

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

**PEOPLE'S COMMITTEE OF HO CHI MINH CITY (PCHCMC)**

**MINISTRY OF PLANNING AND INVESTMENT (MPI)**

**THE SOCIALIST REPUBLIC OF VIET NAM**

**THE DETAILED DESIGN STUDY**

**ON**

**HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT**

**IN**

**THE SOCIALIST REPUBLIC OF VIET NAM**

**FINAL REPORT**

**DRAFT BIDDING DOCUMENTS**

**PACKAGE E :**

**WASTEWATER TREATMENT PLANT CONSTRUCTION**

**VOLUME 3 :**

**DRAFT TENDER DRAWINGS (1/3)**

**[CIVIL]**

**JUNE 2001**

**PACIFIC CONSULTANTS INTERNATIONAL**

**LIST OF DRAWING ON PAKAGE E**  
**WASTEWATER TREATMENT PLANT - CIVIL WORK**

DRAWING No	TITLE	SCALE	DRAWING No	TITLE	SCALE
	<b>GENERAL</b>				
PE-WWTP-201-01	GENERAL LOCATION PLAN FOR THBNDT WWTP SITE	1/25000	PE-WWTP-211-01	MAIN BUILDING PLAN AND SECTION	1/100
PE-WWTP-201-02	GENERAL LAYOUT OF THBNDT WASTEWATER TREATMENT PLANT (FINAL PHASE)	1/2000	PE-WWTP-211-02	MAIN BUILDING SECTION	1/100
PE-WWTP-201-03	GENERAL LAYOUT OF THBNDT WASTEWATER TREATMENT PLANT (PHASE I)	1/1000	PE-WWTP-211-03	MAIN BUILDING STAIRCASE PLAN AND SECTION	1/5, 1/20, 1/50
PE-WWTP-201-04	HYDRAULIC PROFILE OF THBNDT WASTEWATER TREATMENT PLANT	N.T.S	PE-WWTP-212-01	BLOWER BUILDING PLAN AND SECTION	1/100, 1/200
PE-WWTP-201-05	LAYOUT OF SITE PREPARATION (PHASE I)	1/2000	PE-WWTP-212-02	BLOWER BUILDING STAIRCASE PLAN AND SECTION	1/5, 1/20, 1/50
PE-WWTP-201-06	LAYOUT PLAN OF LANDSCAPE (PHASE I)	1/1000	PE-WWTP-213-01	DEWATERING AND CENTRIFUGAL THICKENER BUILDING PLAN	1/200
PE-WWTP-201-07	GENERAL INFORMATION (2/2)	N.T.S	PE-WWTP-213-02	DEWATERING AND CENTRIFUGAL THICKENER BUILDING SECTION	1/200
PE-WWTP-201-08	GENERAL INFORMATION (1/2)	N.T.S	PE-WWTP-213-03	DEWATERING AND CENTRIFUGAL THICKENER STAIRCASE PLAN AND SECTION	AS SHOWN
PE-WWTP-202-01	LIFT PUMPING STATION PLAN (No.1) - WATERWAY FLOOR PLAN	1/100	PE-WWTP-214-01	GRAVITY THICKENER PLAN	1/100
PE-WWTP-202-02	LIFT PUMPING STATION PLAN (No. 2) - B1F PLAN	1/100	PE-WWTP-214-02	GRAVITY THICKENER SECTION	1/100
PE-WWTP-202-03	LIFT PUMPING STATION PLAN (No. 3) - 1F PLAN	1/100	PE-WWTP-215-01	COMPOST PLANT PLAN AND SECTION (No.1)	1/200
PE-WWTP-202-04	LIFT PUMPING STATION SECTION (No. 1)	1/100	PE-WWTP-215-02	COMPOST PLANT PLAN AND SECTION (No.2)	1/50, 1/100
PE-WWTP-202-05	LIFT PUMPING STATION SECTION (No. 2)	1/100	PE-WWTP-215-03	COMPOST PLANT PLAN AND SECTION (No.3)	1/20, 1/50
PE-WWTP-202-06	LIFT PUMPING STATION SECTION (No. 3)	1/100	PE-WWTP-215-04	COMPOST PLANT PLAN AND SECTION (No.4)	1/100
PE-WWTP-202-07	LIFT PUMPING STATION STAIRCASE PLAN AND SECTION		PE-WWTP-215-05	COMPOST PLANT PLAN AND SECTION (No.5)	1/50
PE-WWTP-203-01	WASTEWATER TREATMENT PLANT PLAN (No. 1 - 1)	1/200	PE-WWTP-215-06	COMPOST FACILITY CIVIL WORKS DRAWING (No.1)	1/300
PE-WWTP-203-02	WASTEWATER TREATMENT PLANT PLAN (No. 1 - 2)	1/200	PE-WWTP-215-07	COMPOST FACILITY CIVIL WORKS DRAWING (No.2)	1/200
PE-WWTP-203-03	WASTEWATER TREATMENT PLANT PLAN (No. 2 - 1)	1/200	PE-WWTP-215-08	COMPOST FACILITY CIVIL WORKS DRAWING (No.3)	1/100
PE-WWTP-203-04	WASTEWATER TREATMENT PLANT PLAN (No. 2 - 2)	1/200	PE-WWTP-215-09	COMPOST FACILITY PIPE SUPPORT FOUNDATION DETAILS	1/20, 1/200
PE-WWTP-203-05	WASTEWATER TREATMENT PLANT PLAN (No. 3 - 1)	1/200	PE-WWTP-216-01	TRACK SCALE PLAN AND SECTION (WEIGH BRIDGE STRUCTURE) (No.1)	1/50
PE-WWTP-203-06	WASTEWATER TREATMENT PLANT PLAN (No. 3 - 2)	1/200	PE-WWTP-216-02	TRACK SCALE PLAN AND SECTION (WEIGH BRIDGE STRUCTURE) (No.2)	1/20, 1/50
PE-WWTP-204-01	WASTEWATER TREATMENT PLANT SECTION 1 - 1 & 2 - 2	1/200	PE-WWTP-217-01	WWTP STAIRCASE (A) PLAN AND SECTION	1/100
PE-WWTP-204-02	WASTEWATER TREATMENT PLANT SECTION 3 - 3 & 4 - 4	1/200	PE-WWTP-218-01	WWTP STAIRCASE (B) PLAN AND SECTION	1/100
PE-WWTP-204-03	WASTEWATER TREATMENT PLANT SECTION 5 - 5 & 6 - 6	1/200	PE-WWTP-219-01	CONNECTION PIPE PLAN AND SECTION	1/100
PE-WWTP-204-04	WASTEWATER TREATMENT PLANT SECTION 7 - 7 & 8 - 8	1/200	PE-WWTP-220-01	PLAN AND LONGITUDINAL SECTION (BRIDGE DRAWINGS)	1/50, 1/500
PE-WWTP-204-05	WASTEWATER TREATMENT PLANT SECTION 9 - 9 & 10 - 10	1/200	PE-WWTP-220-02	PRETENSIONED HOLLOW PLATE BEAM (BRIDGE DRAWINGS)	1/10, 1/30
PE-WWTP-204-06	WASTEWATER TREATMENT PLANT SECTION 11 - 11 & 12 - 12	1/200	PE-WWTP-220-03	STRUCTURE OF DECK (BRIDGE DRAWINGS)	1/30
PE-WWTP-204-07	WASTEWATER TREATMENT PLANT SECTION 13 - 13	1/200	PE-WWTP-220-04	THE RAILING (BRIDGE DRAWINGS)	1/10, 1/15, 1/30
PE-WWTP-205-01	DISTRIBUTION TANK PLAN AND SECTION	1/100	PE-WWTP-220-05	EXPANSION JOINT (BRIDGE DRAWINGS)	1/2.5, 1/5, 1/10, 1/25
PE-WWTP-206-01	DISINFECTION TANK PLAN AND SECTION (No.1)	1/100	PE-WWTP-220-06	STRUCTURE OF THE ABUTMENT B (BRIDGE DRAWINGS)	1/50
PE-WWTP-206-02	DISINFECTION TANK PLAN AND SECTION (No.2)	1/100	PE-WWTP-220-07	STRUCTURE OF THE ABUTMENT A (BRIDGE DRAWINGS)	1/50
PE-WWTP-206-03	DISINFECTION TANK SECTION (No.3)	1/100	PE-WWTP-220-08	REINFORCEMENT LAYOUT OF THE ABUTMENT B (BRIDGE DRAWINGS)	1/20, 1/30, 1/50
PE-WWTP-207-01	WATER SUPPLY FACILITY PLAN (No.1)	1/100	PE-WWTP-220-09	REINFORCEMENT LAYOUT OF THE ABUTMENT A (BRIDGE DRAWINGS)	1/15, 1/30, 1/50
PE-WWTP-207-02	WATER SUPPLY FACILITY PLAN (No.2)	1/100	PE-WWTP-220-10	TRANSITION SLAP AND STABILIZING IN FRONT OF THE ABUTMENT A (BRIDGE DRAWINGS)	1/10, 1/20, 1/25, 1/30, 1/40
PE-WWTP-207-03	WATER SUPPLY FACILITY SECTION (No.1)	1/100	PE-WWTP-220-11	TRANSITION SLAP AND STABILIZING IN FRONT OF THE ABUTMENT B (BRIDGE DRAWINGS)	1/10, 1/20, 1/25, 1/30, 1/40
PE-WWTP-207-04	WATER SUPPLY FACILITY SECTION (No.2)	1/100	PE-WWTP-220-12	STRUCTURE OF THE PIER T1 AND T4 (BRIDGE DRAWINGS)	1/20, 1/40
PE-WWTP-207-05	WATER SUPPLY FACILITY SECTION (No.3)	1/100	PE-WWTP-220-13	STRUCTURE OF THE PIER T2 AND T3 (BRIDGE DRAWINGS)	1/20, 1/40, 1/50
PE-WWTP-207-06	WATER SUPPLY FACILITY STAIRCASE PLAN AND SECTION (No. 1)	1/5, 1/20, 1/50	PE-WWTP-220-14	REINFORCEMENT LAYOUT OF THE PIER T1 AND T4 (BRIDGE DRAWINGS)	1/25
PE-WWTP-207-07	WATER SUPPLY FACILITY STAIRCASE PLAN AND SECTION (No. 2)	1/5, 1/20, 1/50	PE-WWTP-220-15	REINFORCEMENT LAYOUT OF THE PIER T2 AND T3 (BRIDGE DRAWINGS)	1/25, 1/40
PE-WWTP-208-01	EFFLUENT PIPE PLAN AND SECTION (No.1)	1/100, 1/200	PE-WWTP-220-16	REINFORCED CONCRETE PILE 40X40 CM (BRIDGE DRAWINGS)	1/2, 1/10, 1/100
PE-WWTP-208-02	EFFLUENT PIPE PLAN AND SECTION (No.2)	1/100	PE-WWTP-220-17	PROJECT OF EXECUTING THE ABUTMENT AND THE PIER (BRIDGE DRAWINGS)	1/50, 1/100
PE-WWTP-208-03	EFFLUENT PIPE PLAN AND SECTION (No.3)	1/100	PE-WWTP-220-18	BRIDGE PREPARATION SOIL IMPROVEMENT	1/30, 1/100, 1/200
PE-WWTP-209-01	PIPE GALLERY LAYOUT PLAN	1/1000	PE-WWTP-221-01	ROAD PLAN, SECTION AND DETAIL (PHASE I & II)	1/2000, 1/200
PE-WWTP-209-02	PIPE GALLERY (A) PLAN AND SECTION	1/100	PE-WWTP-221-02	ROAD PLAN, SECTION AND DETAIL (PHASE I)	1/1000
PE-WWTP-209-03	PIPE GALLERY (B) PLAN AND SECTION	1/100	PE-WWTP-221-03	ROAD PLAN, SECTION AND DETAIL (No.1)	1/20, 1/100
PE-WWTP-209-04	PIPE GALLERY (D) PLAN AND SECTION	1/100	PE-WWTP-221-04	ROAD PLAN, SECTION AND DETAIL (No.2)	1/100, 1/1000
PE-WWTP-209-05	PIPE GALLERY (E) PLAN AND SECTION	1/100	PE-WWTP-222-01	RAIN DISCHARGE PLAN, SECTION AND DETAIL(No.1)	1/2000
PE-WWTP-209-06	PIPE GALLERY (F) PLAN AND SECTION	1/100	PE-WWTP-222-02	RAIN DISCHARGE PLAN, SECTION AND DETAIL(No.2)	1/1000
PE-WWTP-209-07	PIPE GALLERY (G), (H) PLAN AND SECTION	1/100	PE-WWTP-222-03	RAIN DISCHARGE PLAN, SECTION AND DETAIL(No.3)	1/1000
PE-WWTP-210	MAIN SUBSTATION PLAN AND SECTION (NO DRAWING) (REFER TO ELECTRICAL DWG. No. PE-WWTP-507 AND No. PE-WWTP-508)				

DRAWING No	TITLE	SCALE
PE-WWTP-222-04	RAIN DISCHARGE PLAN, SECTION AND DETAIL(No.4)	AS SHOWN
PE-WWTP-223-01	GATE AND FENCE PLAN, SECTION AND DETAIL	1/10, 1/20, 1/25, 1/50
PE-WWTP-224-01	TREE AND VEGETATION PLAN ELEVATION AND DETAIL	1/10, 1/20, 1/30, 1/50, 1/500
PE-WWTP-225-01	NO DRAWING ( PLEASE REFER TO ELECTRICAL DRAWING IN PACKAGE E)	
PE-WWTP-226-01	SANITARY SEWER PLAN	1/1000
PE-WWTP-226-02	SANITARY SEWER DETAILS	1/10, 1/20, 1/40
PE-WWTP-227-01	SITE PREPARATION SOIL IMPROVEMENT PLAN	1/1000
PE-WWTP-228-01	EMBANKMENT SECTION AND DETAILS	1/200
PE-WWTP-229-01	WASTEWATER TREATMENT PLANT PLAN - GRATING COVER KEY PLAN (No.1-1)	1/200
PE-WWTP-229-02	WASTEWATER TREATMENT PLANT PLAN - GRATING COVER KEY PLAN (No.1-2)	1/200
PE-WWTP-229-03	WASTEWATER TREATMENT PLANT PLAN - STOP LOG OF KEY PLAN (No.2-1)	1/200
PE-WWTP-229-04	WASTEWATER TREATMENT PLANT PLAN - STOP LOG OF KEY PLAN (No.2-2)	1/200
PE-WWTP-229-05	WASTEWATER TREATMENT PLANT PLAN - OVERFLOW WEIR OF KEY PLAN (No.2-1)	1/200
PE-WWTP-229-06	WASTEWATER TREATMENT PLANT PLAN - OVERFLOW WEIR OF KEY PLAN (No.2-2)	1/200
PE-WWTP-229-07	WASTEWATER TREATMENT PLANT PLAN - STEEL STEP OF KEY PLAN (No.2-1)	1/200
PE-WWTP-229-08	WASTEWATER TREATMENT PLANT PLAN - STEEL STEP OF KEY PLAN (No.2-2)	1/200
PE-WWTP-229-09	WASTEWATER TREATMENT PLANT PLAN - STAINLESS STEEL CHAIN AND CONCRETE COVER OF KEY PLAN (No.3-1)	1/200
PE-WWTP-229-10	WASTEWATER TREATMENT PLANT PLAN - STAINLESS STEEL CHAIN AND CONCRETE COVER OF KEY PLAN (No.3-2)	1/200
PE-WWTP-229-11	WASTEWATER TREATMENT PLANT PLAN - STEEL BALUSTRADE OF KEY PLAN (No.3-1)	1/200
PE-WWTP-229-12	WASTEWATER TREATMENT PLANT PLAN - STEEL BALUSTRADE OF KEY PLAN (No.3-2)	1/200
PE-WWTP-229-13	STEEL CHAIN, STEEL STEP, SKY LIGHT, STEEL BALUSTRADE OF WATER SUPPLY FACILITY OF KEY PLAN	1/100
PE-WWTP-229-14	STOP LOG AND STEEL STEP OF LIFT PUMPING STATION KEY PLAN	1/100
PE-WWTP-229-15	OVERFLOW WEIR OF DISINFECTION TANK KEY PLAN AND SECTION	1/100
PE-WWTP-229-16	STOPLOG AND STEEL STEP OF DISINFECTION TANK KEY PLAN AND SECTION	1/100
PE-WWTP-229-17	STEEL CHAIN, STEEL BALUSTRADE OF DISINFECTION TANK KEY PLAN AND SECTION	1/100
PE-WWTP-229-18	GRATING COVER OF DISINFECTION TANK KEY PLAN AND SECTION	1/100
PE-WWTP-229-19	OVERFLOW WEIR OF GRAVITY THICKENER KEY PLAN	1/100
PE-WWTP-229-20	CONCRETE COVER OF GRAVITY THICKENER KEY PLAN	1/100
PE-WWTP-229-21	GRATING COVER OF PIPE GALLERY (A) KEY PLAN	1/100
PE-WWTP-229-22	GRATING COVER OF PIPE GALLERY (B) KEY PLAN	1/100
PE-WWTP-229-23	GRATING COVER OF PIPE GALLERY (D) KEY PLAN	1/100
PE-WWTP-229-24	GRATING COVER OF PIPE GALLERY (E) KEY PLAN	1/100
PE-WWTP-229-25	GRATING COVER OF PIPE GALLERY (F) KEY PLAN	1/100
PE-WWTP-229-26	GRATING COVER OF PIPE GALLERY (G), (H) KEY PLAN	1/100
PE-WWTP-229-27	GRATING COVER OF WATER SUPPLY FACILITY KEY PLAN	1/100
PE-WWTP-229-28	GRATING COVER OF BLOWER BUILDING KEY PLAN	1/200
PE-WWTP-229-29	GRATING COVER OF MAIN BUILDING KEY PLAN	1/100
PE-WWTP-229-30	GRATING COVER OF DEWATERING AND CENTRIFUGAL THICKENER BUILDING KEY PLAN	1/200
PE-WWTP-229-31	DETAIL DRAWING (1) GRATING COVER AND BEARER FORM	1/1, 1/5, 1/10
PE-WWTP-229-32	DETAIL DRAWING (2) CONCRETE COVER AND BEARER FORM	1/5
PE-WWTP-229-33	DETAIL DRAWING (3) OVERFLOW WEIR	1/5
PE-WWTP-229-34	DETAIL DRAWING (4) STEEL STEP	1/5, 1/20
PE-WWTP-229-35	DETAIL DRAWING (5) SKY LIGHT	1/20
PE-WWTP-229-36	DETAIL DRAWING (6) STEEL BALUSTRADE	1/5, 1/20
PE-WWTP-229-37	DETAIL DRAWING (7) STEEL CHAIN	1/20
PE-WWTP-229-38	DETAIL DRAWING (8) SYNTHENTIC WOODEN STOP LOG	1/10

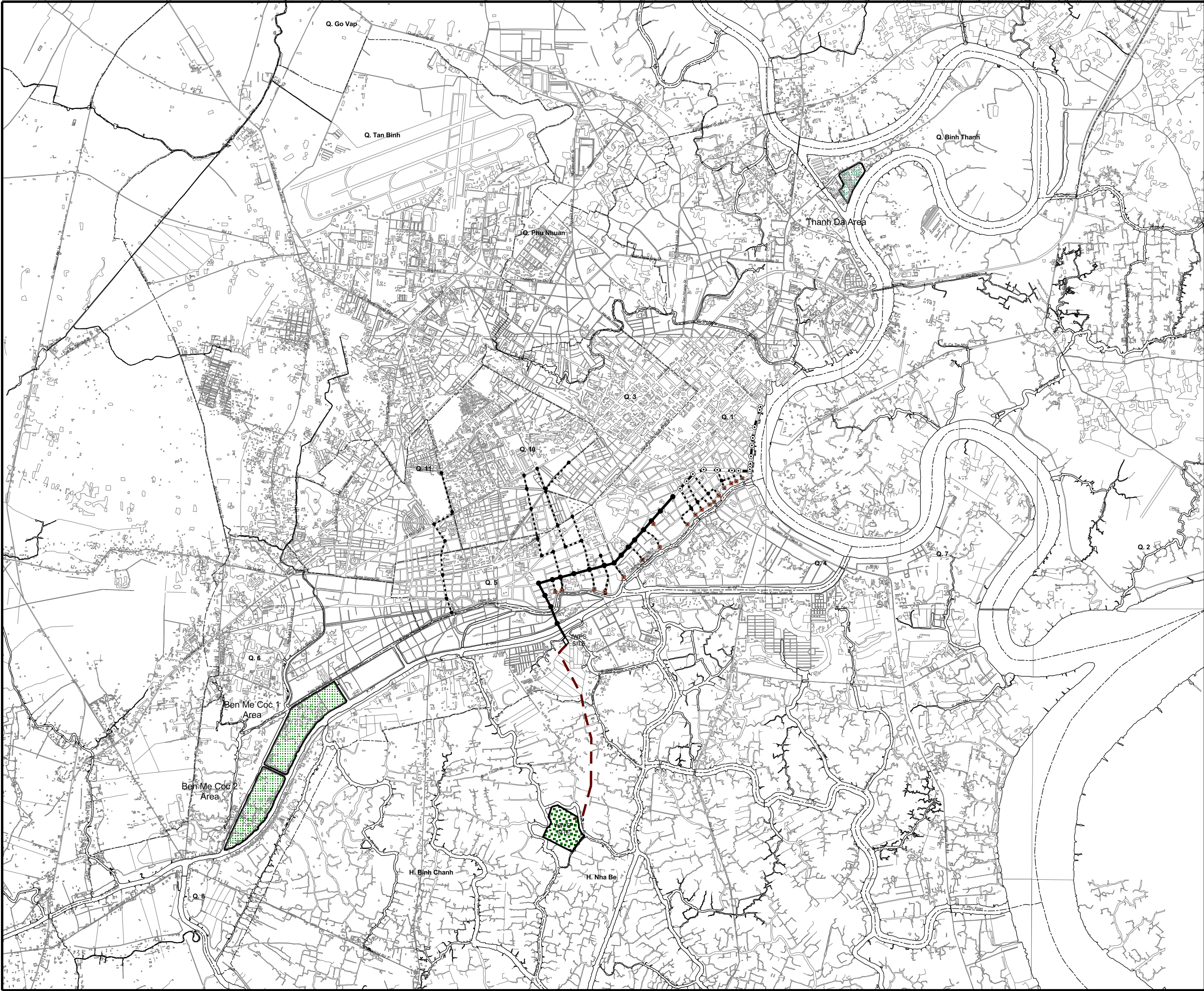
DRAWING No	TITLE	SCALE
PE-WWTP-229-39	DETAIL DRAWING (9) HOOK, EXPANSION JOINT AND CONSTRUCTION JOINT	1/5, 1/10, 1/20
PE-WWTP-229-40	DETAIL DRAWING (10) MANHOLE	1/40
PE-WWTP-229-41	GRATING COVER OF LIFT PUMPING STATION PLAN	1/100
PE-WWTP-230-01	PLAN AND PROFILE OF CONVEYANCE SEWER AND O/M ROAD (1)	H: 1/ 500; V:1/ 100
PE-WWTP-230-02	PLAN AND PROFILE OF CONVEYANCE SEWER AND O/M ROAD (2)	H: 1/ 500; V:1/ 100
PE-WWTP-231-01	PLAN AND SECTION OF SIPHON FO TAC BEN RO CANAL CROSSING	1/100
PE-WWTP-232-01	PLAN AND SECTION FOR SEWER AND MANHOLE OF CONVEYANCE SEWER	1/25
PILE ARRANGEMENT		
PE-WWTP-251-01	LIFT PUMPING STATION PILE ARRANGEMENT PLAN	1/25, 1/100
PE-WWTP-252-01	WASTEWATER TREATMENT PLANT PILE ARRANGEMENT PLAN (No. 1)	1/25, 1/200
PE-WWTP-252-02	WASTEWATER TREATMENT PLANT PILE ARRANGEMENT PLAN (No. 2)	1/25, 1/200
PE-WWTP-253-01	DISINFECTION TANK PILE ARRANGEMENT PLAN (INCLUDED ON DWG. No. PE-WWTP-254-01)	
PE-WWTP-254-01	DISINFECTION TANK AND WATER SUPPLY FACILITY PILE ARRANGEMENT PLAN	1/25, 1/125
PE-WWTP-255-01	PIPE GALLERY (A), (B), (D), (E) PILE ARRANGEMENT PLAN	1/25, 1/100
PE-WWTP-255-02	PIPE GALLERY (F), (G), (H) PILE ARRANGEMENT PLAN	1/25, 1/100
PE-WWTP-256	22KV MAIN SUBSTATION PILE ARRANGEMENT PLAN (NO DRAWING)	
PE-WWTP-257-01	MAIN BUILDING PILE ARRANGEMENT PLAN	1/25, 1/100
PE-WWTP-258-01	BLOWER BUILDING PILE ARRANGEMENT PLAN	1/25, 1/125
PE-WWTP-259-01	DEWATERING AND CENTRIFUGAL THICKENER BUILDING PILE ARRANGEMENT PLAN	1/25, 1/200
PE-WWTP-260-01	GRAVITY THICKENER PILE ARRANGEMENT PLAN	1/25, 1/100
PE-WWTP-261-01	COMPOST PLANT PILE ARRANGEMENT PLAN	1/25, 1/200, 1/100
PE-WWTP-262	TRACK SCALE PILE ARRANGEMENT PLAN (NO DRAWING) (INCLUDED ON DWG. PE-WWTP-216-01)	
PE-WWTP-263	CONNECTION PIPE PILE ARRANGEMENT PLAN (NO DRAWING) (REFER TO DWG. PE-WWTP-219-01)	
PE-WWTP-264-01	EXISTING POWER TOWER PROTECTION GENERAL CONDITION	AS SHOWN
PE-WWTP-264-02	EXISTING POWER TOWER PROTECTION - PROTECTION DETAILS	AS SHOWN
PE-WWTP-265-01	DETAIL OF R.C PILE 300x300	AS SHOWN
PE-WWTP-265-02	DETAIL OF R.C PILE 400x400	AS SHOWN
BAR ARRANGEMENT		
PE-WWTP-266-01	LIFT PUMPING STATION STRUCTURE BAR ARRANGEMENT DRAWING (No. 1)	1/50
PE-WWTP-266-02	LIFT PUMPING STATION STRUCTURE BAR ARRANGEMENT DRAWING (No. 2)	1/50
PE-WWTP-266-03	LIFT PUMPING STATION STRUCTURE BAR ARRANGEMENT DRAWING (No. 3)	1/50
PE-WWTP-266-04	LIFT PUMPING STATION STRUCTURE BAR ARRANGEMENT DRAWING (No. 4)	1/50
PE-WWTP-267-01	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No. 1)	1/50
PE-WWTP-267-02	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No.2)	1/50
PE-WWTP-267-03	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No. 3)	1/50
PE-WWTP-267-04	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No. 4)	1/50
PE-WWTP-267-05	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No. 5)	1/50
PE-WWTP-267-06	WASTEWATER TREATMENT PLANT BAR ARRANGEMENT DRAWING (No. 6)	1/50
PE-WWTP-268	DISTRIBUTION TANK BAR ARRANGEMENT DRAWING (INCLUDING 267-03)	1/50
PE-WWTP-269-01	DISINFECTION TANK BAR ARRANGEMENT DRAWING (No. 1)	1/50
PE-WWTP-269-02	DISINFECTION TANK BAR ARRANGEMENT DRAWING (No. 2)	1/50
PE-WWTP-270-01	WATER SUPPLY FACILITY PLAN OF BEAM	1/100
PE-WWTP-270-02	WATER SUPPLY FACILITY BAR ARRANGEMENT DRAWING (No.1)	1/50
PE-WWTP-270-03	WATER SUPPLY FACILITY BAR ARRANGEMENT DRAWING (No.2)	1/25, 1/50
PE-WWTP-270-04	WATER SUPPLY FACILITY BAR ARRANGEMENT DRAWING (STAIRCASE No.1)	1/10, 1/20, 1/50
PE-WWTP-270-05	WATER SUPPLY FACILITY BAR ARRANGEMENT DRAWING (STAIRCASE No.2)	1/10, 1/25, 1/50
PE-WWTP-271-01	PIPE GALLERY BAR ARRANGEMENT DRAWING	1/50, 1/100
PE-WWTP-272-01	LIFT PUMPING STATION TRANSFOMER PLAN, SECTION AND BAR ARRANGEMENT DRAWING	1/50

DRAWING No	TITLE	SCALE
PE-WWTP-273-01	MAIN BUILDING STRUCTURE (No. 1)	1/100
PE-WWTP-273-02	MAIN BUILDING STRUCTURE (No. 2)	1/100
PE-WWTP-273-03	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 1)	1/25, 1/50
PE-WWTP-273-04	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 2)	1/50
PE-WWTP-273-05	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 3)	1/50
PE-WWTP-273-06	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 4)	1/50
PE-WWTP-273-07	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 5)	1/25, 1/50
PE-WWTP-273-08	MAIN BUILDING BAR ARRANGEMENT DRAWING (No. 6)	
PE-WWTP-274-01	BLOWER BUILDING STRUCTURE	1/100, 1/200
PE-WWTP-274-02	BLOWER BUILDING BAR ARRANGEMENT DRAWING (No. 1)	1/50
PE-WWTP-274-03	BLOWER BUILDING BAR ARRANGEMENT DRAWING (No. 2)	1/25, 1/50
PE-WWTP-274-04	BLOWER BUILDING BAR ARRANGEMENT DRAWING (No. 3)	1/20, 1/50
PE-WWTP-275-01	DEWATERING AND CENTRIFUGAL THICKENER BUILDING PLAN	1/200
PE-WWTP-275-02	DEWATERING AND CENTRIFUGAL THICKENER BUILDING SECTION	1/200
PE-WWTP-275-03	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION A - A)	1/200
PE-WWTP-275-04	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION B - B)	1/200
PE-WWTP-275-05	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION C - C)	1/50
PE-WWTP-275-06	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION D - D)	1/50
PE-WWTP-275-07	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION E - E)	1/50
PE-WWTP-275-08	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (SECTION F - F)	1/50

DRAWING No	TITLE	SCALE
PE-WWTP-275-09	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (STAIR 1)	1/50
PE-WWTP-275-10	DEWATERING AND CENTRIFUGAL THICKENER BUILDING BAR ARRANGEMENT DRAWING (STAIR 2)	1/50
PE-WWTP-276-01	GRAVITY THICKENER BUILDING BAR ARRANGEMENT DRAWING (No. 1)	1/50
PE-WWTP-276-02	GRAVITY THICKENER BUILDING BAR ARRANGEMENT DRAWING (No. 2)	1/50
PE-WWTP-277-01	WWTP STAIRCASE (A), (B) BAR ARRANGEMENT DRAWING (No.1)	1/30, 1/50
PE-WWTP-278-01	BAR ARRANGEMENT OF CONVEYANCE SEWER AND MANHOLE	1/25
PE-WWTP-278-02	BAR ARRANGEMENT OF MAINTENANCE CHAMBER OF SIPHON	1/50
PE-WWTP-279-01	FERMENTING VESSEL BAR ARRANGEMENT DRAWING	1/50
PE-WWTP-279-02	DEODORIZING SOIL FILTER BAR ARRANGEMENT DRAWING	1/50
PE-WWTP-280-01	EXCAVATION PROFILE LAYOUT	1/50
PE-WWTP-280-02	EXCAVATION SECTION	1/50
PE-WWTP-281-01	TEMPORARY JETTY PLAN AND SECTION	1/50
PE-WWTP-281-02	LIFT PUMPING STATION - TEMPORY EARTH-RETAINING STRUCTURE PLAN	1/100
PE-WWTP-281-03	LIFT PUMPING STATION - TEMPORY EARTH-RETAINING STRUCTURE SECTION	1/100
PE-WWTP-281-04	PIPE GALLERRY (INLET WATERWAY) - TEMPORY EARTH-RETAINING STRUCTURE PLAN AND SECTION	1/100, 1/100
PE-WWTP-281-05	EFFULENT PIPE - TEMPORY EARTH-RETAINING STRUCTURE	1/100, 1/50
PE-WWTP-282-01	TEMPORARY STRUCTURE OF SHEET PILE (REFERENCE)	1/50
PE-WWTP-282-02	TEMPORARY STRUCTURE OF SHAFT FOR PIPE JACKING (REFERENCE)	1/50

# GENERAL





LEGEND

•

Manhole for Main Interceptor (Open Cut)

○

Manhole for Main Interceptor (Pipe Jacking)

•

Manhole for Combined Sewer Improvement

Conveyance Sewer

Secondary Interceptor

Main Interceptor (Open Cut)



Main Interceptor (Pipe Jacking)

Combined Sewer Improvement

District Boundary

Intermediate Pumping Station

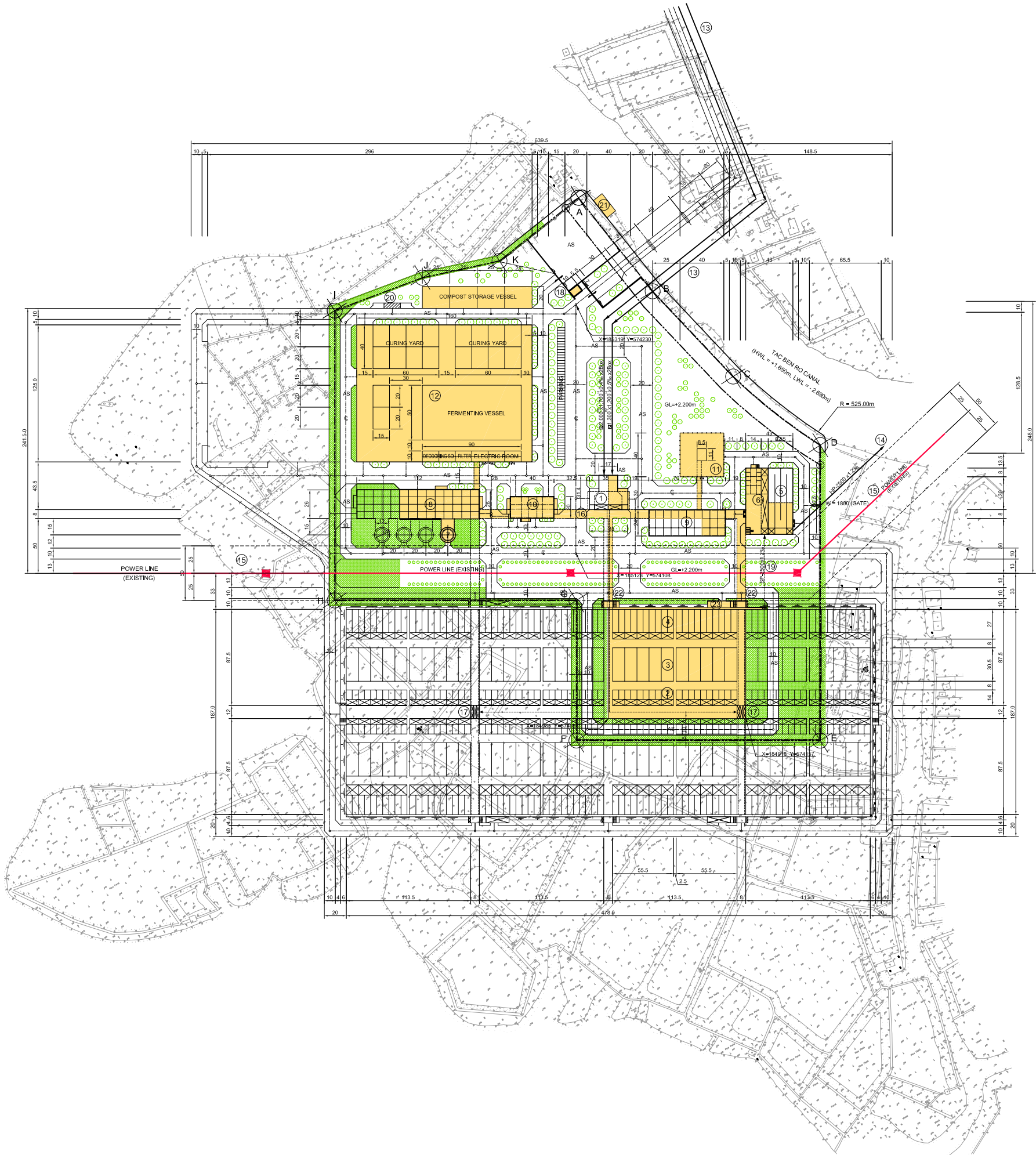
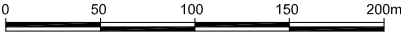
Wastewater Treatment Plant Site

NO.	DATE	DESCRIPTIONS		BY	APPRO.
REVISIONS					
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT					
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM					
PACKAGE E WASTEWATER TREATMENT PLANT  GENERAL LOCATION PLAN FOR THBNDD WWTP SITE					
SCALE : 1 : 25000					
<div><div>JICA</div><div>JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )</div></div>					
<div><div>PACIFIC CONSULTANTS INTERNATIONAL</div></div>					
DESIGNED KIMURA TORU			CHECKED KONDO MASAMI		
DATE : JUNE 2001			DWG. No. PE - WWTP - 201 - 01		



GENERAL LAYOUT OF THBNDT WASTEWATER TREATMENT PLANT (Phase I AND FINAL PLAN)

Scale: 1 / 2000



- LEGEND
- ① LIFT PUMPING STATION
  - ② PRIMARY SEDIMENTATION TANK (5.0m<sup>2</sup> x13.0m<sup>2</sup> x3.0m<sup>2</sup> x160 waterway 80 tank)
  - ③ AERATION TANK (10.5m<sup>2</sup> x28.0m<sup>2</sup> x5.5m<sup>2</sup> x80 tank)
  - ④ FINAL SEDIMENTATION TANK (5.0m<sup>2</sup> x26.0m<sup>2</sup> x3.5m<sup>2</sup> x160 waterway 80 tank)
  - ⑤ DISINFECTION TANK (5.0m<sup>2</sup> x54.0m<sup>2</sup> x5.0m<sup>2</sup> x3 bend 4 waterway 1 tank)
  - ⑥ CHLORINE STORAGE BUILDING
  - ⑦ SAND FILTRATION EFFLUENT TANK, SECONDARY TREATMENT TANK
  - ⑧ GRAVITY THICKENER (14.0m<sup>2</sup> x3.5m<sup>2</sup> x4 tank)
  - ⑨ DEWATERING & CENTRIFUGAL THICKENER BUILDING
  - ⑩ BLOWER BUILDING
  - ⑪ MAIN BUILDING (Control Room, Electrical Room, etc.)
  - ⑫ MAIN SUBSTATION
  - ⑬ COMPOST PLANT FACILITY
  - ⑭ INLET PIPE (ø1,300 x1,200 x0.5% x2Box, ø2,000 x1,700 x 0.4% x2Box)
  - ⑮ EFFLUENT PIPE (ø2,500mm x1.2%, HP)
  - ⑯ POWER LINE (EXISTING)
  - ⑰ PIPE GALLERY
  - ⑱ DISTRIBUTION TANK
  - ⑲ GUARD ROOM
  - ⑳ CONNECTION PIPE (ø2,500mm x1.2%, SP)
  - ㉑ TRUCK SCALE
  - ㉒ JETTY
  - ㉓ STAIRCASE
  - ㉔ WWTP ELECTRICAL ROOM
  - AS : ASPHALT CONCRETE

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  
GENERAL LAYOUT OF THBNDT  
WASTEWATER TREATMENT PLANT  
(PHASE I AND FINAL PLAN)

SCALE: 1 / 2000

JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED  
KIMURA TORU

CHECKED  
KONDO MASAMI

DATE : JUNE 2001

DWG. No. PE - WWTP - 201 - 02