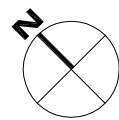
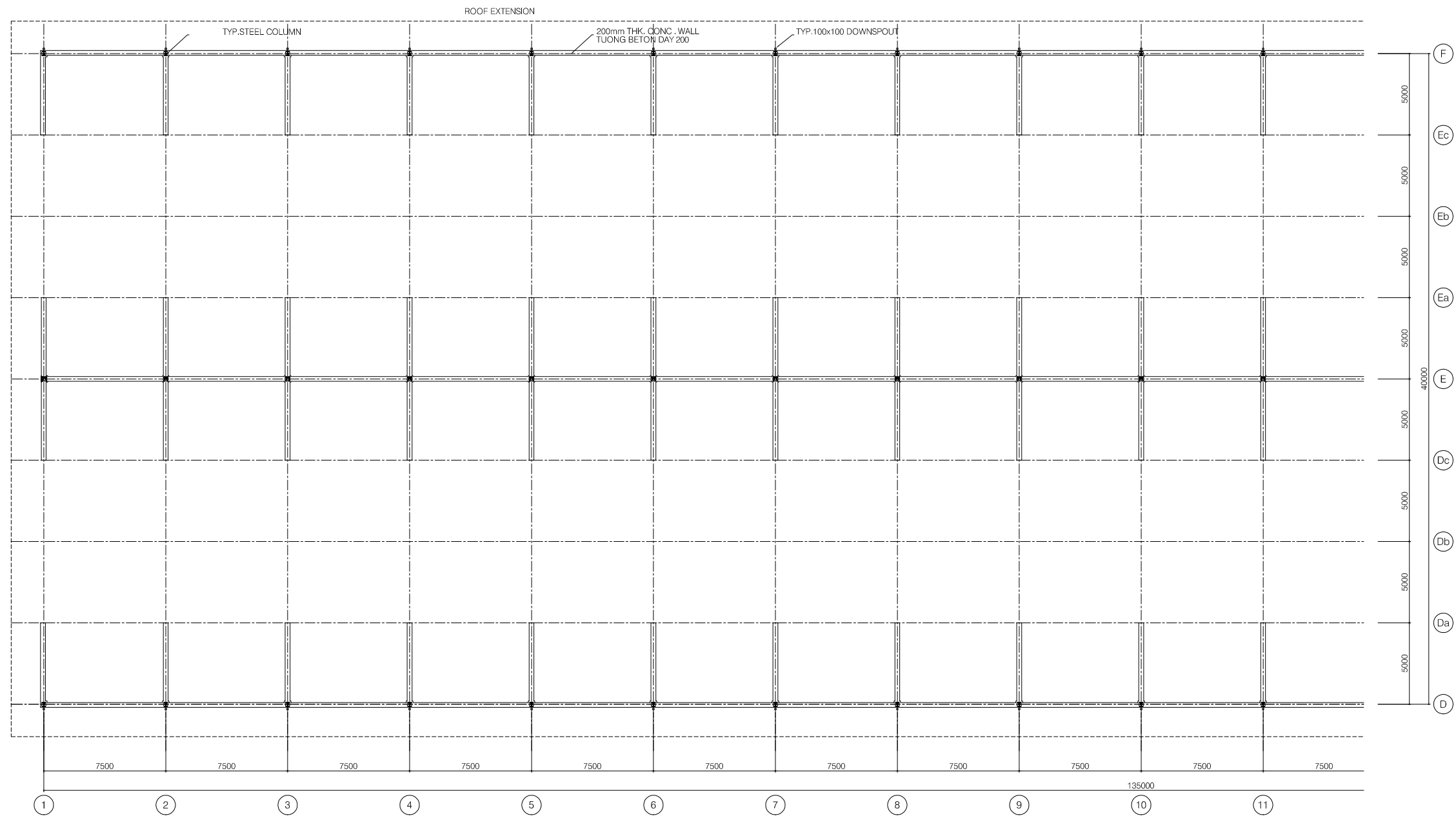
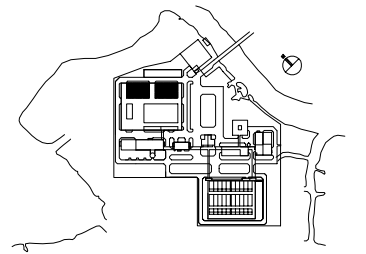


Second fermentation tank



PARTIAL FLOOR PLAN (1/2)



NO.	DATE	DESCRIPTIONS	BY	APPRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
PARTIAL FLOOR PLAN (1/2)

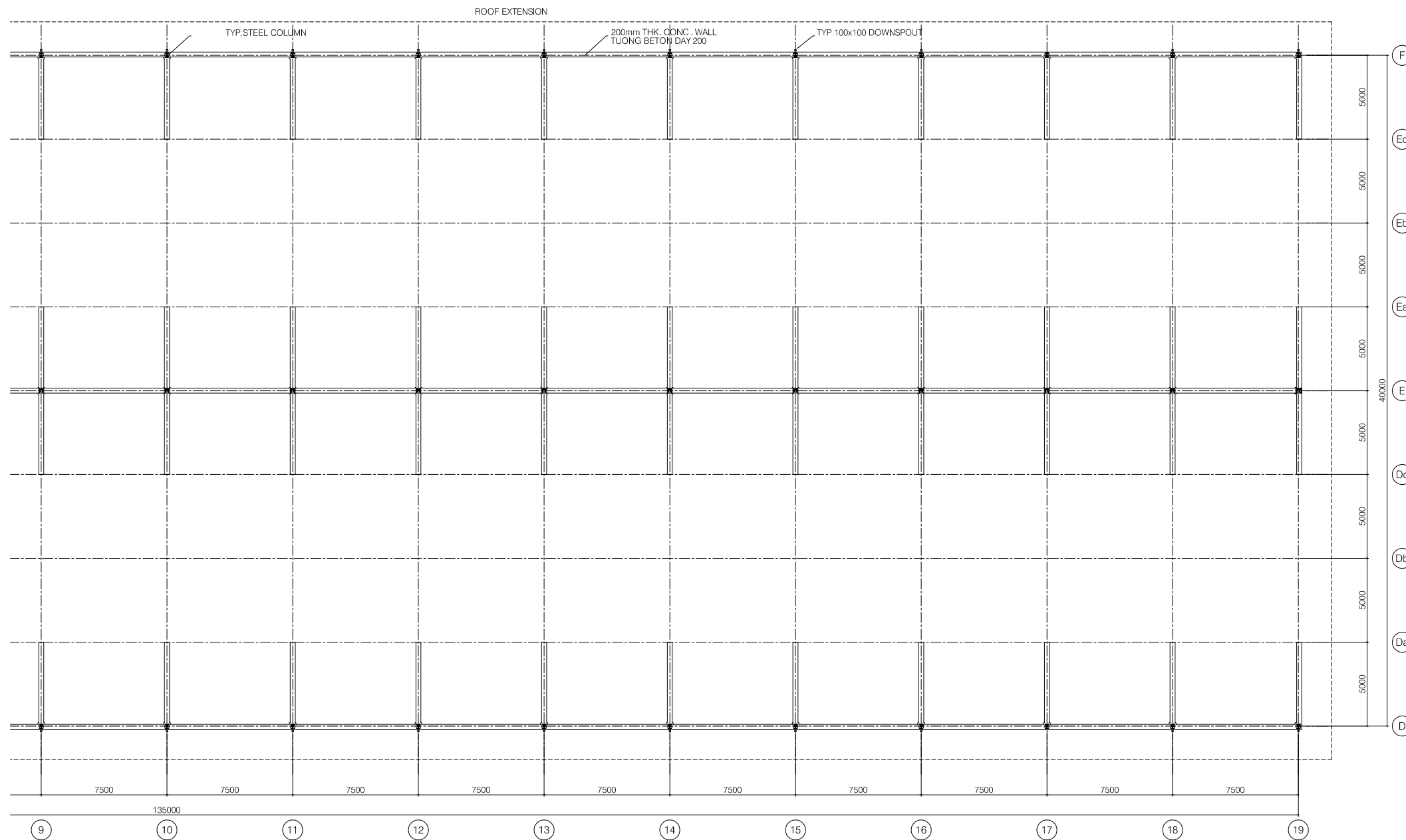
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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

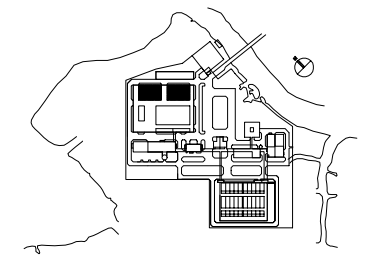
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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DATE : JUNE 2001	DWG. No. PE-WWTP-305-21
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PARTIAL FLOOR PLAN (2/2)



NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
PARTIAL FLOOR PLAN (2/2)

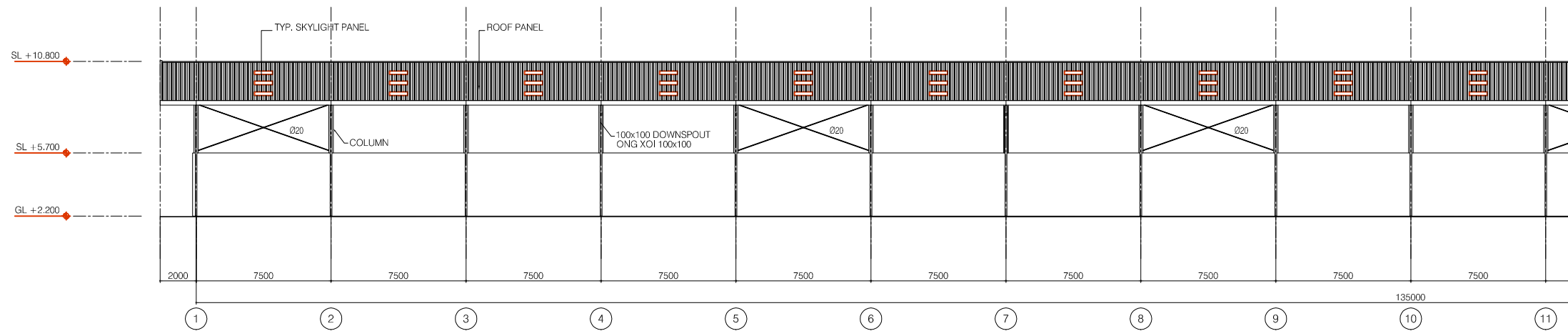
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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

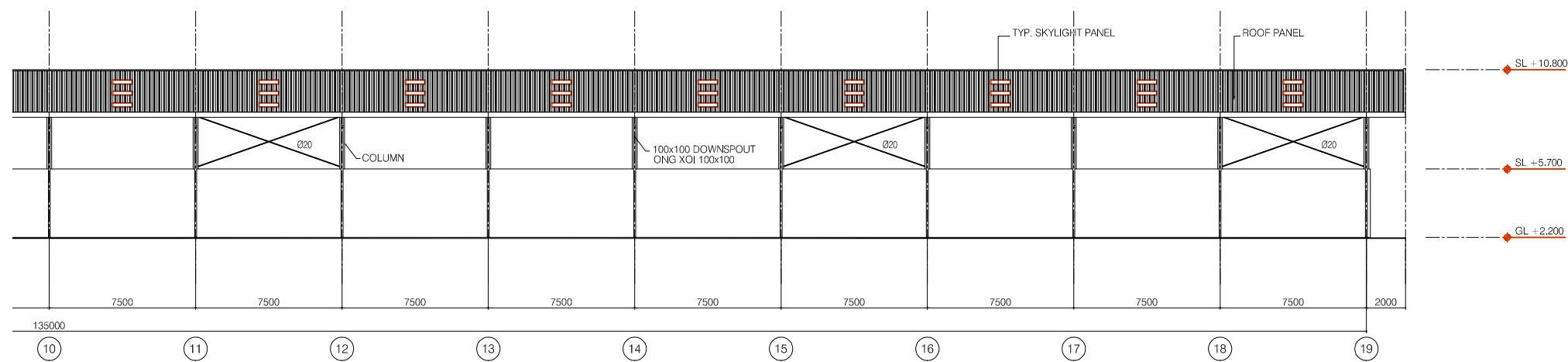
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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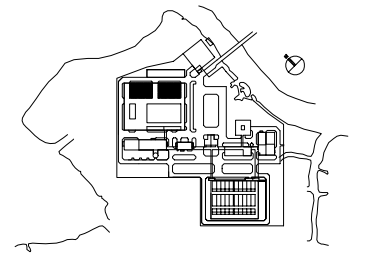
DATE : JUNE 2001 DWG. No. PE-WWTP-305-22



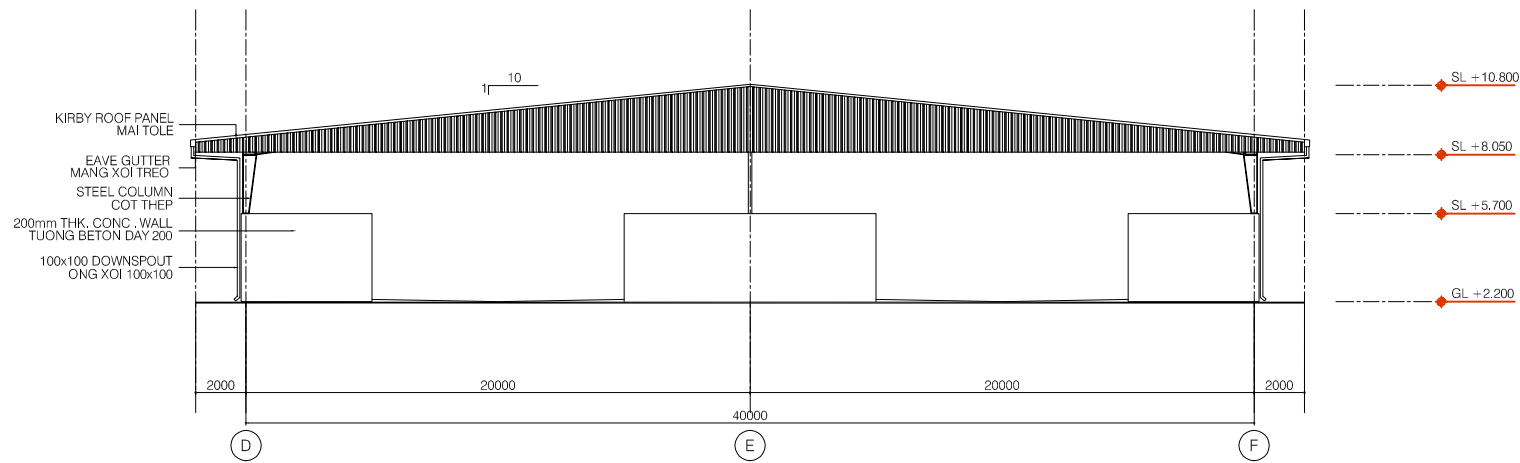
ELEVATION LINE A (1/2)



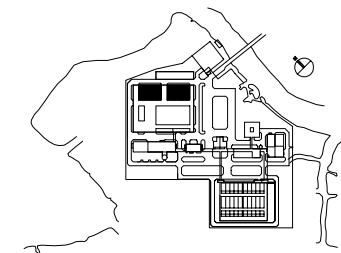
ELEVATION LINE A (2/2)



NO.	DATE	DESCRIPTIONS	BY	APPRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT SECOND FERMENTATION TANK PARTIAL ELEVATION LINE A				
SCALE : 1/150				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KIKUTA HIROSHI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE-WWTP-305-23		



ELEVATION LINE 1&19



NO.	DATE	DESCRIPTIONS	BY	APRO.


REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
ELEVATION LINE 1

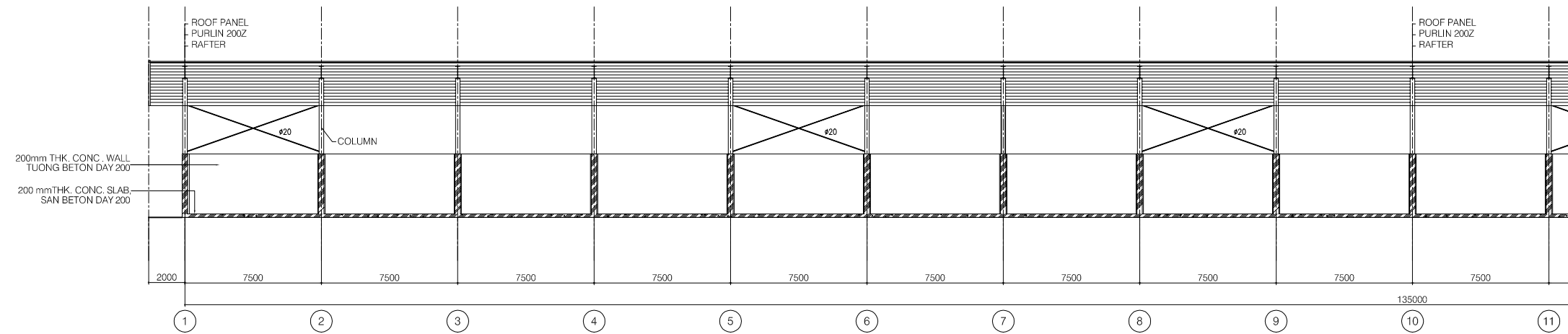
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 JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

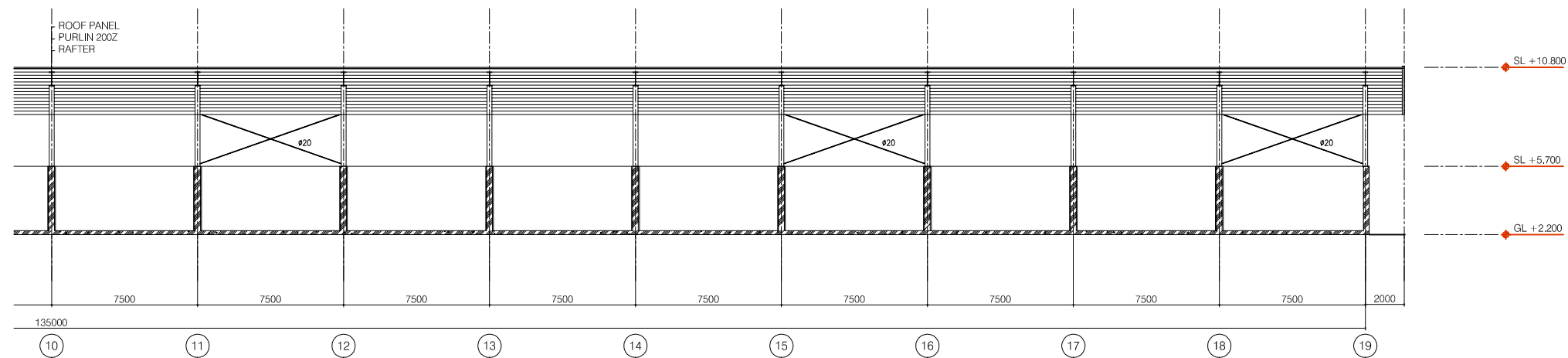
 PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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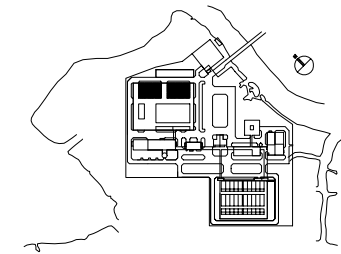
DATE : JUNE 2001 DWG. No. PE-WWTP-305-24



PARTIAL LONGITUDINAL SECTION (1/2)



PARTIAL LONGITUDINAL SECTION (2/2)



NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
LONGITUDINAL SECTION

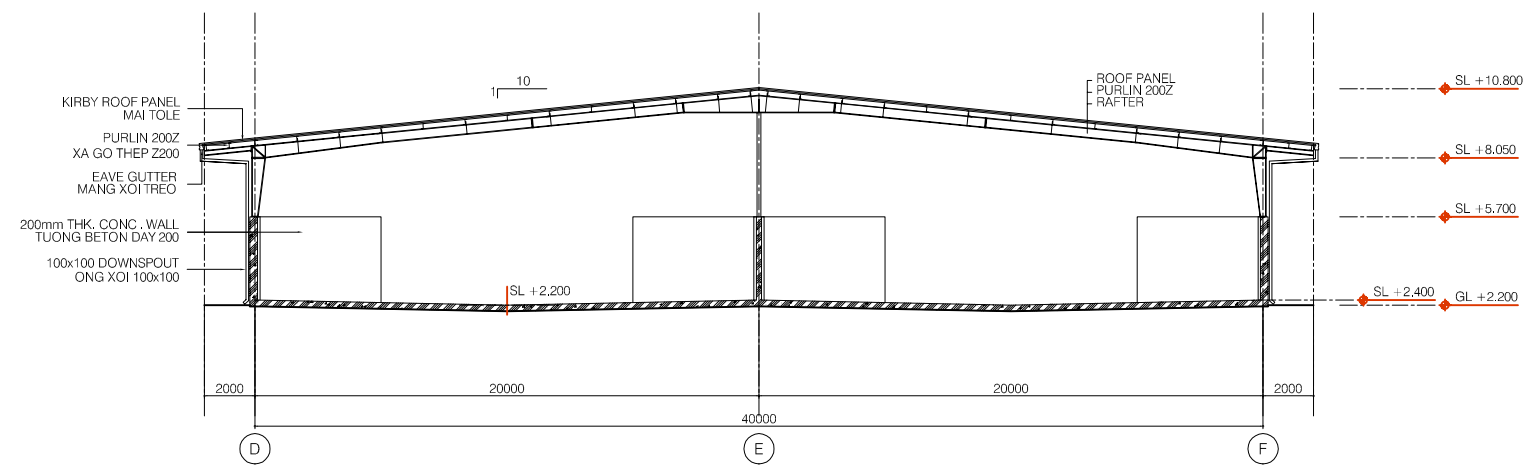
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JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

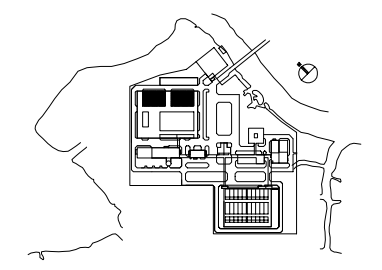
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PE-WWTP-305-25



CROSS SECTION



NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
CROSS SECTION

SCALE : 1/150

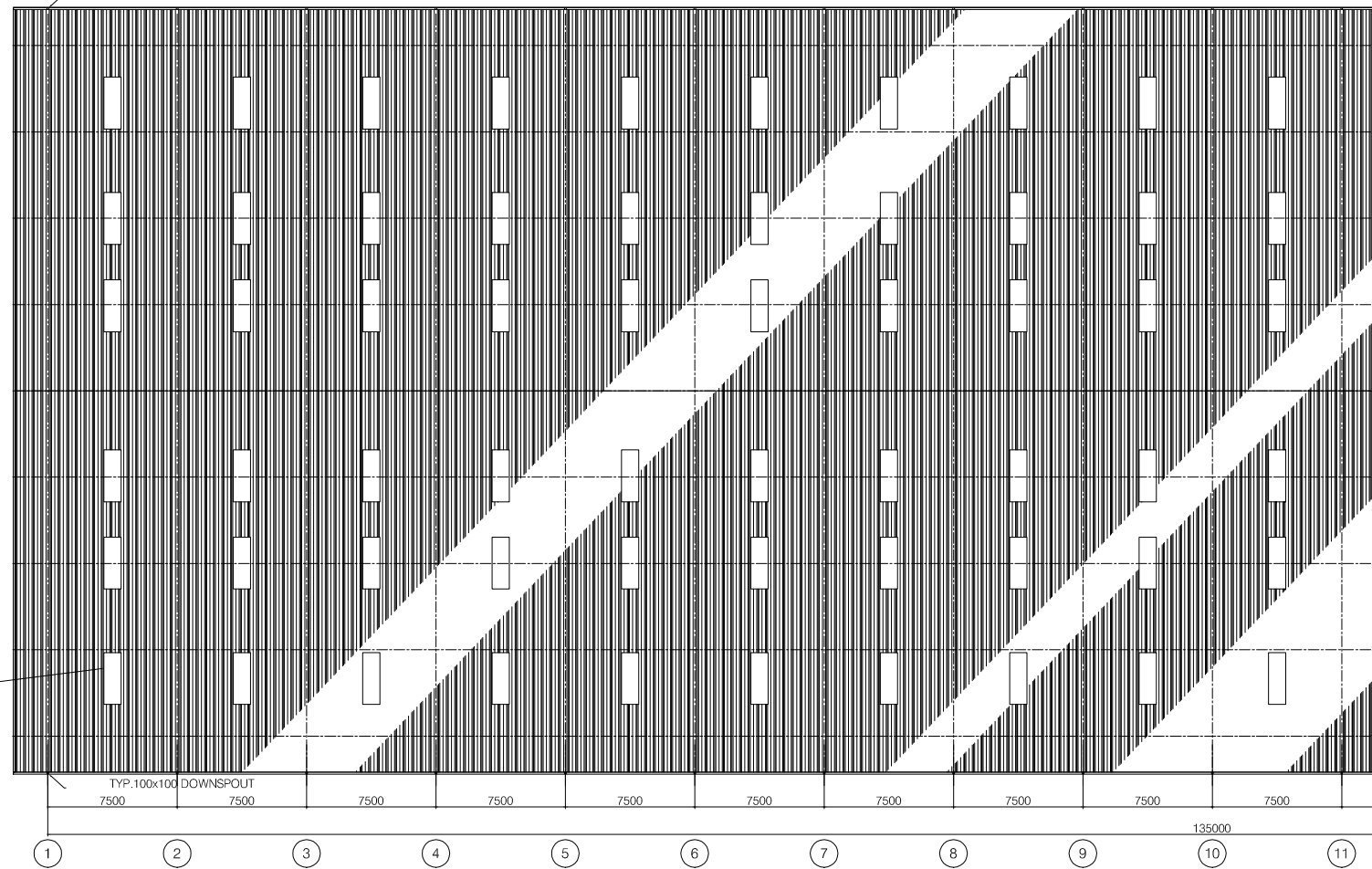
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

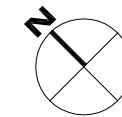
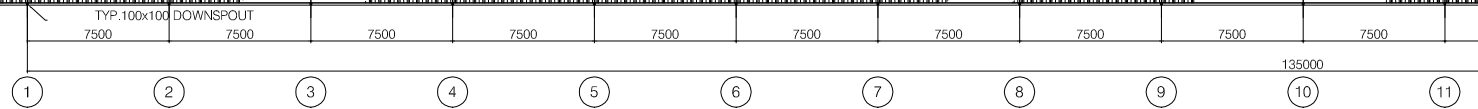
DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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DATE : JUNE 2001	DWG. No. PE-WWTP-305-26
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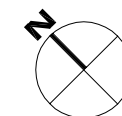
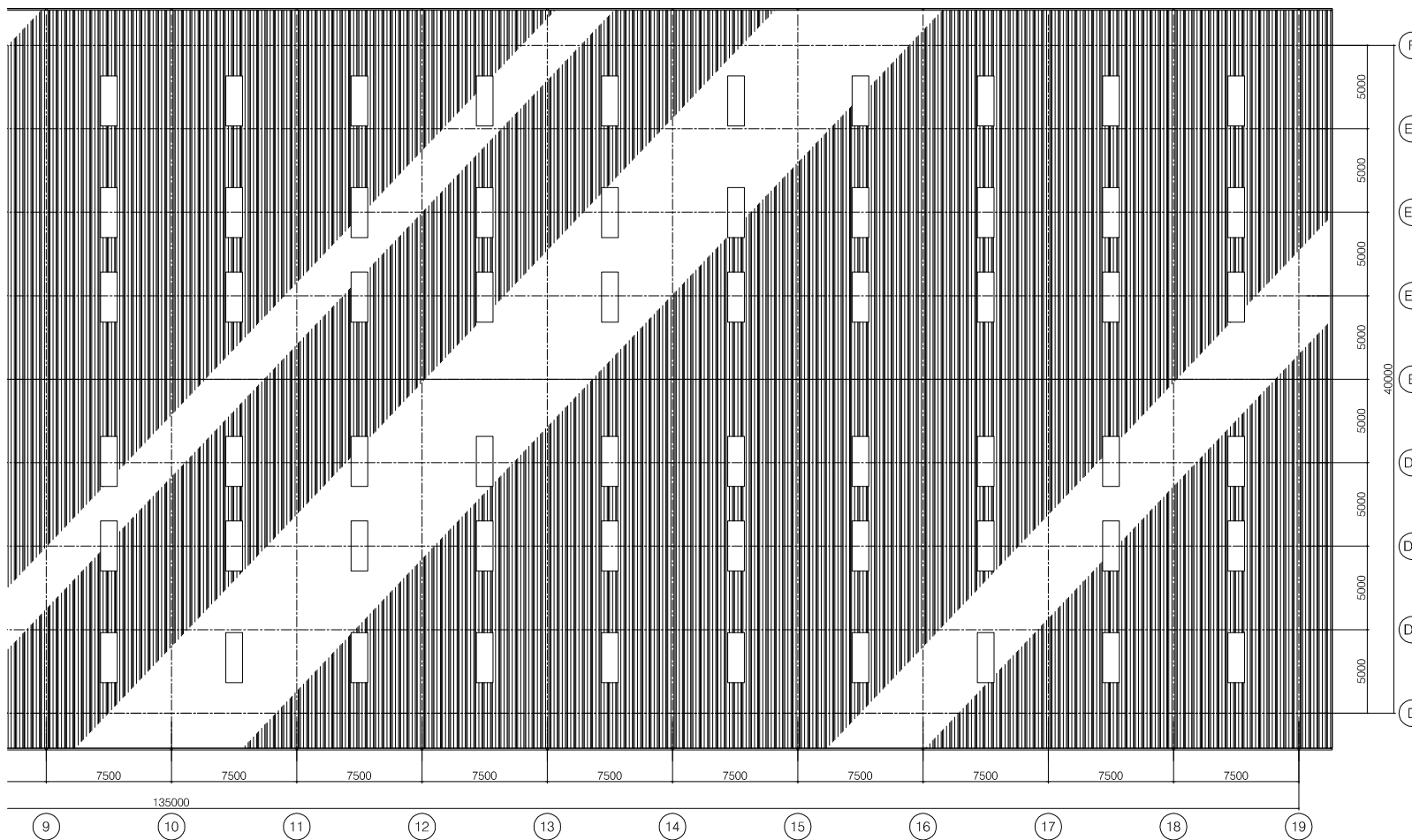
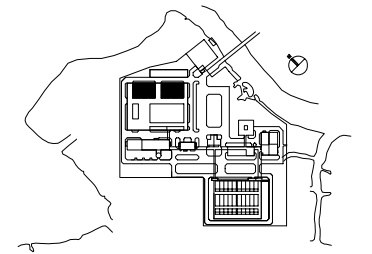
TYP. 100x100 DOWNSPOUT



TYP. SKYLIGHT PANEL
108NOS. (6NOS./BAY)

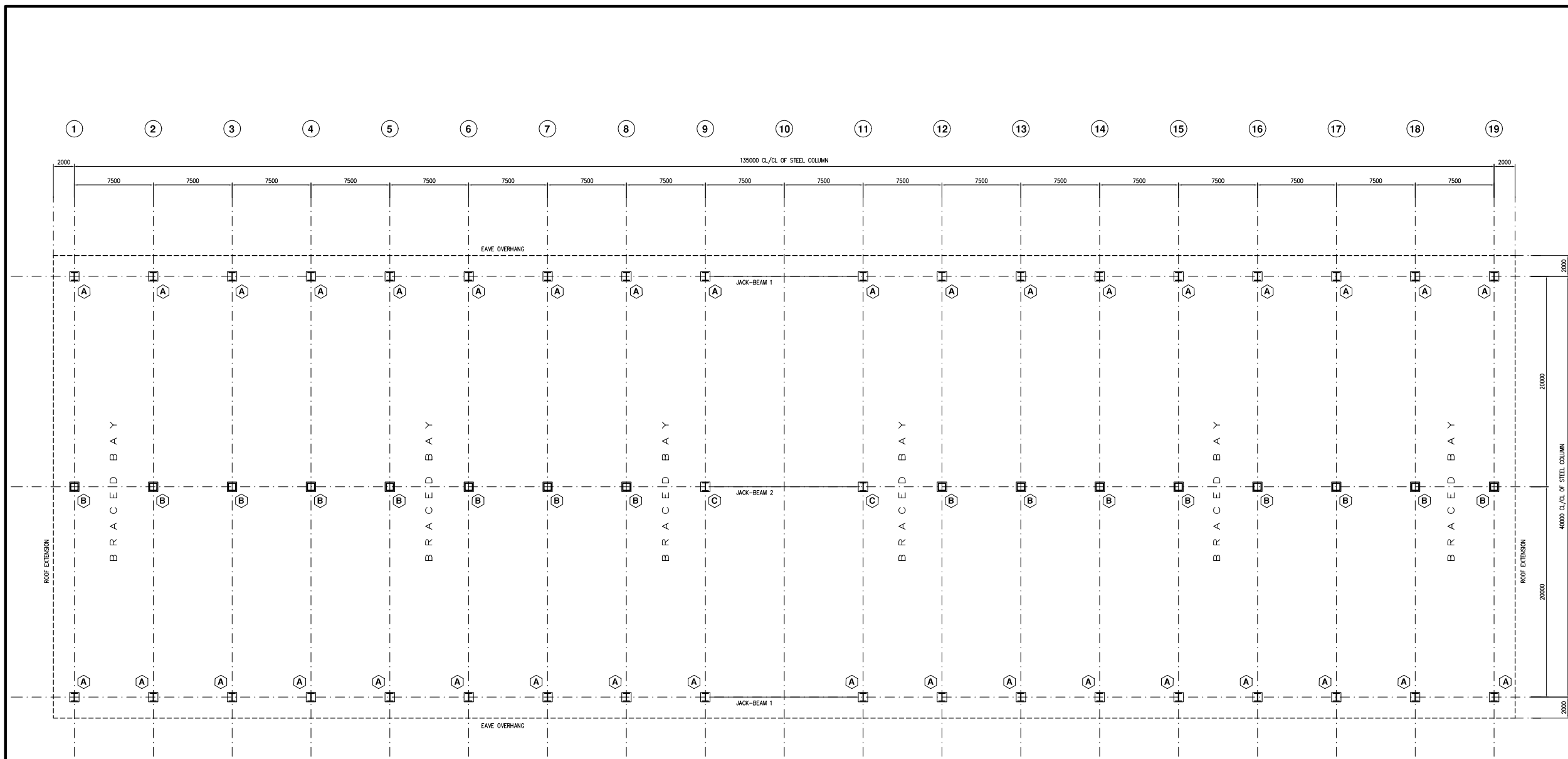


PARTIAL ROOF PLAN (1/2)

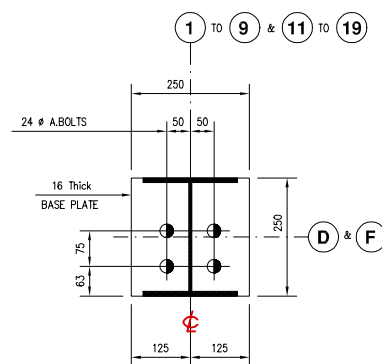


PARTIAL ROOF PLAN (2/2)

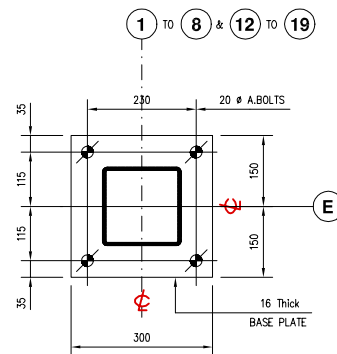
NO.	DATE	DESCRIPTIONS	BY	APPRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT SECOND FERMENTATION TANK ROOF PLAN				
SCALE : 1/200				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		PACIFIC CONSULTANTS INTERNATIONAL		
DESIGNED KIKUTA HIROSHI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE-WWTP-305-27		



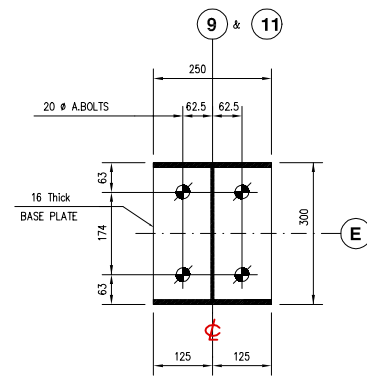
PRIMARY STEEL PLAN



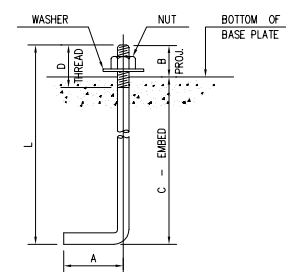
DETAIL - A



DETAIL - B



DETAIL - C

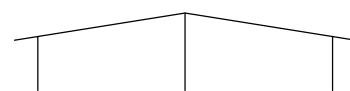


ANCHOR BOLT SETTING

NOTE 1
 - ALL REACTIONS SHOWN ARE AT TOP OF R.C COLUMNS/WALL
 - PLEASE MAKE SURE THAT ALL CONCRETE COLUMNS ARE DESIGNED FOR HORIZONTAL AS WELL AS VERTICAL REACTIONS FROM FRAMES AT TOP OF CONCRETE COLUMN.

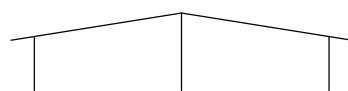
ANCHOR BOLT SCHEDULE -- BOLTS BY:--

SYMBOL	QUANTITY	DIAMETER	L	A	B	C	D
⊕	--	16	400	100	65	335	75
⊗	--	20	500	120	65	435	75
⊙	--	24	650	150	65	585	75
⊚	--	32	950	200	75	875	100
+	--	M10x90 Expansion Bolts (HILTI HSA STUD TYPE - New Version)					



MAIN FRAME REACTIONS AT GL- 1 TO 8 @ 12 TO 19

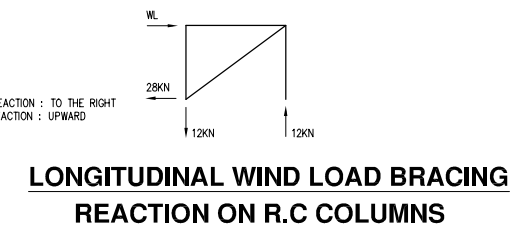
	HORZ. KN	VERT. KN	MOMT. KN-M	LOAD COMBINATION
LEFT EXT. COLUMN	69.10	71.75	0.00	CASE 1--1.0DL + 1.0LL
	-57.39	-62.96	0.00	CASE 2--1.0DL + 1.0WLL
LEFT EXT. COLUMN	-69.10	71.75	0.00	CASE 1--1.0DL + 1.0LL
	49.67	-46.70	0.00	CASE 2--1.0DL + 1.0WLL
INT. COLUMN - 1	0.00	99.06	0.00	CASE 1--1.0DL + 1.0LL
	0.00	-76.91	0.00	CASE 2--1.0DL + 1.0WLL



MAIN FRAME REACTIONS AT GL- 1 TO 9 & 11

	HORZ. KN	VERT. KN	MOMT. KN-M	LOAD COMBINATION
LEFT EXT. COLUMN	70.73	100.92	0.00	CASE 1--1.0DL + 1.0LL
	-58.73	-87.06	0.00	CASE 2--1.0DL + 1.0WLL
LEFT EXT. COLUMN	-70.73	100.92	0.00	CASE 1--1.0DL + 1.0LL
	51.01	-70.80	0.00	CASE 2--1.0DL + 1.0WLL
INT. COLUMN - 1	0.00	167.45	0.00	CASE 1--1.0DL + 1.0LL
	0.00	-124.15	0.00	CASE 2--1.0DL + 1.0WLL

SIGN CONVENTIONS :
 POSITIVE HORIZ. REACTION : TO THE RIGHT
 POSITIVE VERT. REACTION : UPWARD



TYPICAL BUILT-UP SECTION DESIGNATION SYSTEM

Eg.:-- Size 200 x 10 x 5 @ 400
 Flanges = 200mm Wide x 10 mm thick.
 Web = 5 mm thick.
 Depth of Web = 400 mm.

Designation	Depth	Width
WBx10	200	100
WBx18	208	133
WBx24	200	165
WBx31	203	203
W12x14	302	100
W12x22	311	100
W14x82	363	257

Designation	Depth	Width
C8x11.5	203	57
C10x15.3	254	66
C12x20.7	305	75
C15x33.9	381	86
C20x75	200	75
C30x100	300	100

DESIGN LOADS :
 DL = 0.1KN/M² + SELF WEIGHT OF STRUCTURE FOR FRAME
 LL = 0.57KN/M²
 WIND SPEED = 31.0M/SEC.

DESIGN CRITERIA :
 - METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA)
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 - AMERICAN IRON AND STEEL INSTITUTE (AISI)
 - AMERICAN WELDING SOCIETY (AWS)

- ALL DIMENSIONS ARE IN MILLIMETER
 - DO NOT SCALE DRAWING
 - THIS DRAWING FOR PROPOSAL ONLY
 - NOT FOR CONSTRUCTION

- ALL STEEL COLUMNS SIT ON TOP OF R.C. WALLS AT LEVEL +5700

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
 HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT PROJECT
 IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
 WASTEWATER TREATMENT PLANT
 SECOND FERMENTATION TANK
 STEEL COLUMN PLAN &
 COLUMN DETAILS

SCALE : N.T.S

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI
 CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE-WWTP-305-28

TYPICAL BUILT-UP SECTION DESIGNATION SYSTEM

Eg.: Size 200 x 10 x 5 @ 400
 Flanges = 200mm Wide x 10 mm thick.
 Web = 5 mm thick.
 Depth of Web = 400 mm.

Designation	Depth	Width
WBx10	200	100
WBx18	208	133
WBx24	200	165
WBx31	203	203
W12x14	302	100
W12x22	311	100
W14x22	363	257

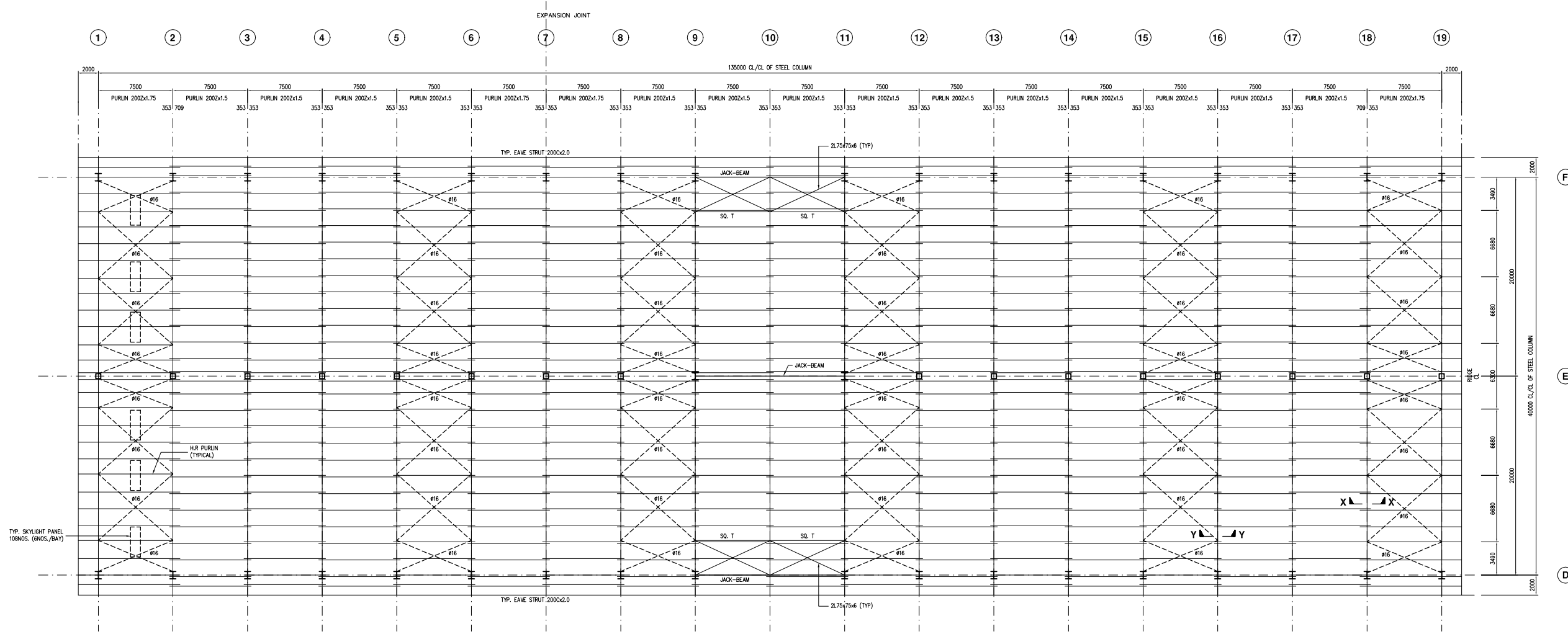
Designation	Depth	Width
C8x11.5	203	57
C10x15.3	254	66
C12x20.7	305	75
C15x33.9	381	86
C20x75	200	75
C30x100	300	100

DESIGN LOADS :
 DL = 0.1KN/M² + SELF WEIGHT OF STRUCTURE FOR FRAME
 LL = 0.57KN/M²
 WIND SPEED = 31.0M/SEC.

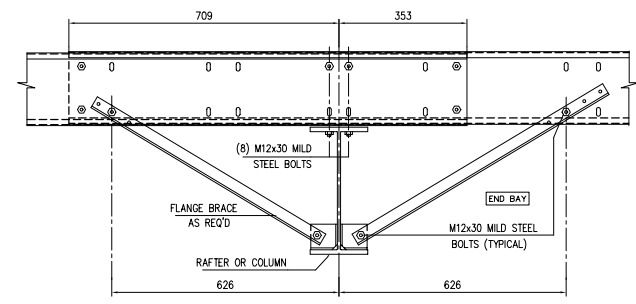
DESIGN CRITERIA :
 - METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA)
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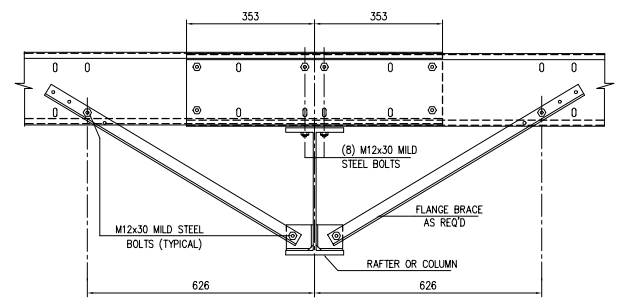
- ALL STEEL COLUMNS SIT ON TOP OF R.C. WALLS AT LEVEL +5700



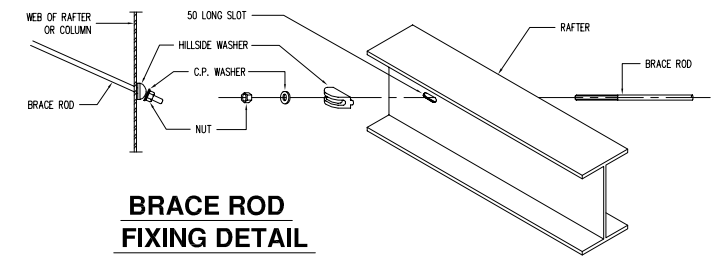
PROOF FRAMING PLAN



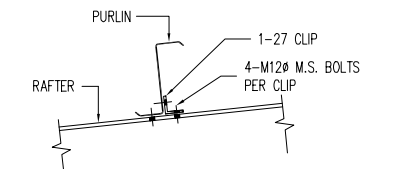
SECTION X-X



SECTION Y-Y



BRACE ROD FIXING DETAIL



PURLIN CONNECTION DETAIL

NOTE :
 - SQ. T : T6x10x188" - W14 - M16 & 12PL. @ END.
 - 2L75x75x6 - W12 - M14 & 10mm GUS. @ EACH END.

ALL HIGH STRENGTH BOLTS SHALL HAVE 2 HIGH STRENGTH WASHERS AND ONE HIGH STRENGTH NUT, AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM A325 BOLT SPECIFICATIONS.

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
 HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT PROJECT
 IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
 WASTEWATER TREATMENT PLANT
 SECOND FERMENATION TANK
 ROOF FRAMING PLAN &
 ROOF DETAILS

SCALE : N.T.S

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

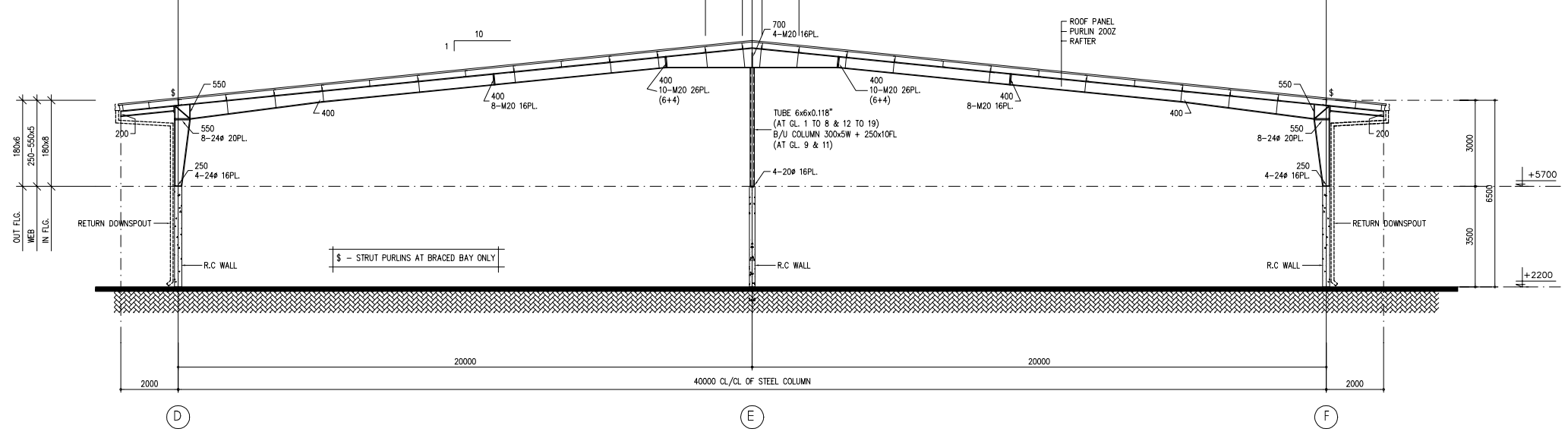
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
 KIKUTA HIROSHI

CHECKED
 KONDO MASAMI

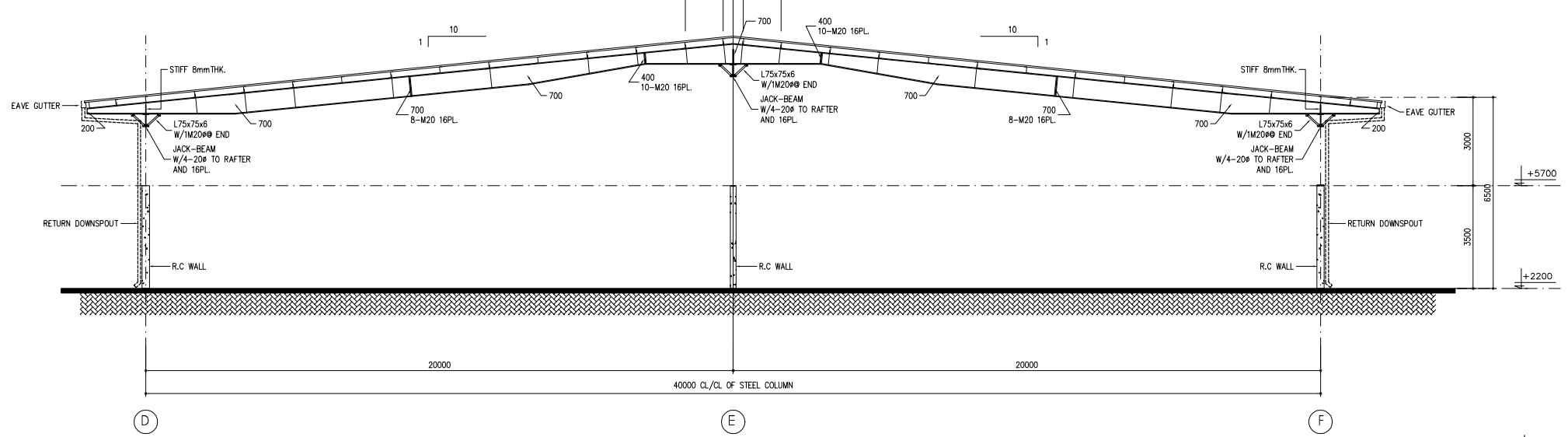
DATE : JUNE 2001 DWG. No. PE-WWTP-305-29

LENGTH	5000	6000	3000	3000	3000	3000	3000	3000	6000	5000
OUT FLG.	180x8	180x6	180x6	180x8	180x8	180x8	180x8	180x6	180x6	180x8
WEB (CL. 1 TO 8 & 12 TO 19)	4.0	3.5	3.5	3.5	5.0	3.5	3.5	4.0	3.5	4.0
WEB (CL. 9 & 11)	4.0	3.5	3.5	4.0	5.0	5.0	4.0	3.5	3.5	4.0
IN FLG. (CL. 1 TO 8 & 12 TO 19)	180x8	180x6	180x6	180x6	180x8	180x6	180x6	180x6	180x6	180x8
IN FLG. (CL. 9 & 11)	180x10	180x8	180x6	180x10	180x8	180x8	180x6	180x6	180x6	180x10
PURLIN SPAC.	11 @ 1670									

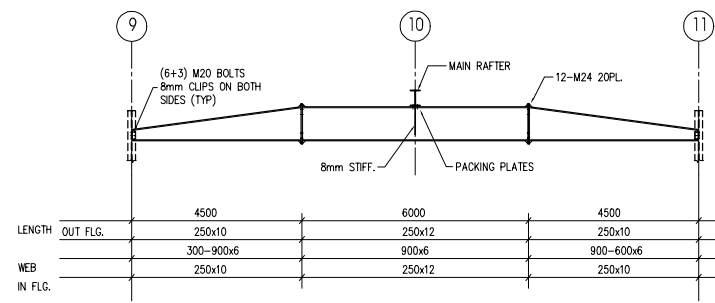


TYP. CROSS SECTION @ GL 1 TO 9 & 11 TO 19

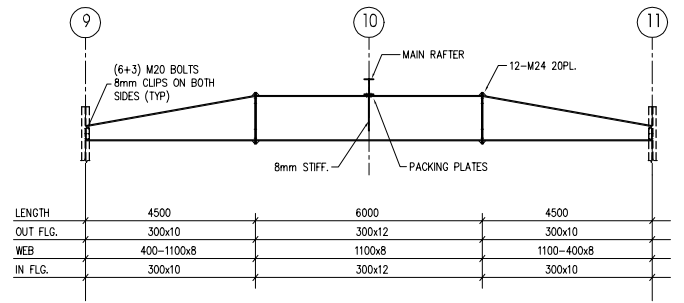
LENGTH	5000	6000	3000	3000	3000	3000	3000	6000	5000	
OUT FLG.	180x6	180x6	180x6	180x6	200x8	200x8	180x6	180x6	180x6	
WEB	4.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	
IN FLG.	180x6	180x6	180x6	180x6	200x8	180x6	180x6	180x6	180x6	
PURLIN SPAC.	11 @ 1670									



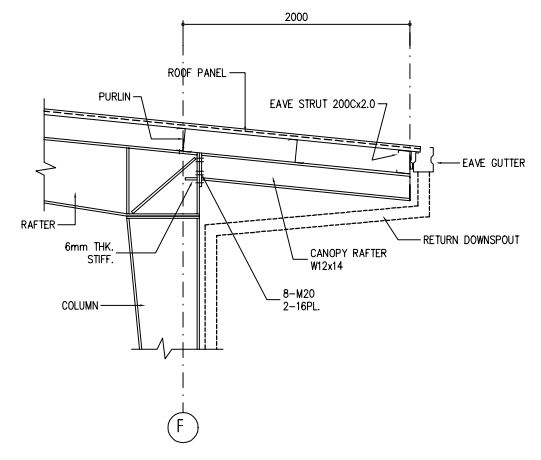
TYP. CROSS SECTION @ GL 10



JACK-BEAM @ GL. D&F



JACK-BEAM @ GL. E



CANOPY DETAIL

TYPICAL BUILT-UP SECTION DESIGNATION SYSTEM		
Flange	Web	Depth
Eg.: Size 200 x 10 x 5 @ 400		
Flanges = 200mm Wide x 10 mm thick.		
Web = 5 mm thick.		
Depth of Web = 400 mm.		

Designation	Depth	Width
WBx10	200	100
WBx18	208	133
WBx24	200	165
WBx31	203	203
W12x14	302	100
W12x22	311	100
W14x82	363	257

Designation	Depth	Width
C8x11.5	203	57
C10x15.3	254	66
C12x20.7	305	75
C15x33.9	381	86
C20x75	200	75
C30x100	300	100

DESIGN LOADS :
DL = 0.1KN/M2 + SELF WEIGHT OF STRUCTURE FOR FRAME
LL = 0.57KN/M2
WIND SPEED = 31.0M/SEC.

DESIGN CRITERIA :
- METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA)
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
- AMERICAN IRON AND STEEL INSTITUTE (AISI)
- AMERICAN WELDING SOCIETY (AWS)

- ALL DIMENSIONS ARE IN MILLIMETER
- DO NOT SCALE DRAWING
- THIS DRAWING FOR PROPOSAL ONLY
- NOT FOR CONSTRUCTION

- ALL STEEL COLUMNS SIT ON TOP OF R.C. WALLS AT LEVEL +5700

NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENATION TANK
CROSS SECTION, ENDWALL ELEVATION
CANOPY DETAILS

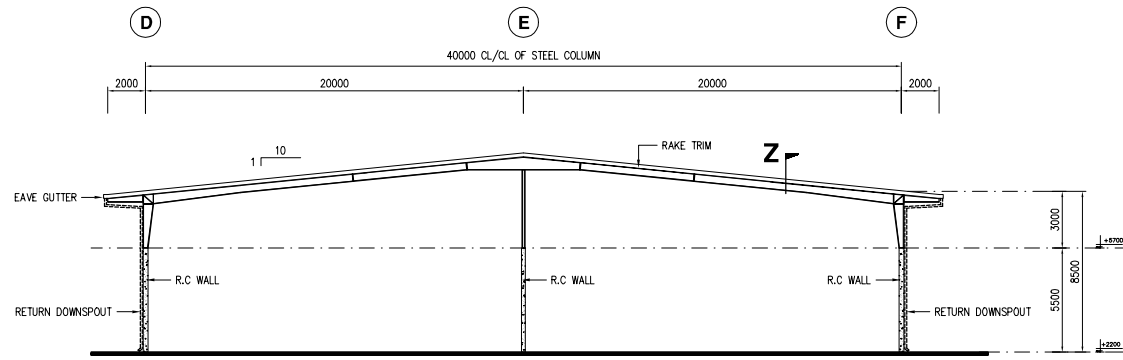
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

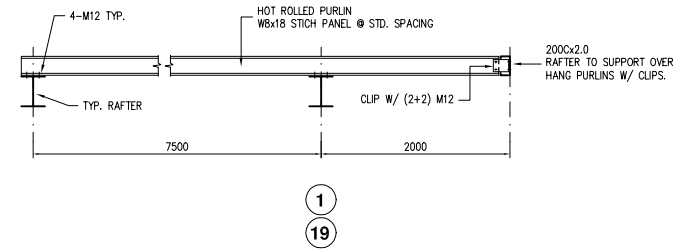
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI
CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE-WWTP-305-30



ENDWALL ELEVATION D-F (AS DRAWN)
ENDWALL ELEVATION F-D (OPP. HAND)



SECTION - Z (ROOF EXTENSION)

TYPICAL BUILT-UP SECTION DESIGNATION SYSTEM

Eg.: Size 200 x 10 x 5 @ 400
 Flanges = 200mm Wide x 10 mm thick.
 Web = 5 mm thick.
 Depth of Web = 400 mm.

Designation	Depth	Width
WBx10	200	100
WBx18	208	133
WBx24	200	165
WBx31	203	203
W12x14	302	100
W12x22	311	100
W14x82	363	257

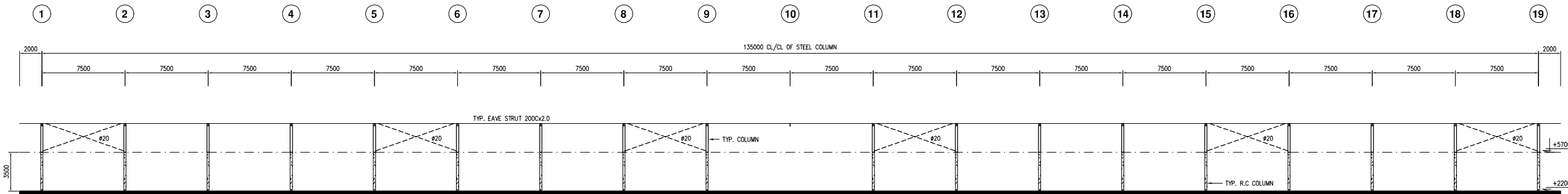
Designation	Depth	Width
C8x11.5	203	57
C10x15.3	254	66
C12x20.7	305	75
C15x33.9	381	86
C20x75	200	75
C300x100	300	100

DESIGN LOADS :
 DL = 0.1KN/M² + SELF WEIGHT OF STRUCTURE FOR FRAME
 LL = 0.57KN/M²
 WIND SPEED = 31.0M/SEC.

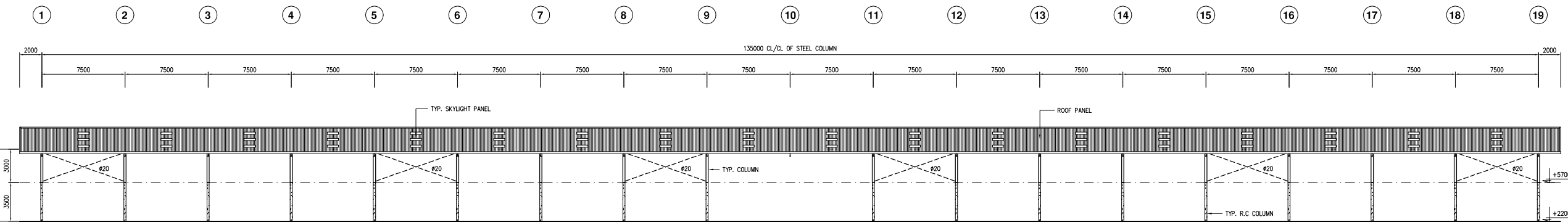
DESIGN CRITERIA :
 - METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA)
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 - AMERICAN IRON AND STEEL INSTITUTE (AISI)
 - AMERICAN WELDING SOCIETY (AWS)

- ALL DIMENSIONS ARE IN MILLIMETER
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SIDEWALL FRAMING ELE. 1-19 (AS DRAWN)
SIDEWALL FRAMING ELE. 19-1 (OPP. HAND)



SIDEWALL ELEVATION 1-19 (AS DRAWN)
SIDEWALL ELEVATION 19-1 (OPP. HAND)

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
 HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT PROJECT
 IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
 WASTEWATER TREATMENT PLANT
 SECOND FERMENTATION TANK
 SIDEWALL ELEVATION &
 FRAMINGS

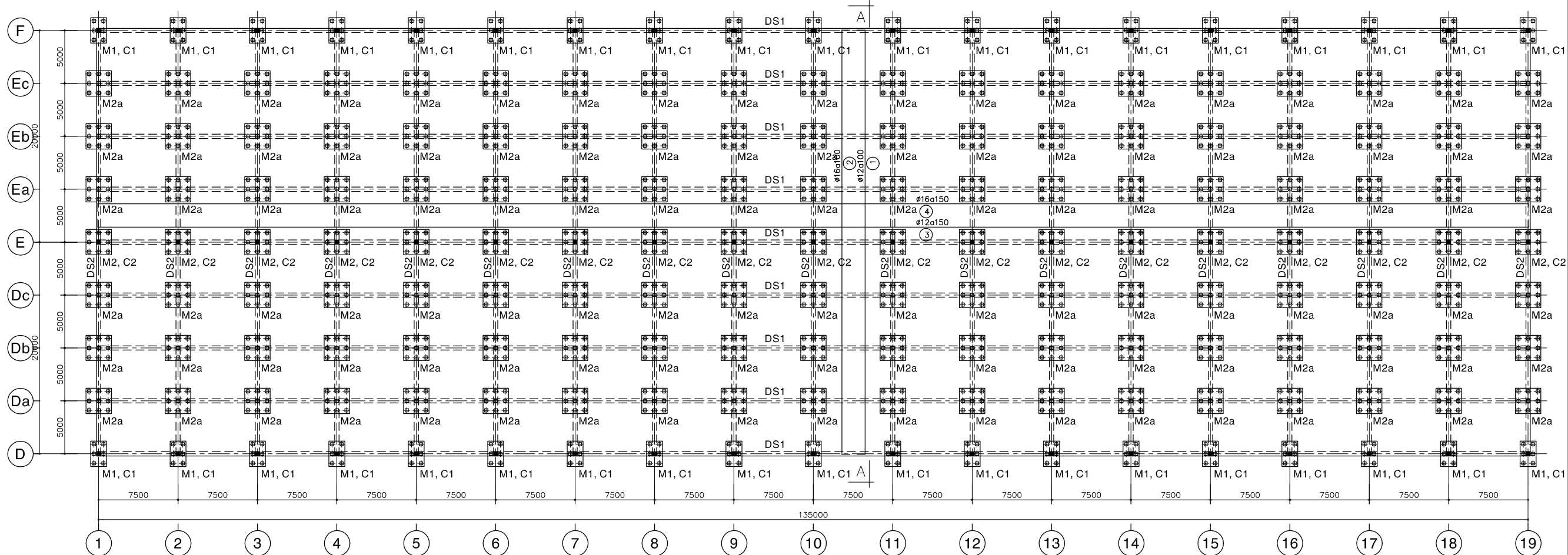
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

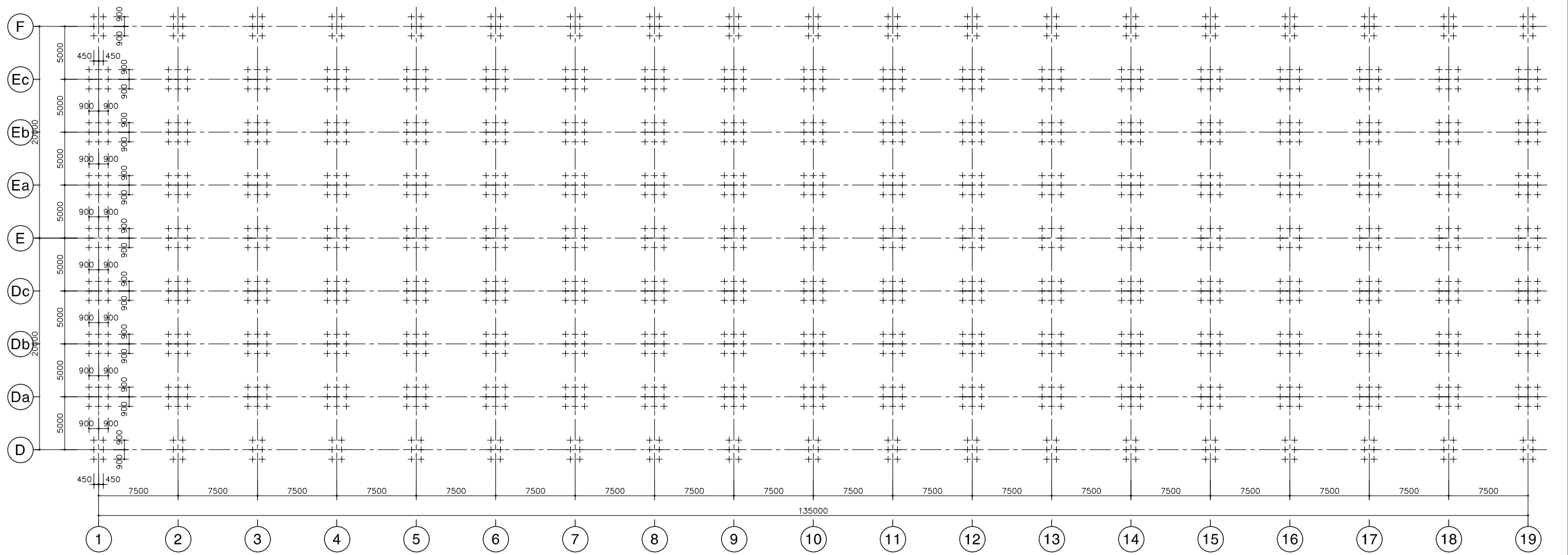
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI
 CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE-WWTP-305-31



MẶT BẰNG MÓNG, CỘT & ĐÀ KIỀNG
PLAN OF FOUNDATIONS, COLUMNS & G-BEAMS



MẶT BẰNG ĐỊNH VỊ CỌC
PLAN OF PILES LOCATION

GHI CHÚ:
 - BÊ TÔNG LỚT ĐÁ 40X60, MÁC 100
 - BÊ TÔNG ĐÁ 10X20, MÁC 300
 - CỐT THÉP Ra=2000 Kg/cm²

NOTE :
 - LEAN CONCRETE STONE 40x60, GRADE 100
 - CONCRETE STONE 10x20, GRADE 300
 - REINFORCEMENT Ra=2000 Kg/cm²

NO.	DATE	DESCRIPTIONS	BY	APPRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
 HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT PROJECT
 IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
 WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
 PLAN OF FOUNDATIONS, COLUMNS, G-BEAMS

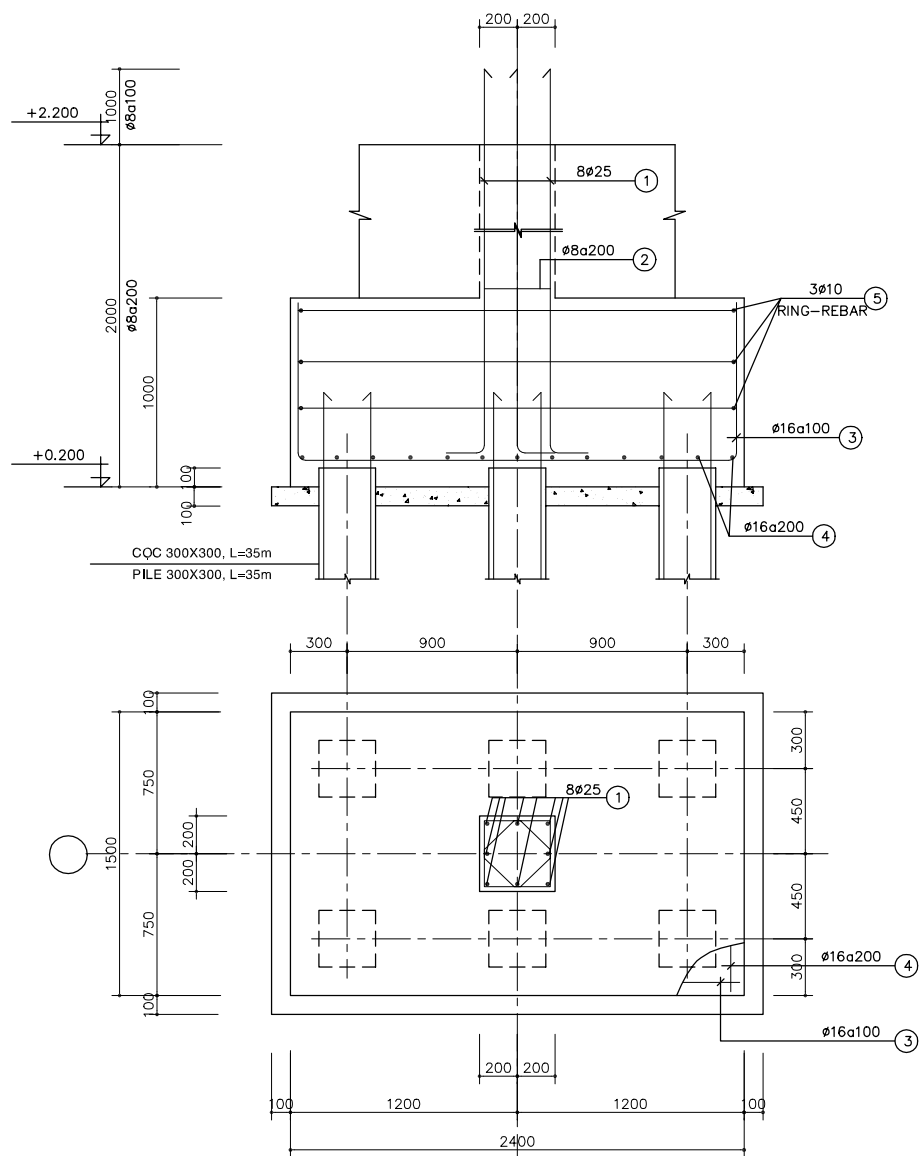
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JICA JAPAN INTERNATIONAL COOPERATION
 AGENCY (JICA)

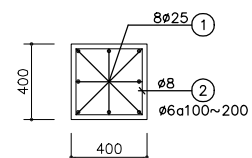
PC PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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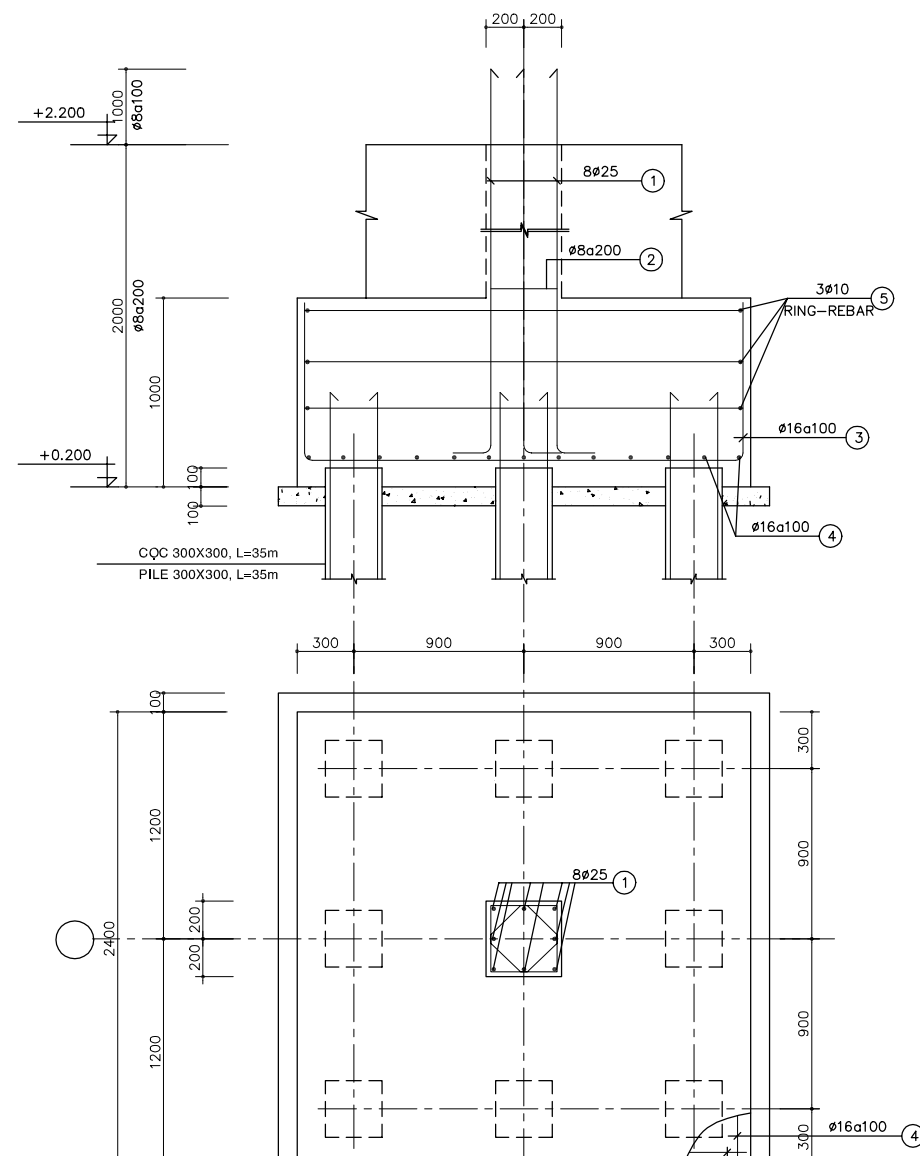
DATE : JUNE 2001 DWG. No. PE-WWTP-305-32



M1
(1500X2400, 38 PCS)

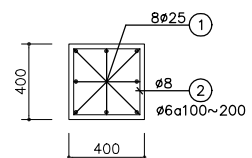


COLUMN C1
(FROM +2.200~+5.700, 38 PCS)

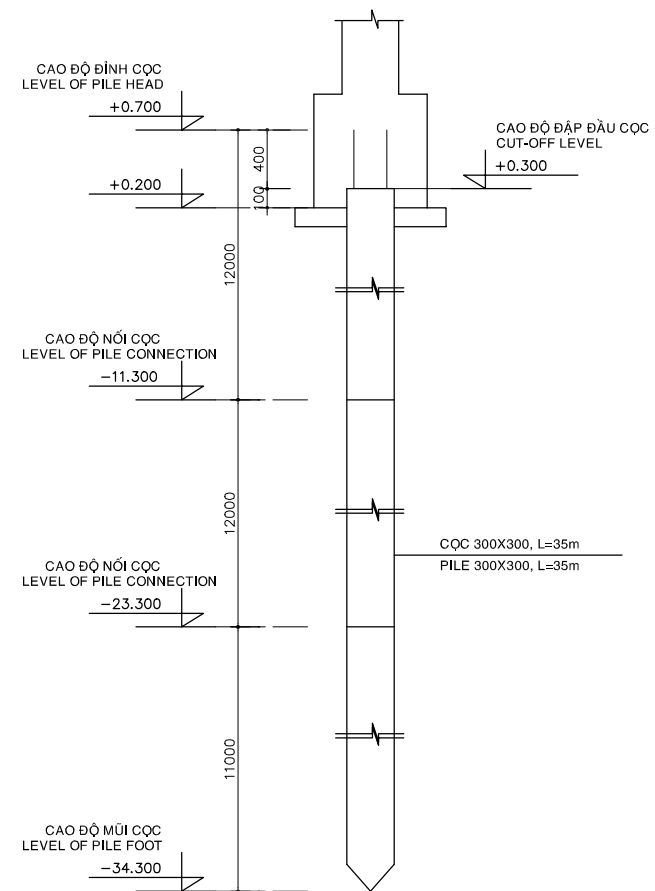


M2
(2400X2400, 19 PCS)

M2a
(2400X2400, 114 PCS)



COLUMN C2
(FROM +2.200~+5.700, 19 PCS)



**SƠ ĐỒ ĐÓNG CỌC
PILING ELEVATION**

GHI CHÚ:
 - BÊ TÔNG LỘT ĐÁ 40x60, MÁC 100
 - BÊ TÔNG ĐÁ 10x20, MÁC 300
 - CỐT THÉP Ra=2000 Kg/cm²

NOTE:
 - LEAN CONCRETE STONE 40x60, GRADE 100
 - CONCRETE STONE 10x20, GRADE 300
 - REINFORCEMENT Ra=2000 Kg/cm²

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT

SECOND FERMENTATION TANK
DETAIL OF FOUNDATIONS
COLUMNS, GROUND-BEAM

SCALE : N.T.S

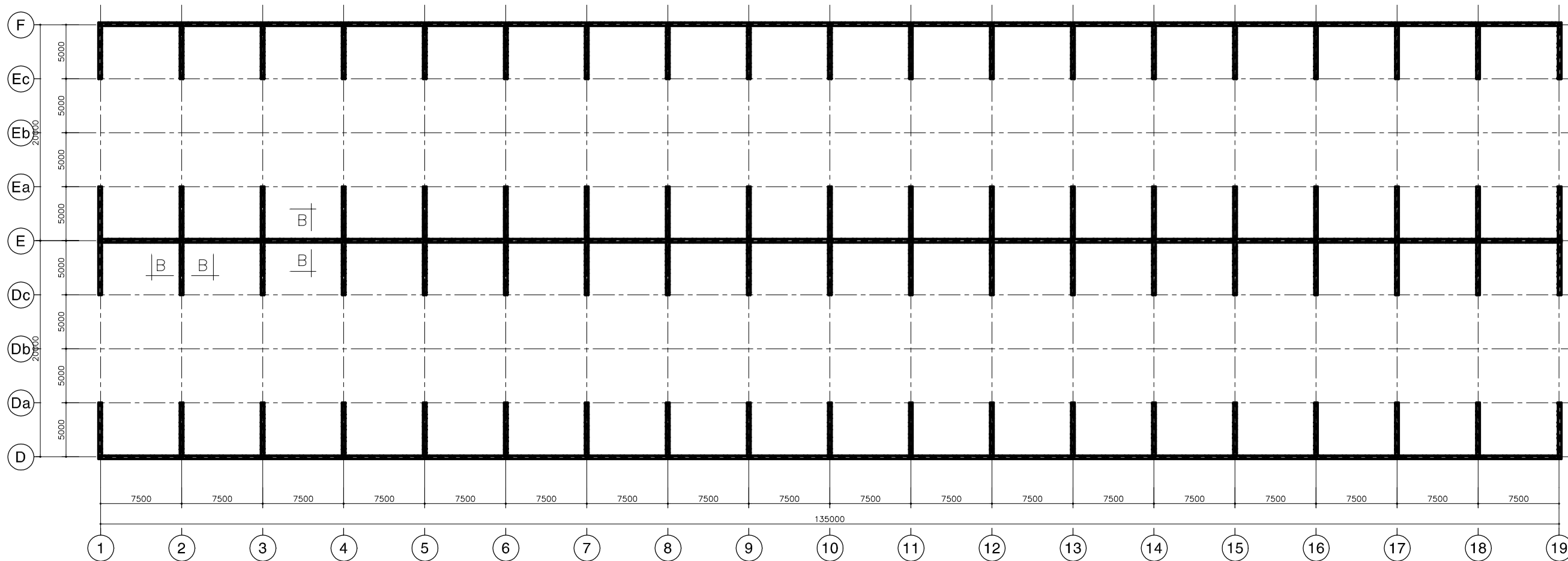
JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KIKUTA HIROSHI

CHECKED
KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE-WWTP-305-33



MẶT BẰNG TƯỜNG BTCT
PLAN OF RC. WALL

GHI CHÚ:
 - BÊ TÔNG LỚT ĐÁ 40X60, MÁC 100
 - BÊ TÔNG ĐÁ 10X20, MÁC 300
 - CỐT THÉP Ra=2000 Kg/cm²

NOTE :
 - LEAN CONCRETE STONE 40x60, GRADE 100
 - CONCRETE STONE 10x20, GRADE 300
 - REINFORCEMENT Ra=2000 Kg/cm²

NO.	DATE	DESCRIPTIONS	BY	APPRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
 HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
 WATER ENVIRONMENT IMPROVEMENT PROJECT
 IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
 WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
 PLAN OF RC. WALL

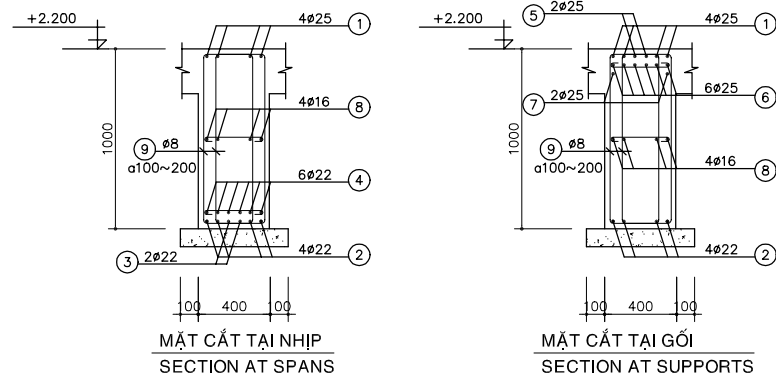
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JICA JAPAN INTERNATIONAL COOPERATION
 AGENCY (JICA)

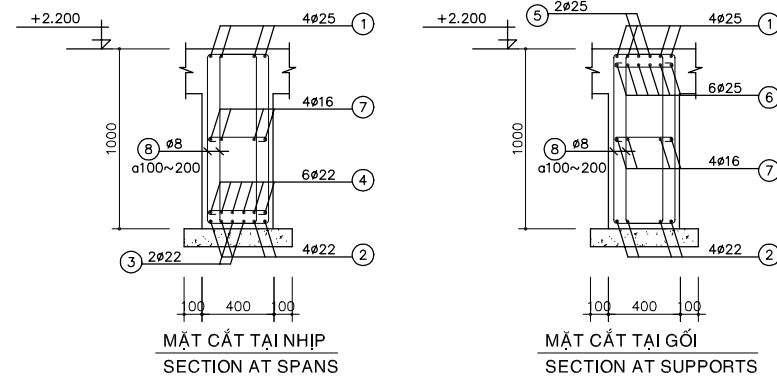
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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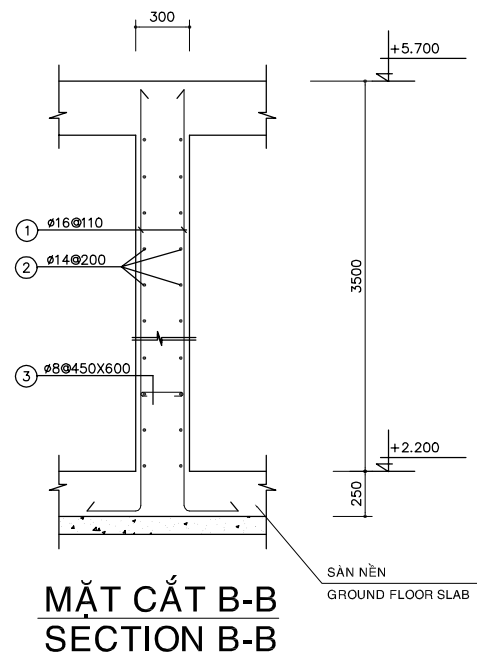
DATE : JUNE 2001 DWG. No. PE-WWTP-305-34



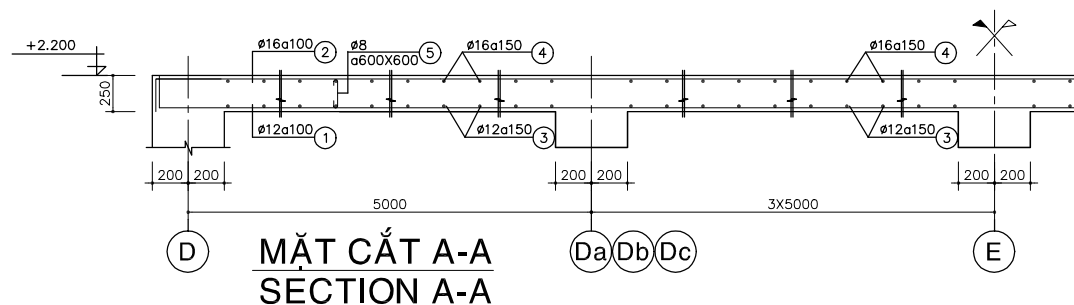
DS1
(L=135400, 9 PCS)



DS2
(L=40400, 19 PCS)



TYPICAL OF RC WALL



MẶT CẮT A-A
SECTION A-A

GHI CHÚ:
- BÊ TÔNG LỚT ĐÁ 40X60, MÁC 100
- BÊ TÔNG ĐÁ 10X20, MÁC 300
- CỐT THÉP Ra=2000 Kg/cm²

NOTE :
- LEAN CONCRETE STONE 40x60, GRADE 100
- CONCRETE STONE 10x20, GRADE 300
- REINFORCEMENT Ra=2000 Kg/cm²

NO.	DATE	DESCRIPTIONS	BY	APPRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT

SECOND FERMENTATION TANK
DETAILS OF G-FLOOR SLAB, BEAMS

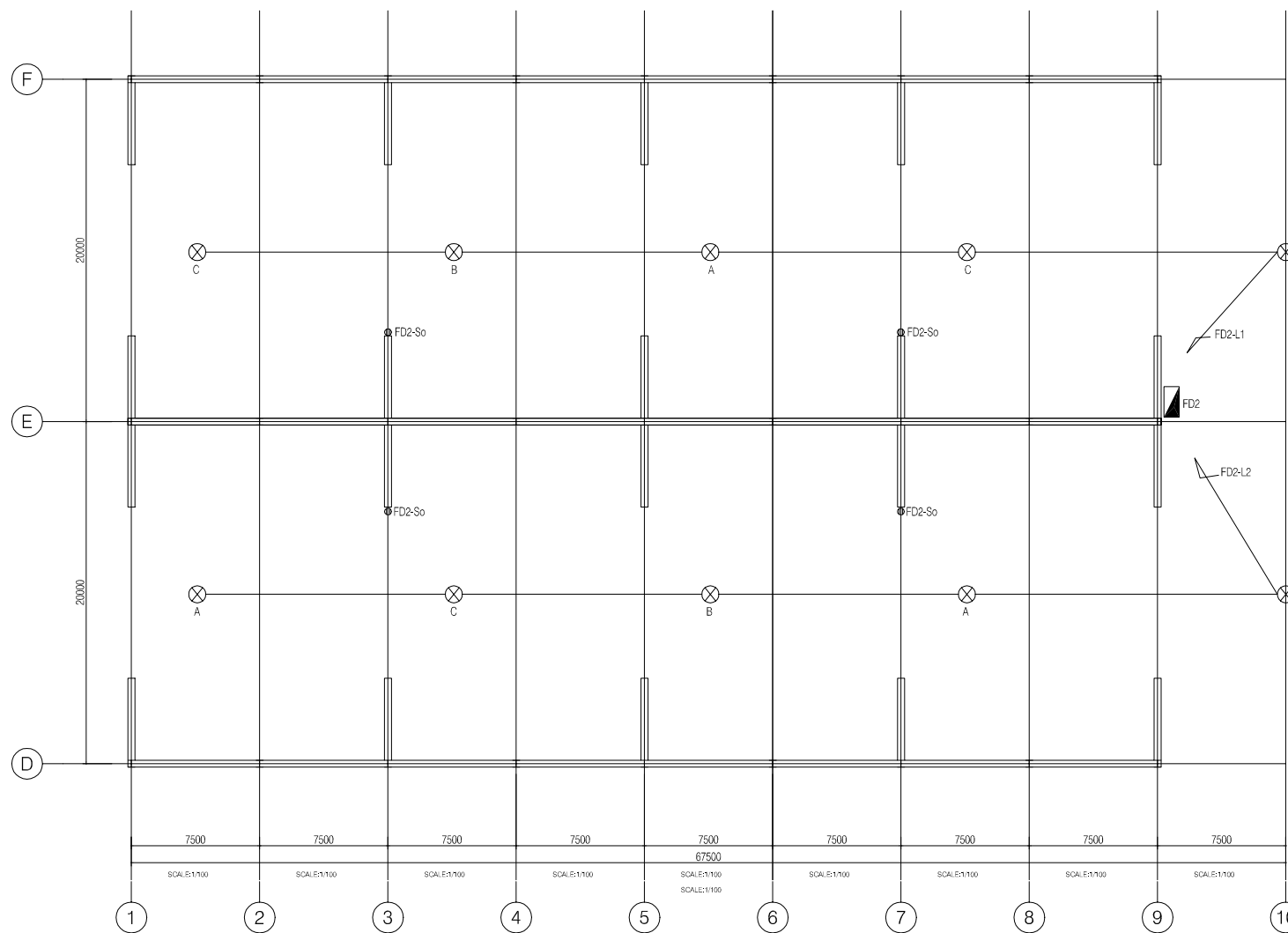
SCALE : N.T.S

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

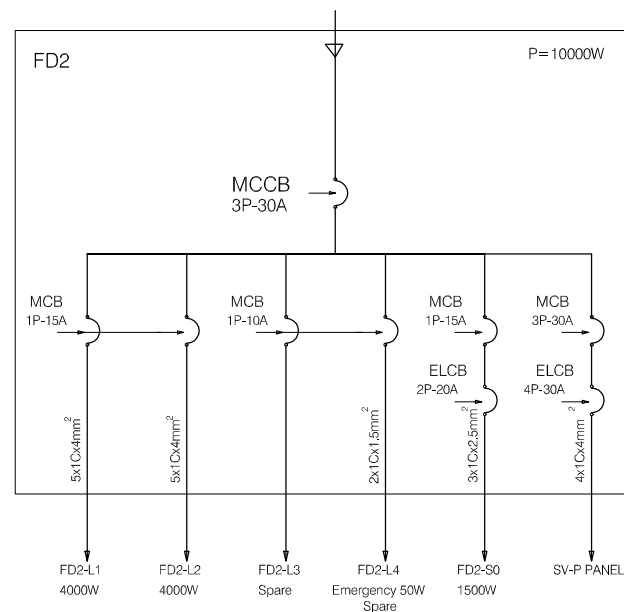
DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PE-WWTP-305-35

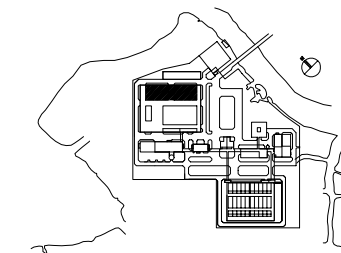


FIRST FLOOR- ELECTRICAL PLAN (1/2)
SCALE:1/100

FROM COMPOST ELECTRIC ROOM



- LEGEND
- ⊗ 400W HIGH PRESSURE SODIUM INDUSTRIAL HIGH BAY LUMINAIRE
 - ▬ 2x36W RECESSED FLOURESCENT
 - ▬ 2x36W FLOURESCENT BATTEN (CEILING OR WALL MOUNTED)
 - 1x40W DOWNLIGHT (in VC)
 - 100W OUTDOOR LUMINAIRE, IP 56
 - 1x40W DOWNLIGHT (in VC)
 - ▬ 1x18W FLOURESCENT BATTEN, IP65
 - ▬ 2x36W FLOURESCENT BATTEN, IP65
 - 2x10W NON-MAINTAINED EXIT LIGHT
 - 16A DUPLEX SOCKET OUTLET
 - 16A DUPLEX SOCKET OUTLET FOR A/C UNIT
 - 1 WAY SINGLE SWITCH
 - DISTRIBUTION BOARD
 - DL : DOOR LOUVER
 - EAF : EXHAUST AIR FAN



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
LIGHTING PLAN(1/2)

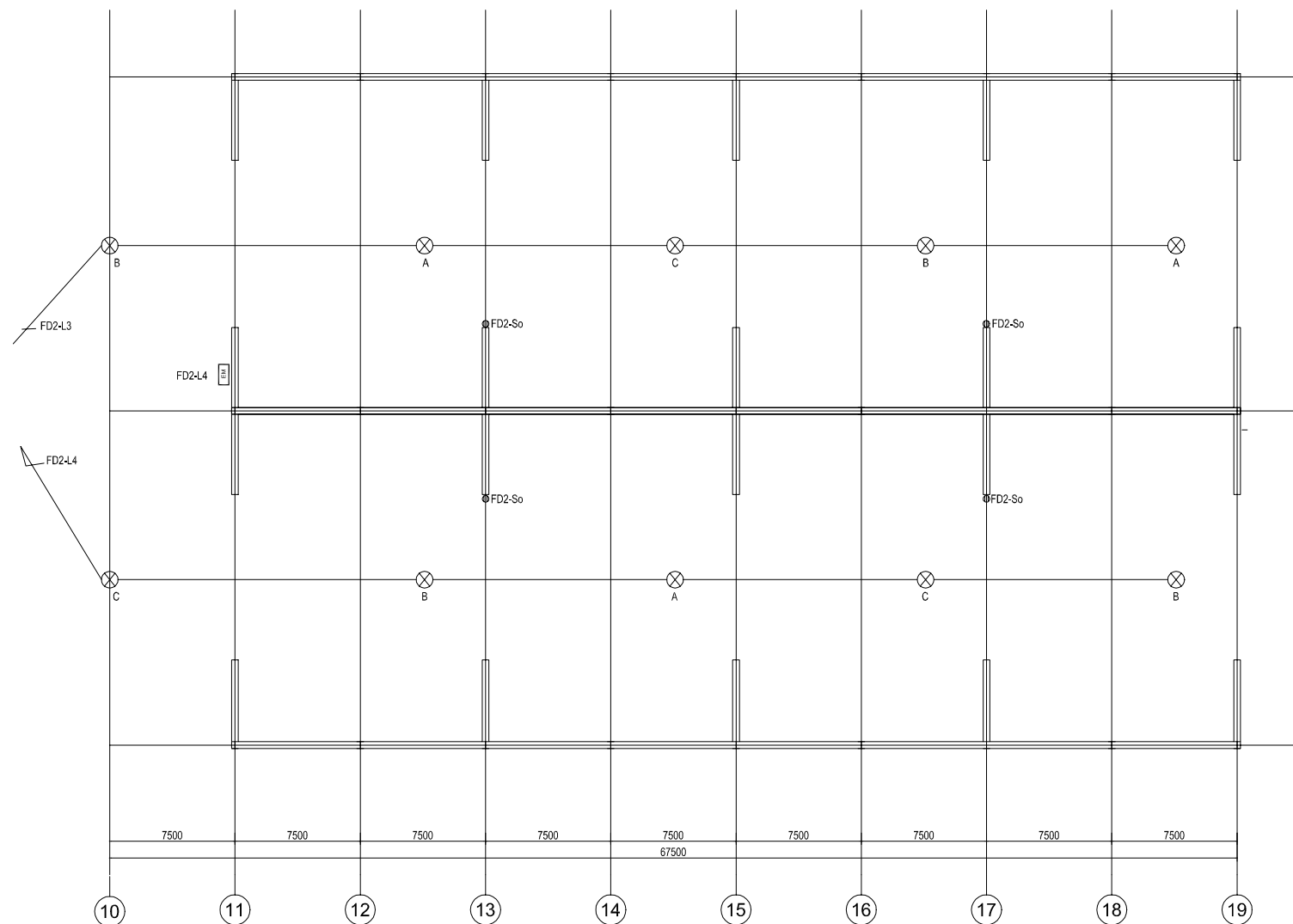
SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
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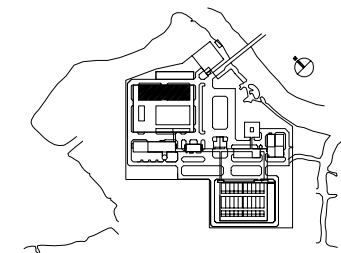
DATE : JUNE 2001 DWG. No. PE-WWTP-305-36



FIRST FLOOR- ELECTRICAL PLAN (2/2)
SCALE: 1/100

LEGEND

- ⊗ 400W HIGH PRESSURE SODIUM INDUSTRIAL HIGH BAY LUMINAIRE
- ▬ 2x36W RECESSED FLOURESCENT
- ▬ 2x36W FLOURESCENT BATTEN (CEILING OR WALL MOUNTED)
- 1x40W DOWNLIGHT (h WC)
- 100W OUTDOOR LUMINAIRE, IP 56
- 1x40W DOWNLIGHT (h WC)
- ▬ 1x18W FLOURESCENT BATTEN, IP65
- ▬ 2x36W FLOURESCENT BATTEN, IP65
- 2x10W NON- MAINTAINED EXIT LIGHT
- 16A DUPLEX SOCKET OUTLET
- 16A DUPLEX SOCKET OUTLET FOR A/C UNIT
- ⚡ 1 WAY SINGLE SWITCH
- DISTRIBUTION BOARD
- DL : DOOR LOUVER
- EAF : EXHAUST AIR FAN



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
LIGHTING PLAN(2/2)
SECOND FERMENTATION TANK

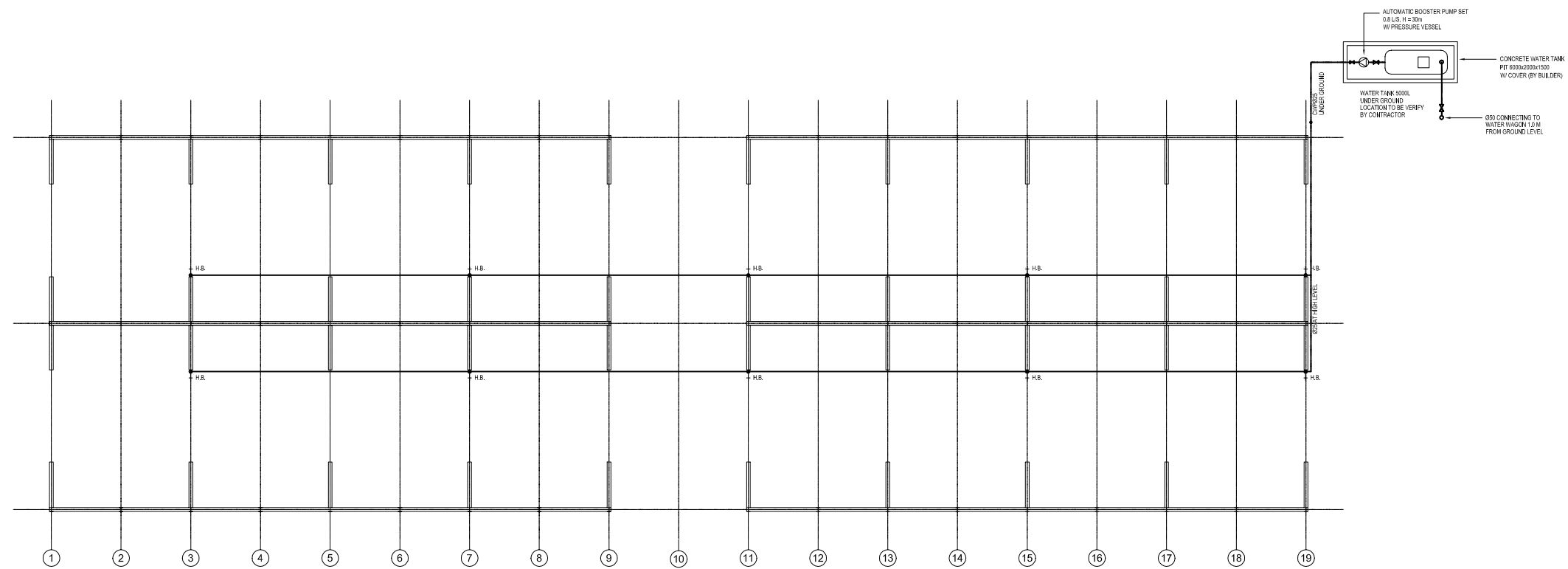
SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
----------------------------	-------------------------

DATE : JUNE 2001 DWG. No. PE-WWTP-305-37



PLUMBING PLAN
SCALE : 1/150

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
SECOND FERMENTATION TANK
PLUMBING PLAN

SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PC PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIKUTA HIROSHI	CHECKED KONDO MASAMI
----------------------------	-------------------------

DATE : JUNE 2001 DWG. No. PE-WWTP-305-38