
 CS-20 SCALE : A



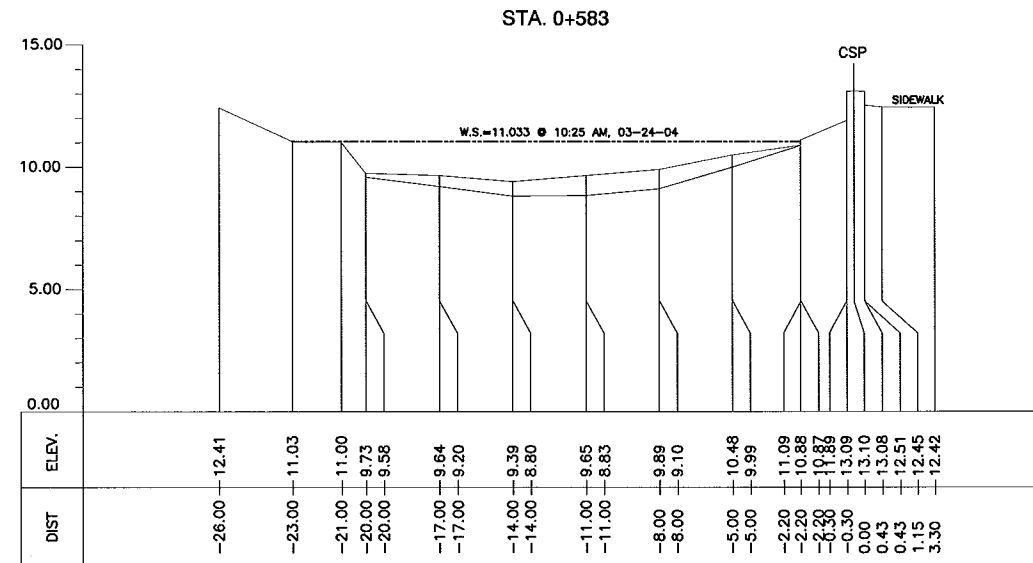
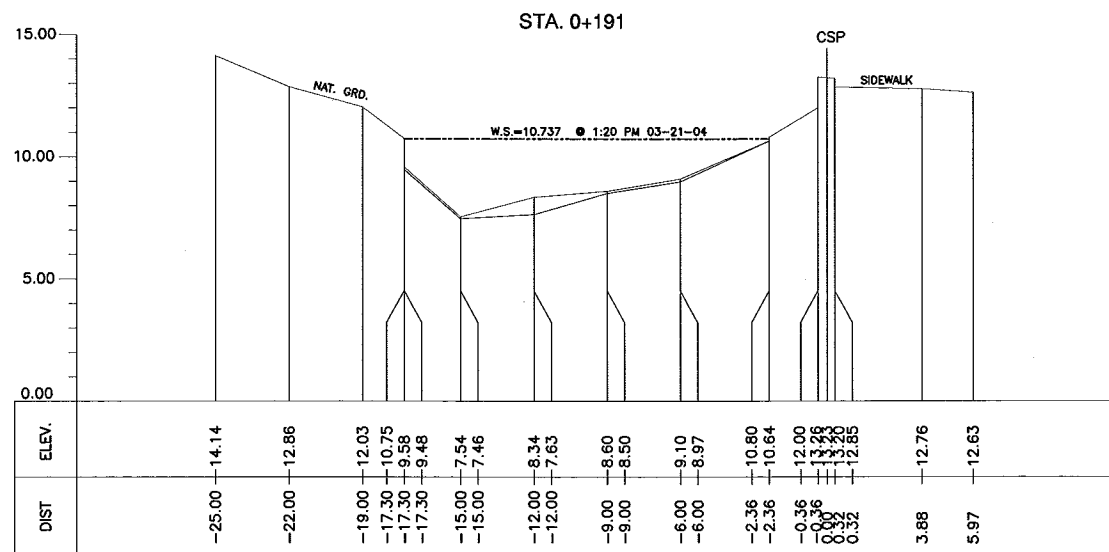
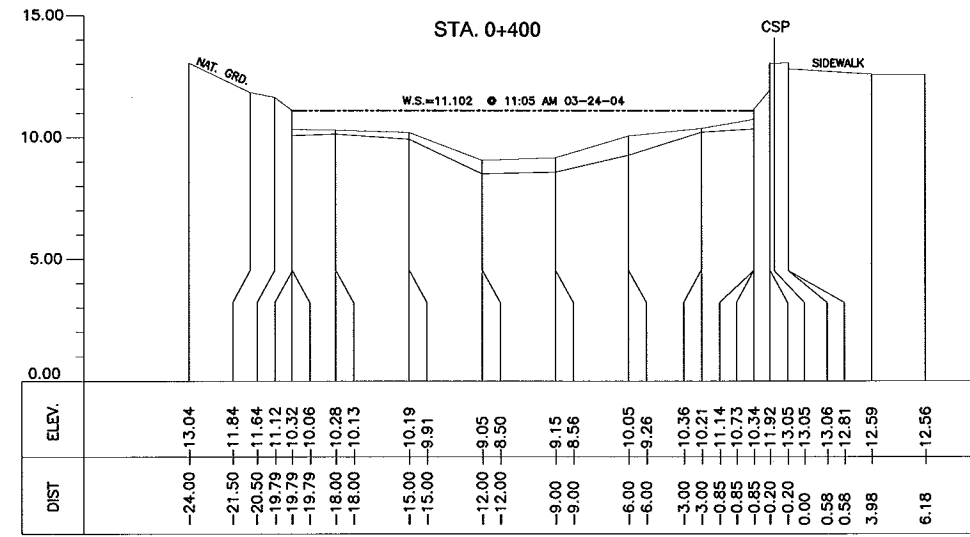
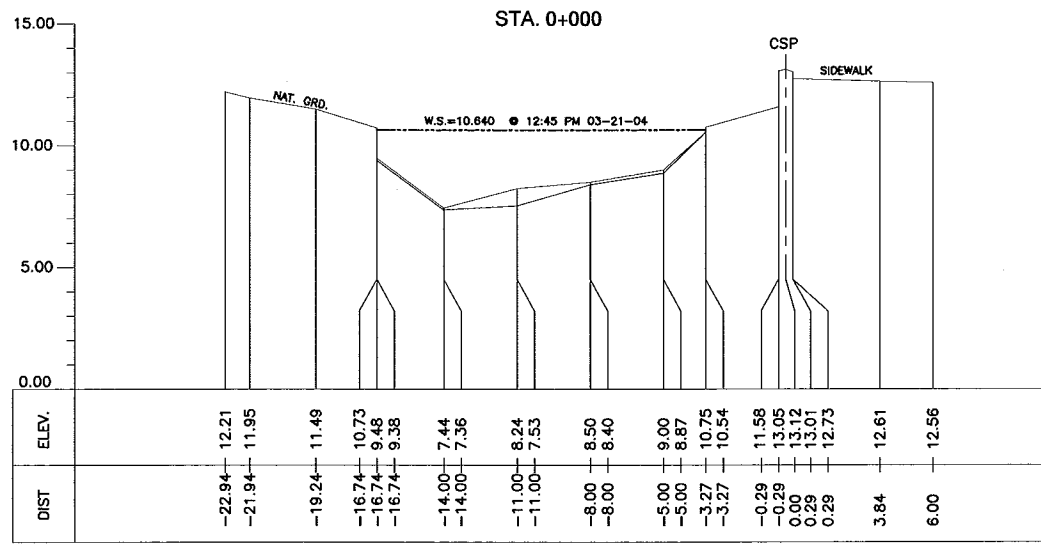
CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION LIBERTAD CHANNEL (SE21) (STA. 0-886)	SHT. NO CS-20 01 06
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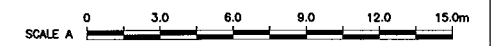
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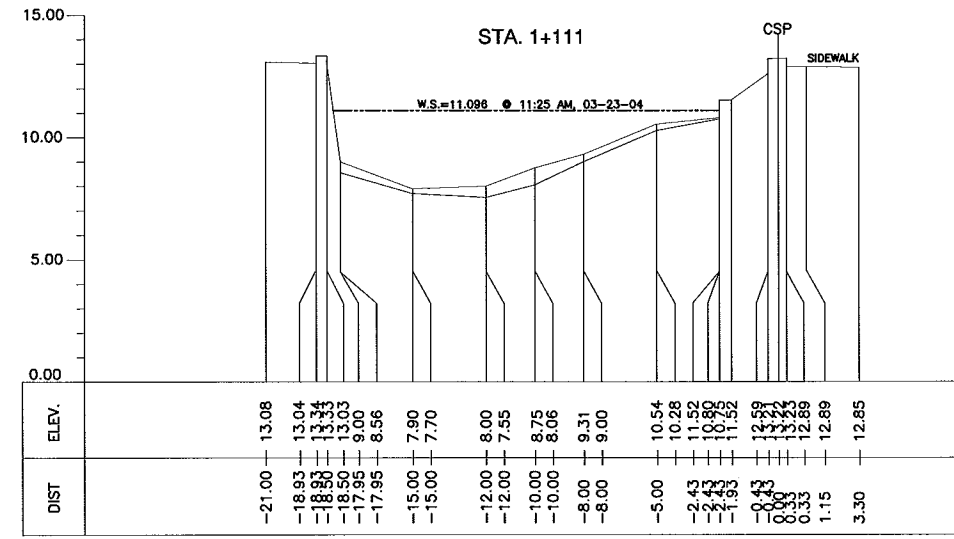
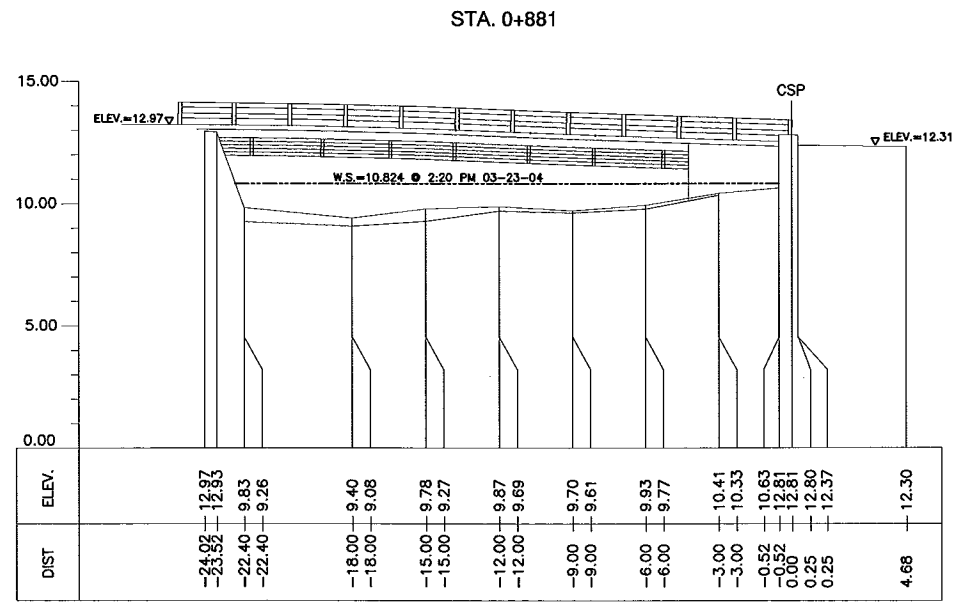
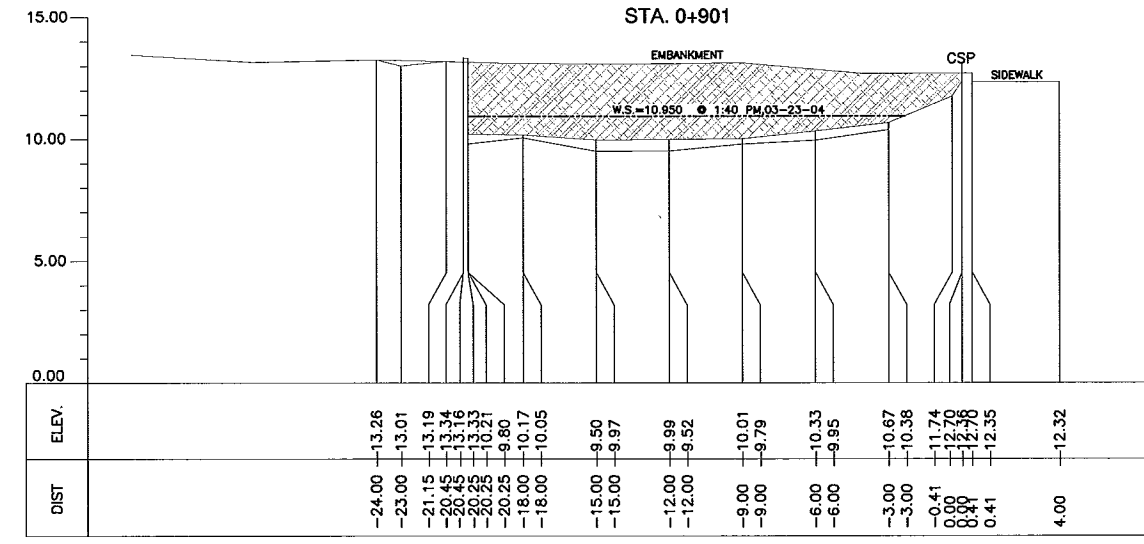
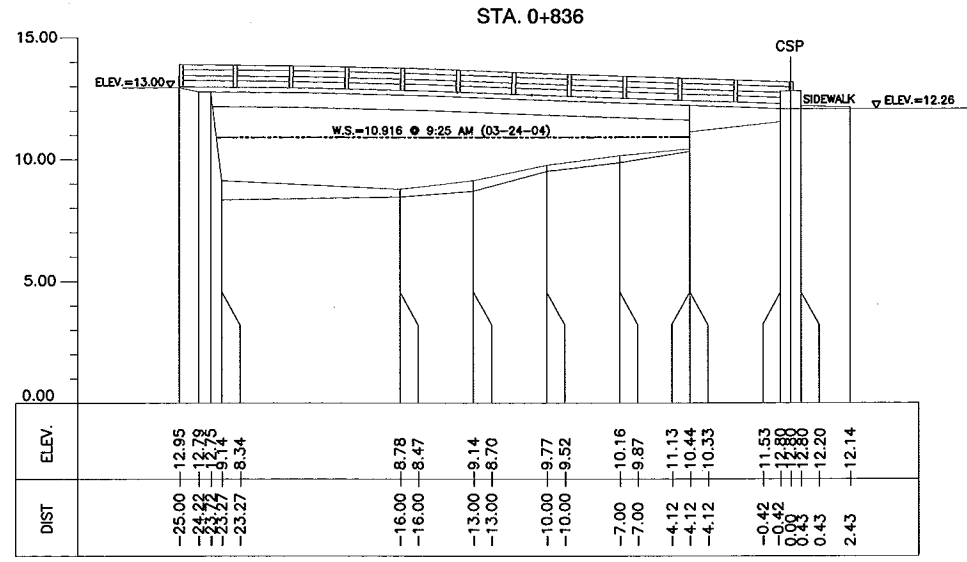
CONSULTANTS PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.		REPUBLIC OF THE PHILIPPINES JICA JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS METROPOLITAN MANILA DEVELOPMENT AUTHORITY		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION LIBERTAD CHANNEL (SE21) (STA. 0-351)	SHT. NO CS-20 02 06
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1 CROSS-SECTION
CS-20 SCALE : A

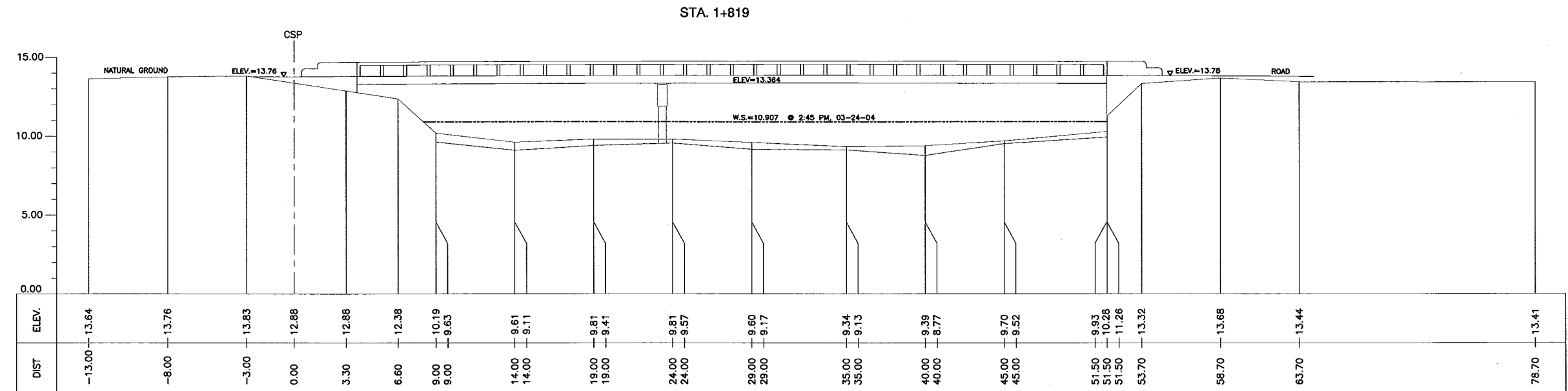
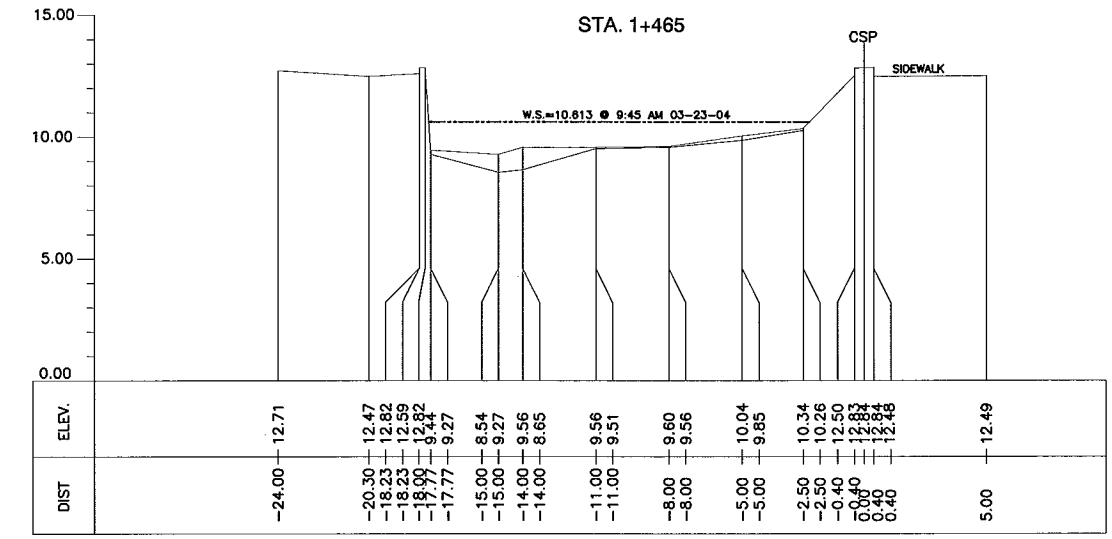
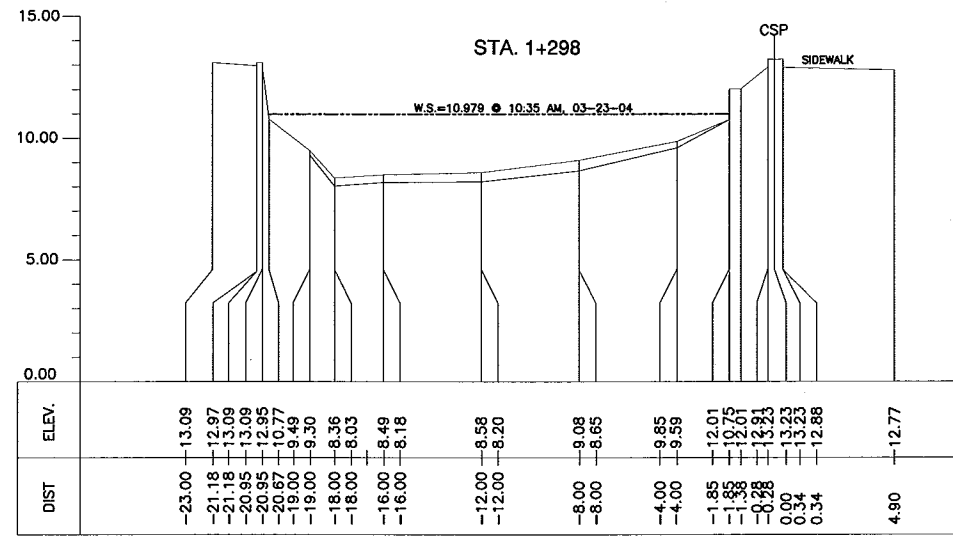


<p>CONSULTANTS</p>		<p>REPUBLIC OF THE PHILIPPINES</p>		<p>PROJECT & LOCATION:</p> <p>THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA</p>	<p>SHT. CONTENTS:</p> <p>CROSS-SECTION LIBERTAD CHANNEL (SE21) (STA. 0+000 - STA. 0+583)</p>	<p>SHT. NO</p> <p>CS-20 03 06</p>
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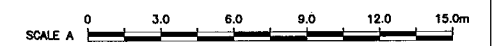


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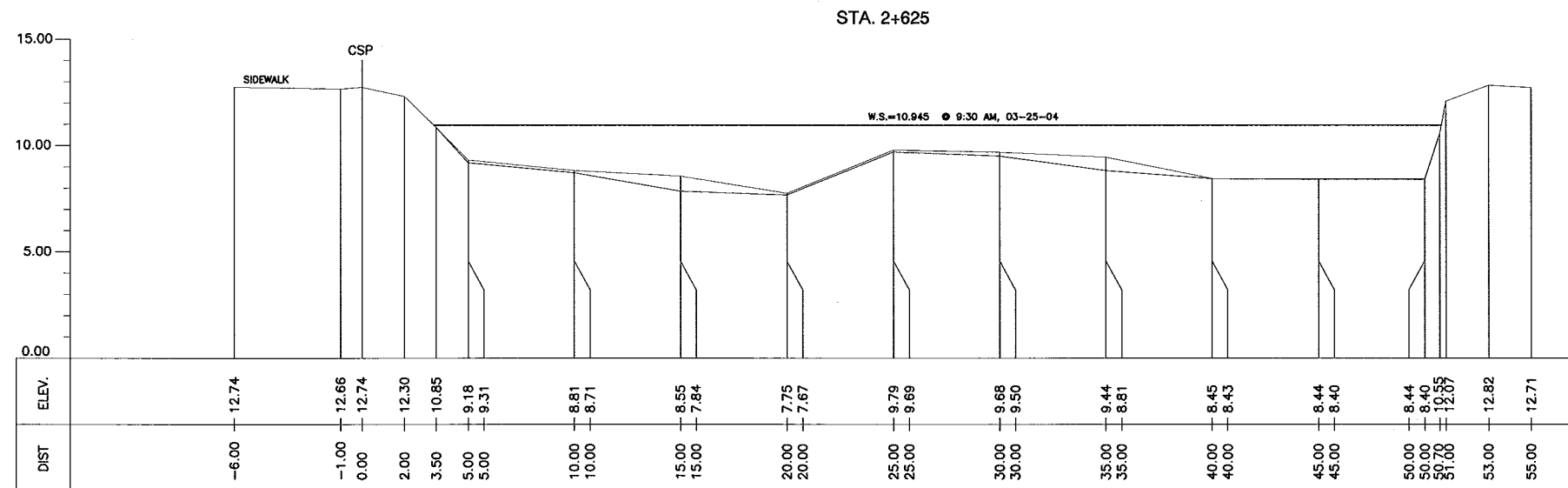




1 CROSS-SECTION
CS-20 SCALE : A



CONSULTANTS 		REPUBLIC OF THE PHILIPPINES 		PROJECT & LOCATION: THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA	SHT. CONTENTS: CROSS-SECTION LIBERTAD CHANNEL (SE21) (STA. 1+298 ~ STA. 1+819)	SHT. NO
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1 CROSS-SECTION
CS-20 SCALE : A



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		PROJECT & LOCATION:	SHT. CONTENTS:	SHT. NO
PACIFIC CONSULTANTS INTERNATIONAL IN ASSOCIATION WITH NIKKEN CONSULTANTS, INC.	JAPAN INTERNATIONAL COOPERATION AGENCY FOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	METROPOLITAN MANILA DEVELOPMENT AUTHORITY	THE STUDY ON DRAINAGE IMPROVEMENT IN THE CORE AREA OF METROPOLITAN MANILA		CROSS-SECTION LIBERTAD CHANNEL (SE21) (STA. 2+625)	CS-20 06 06