

**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 C :**

**INTERCEPTOR SEWER CONSTRUCTION**

**INTERMEDIATE WASTEWATER PUMPING STATION CONSTRUCTION**

**PROCUREMENT OF SEWER CLEANING EQUIPMENT**

**VOLUME 3 :**

**DRAFT TENDER DRAWINGS**

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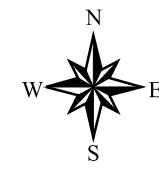
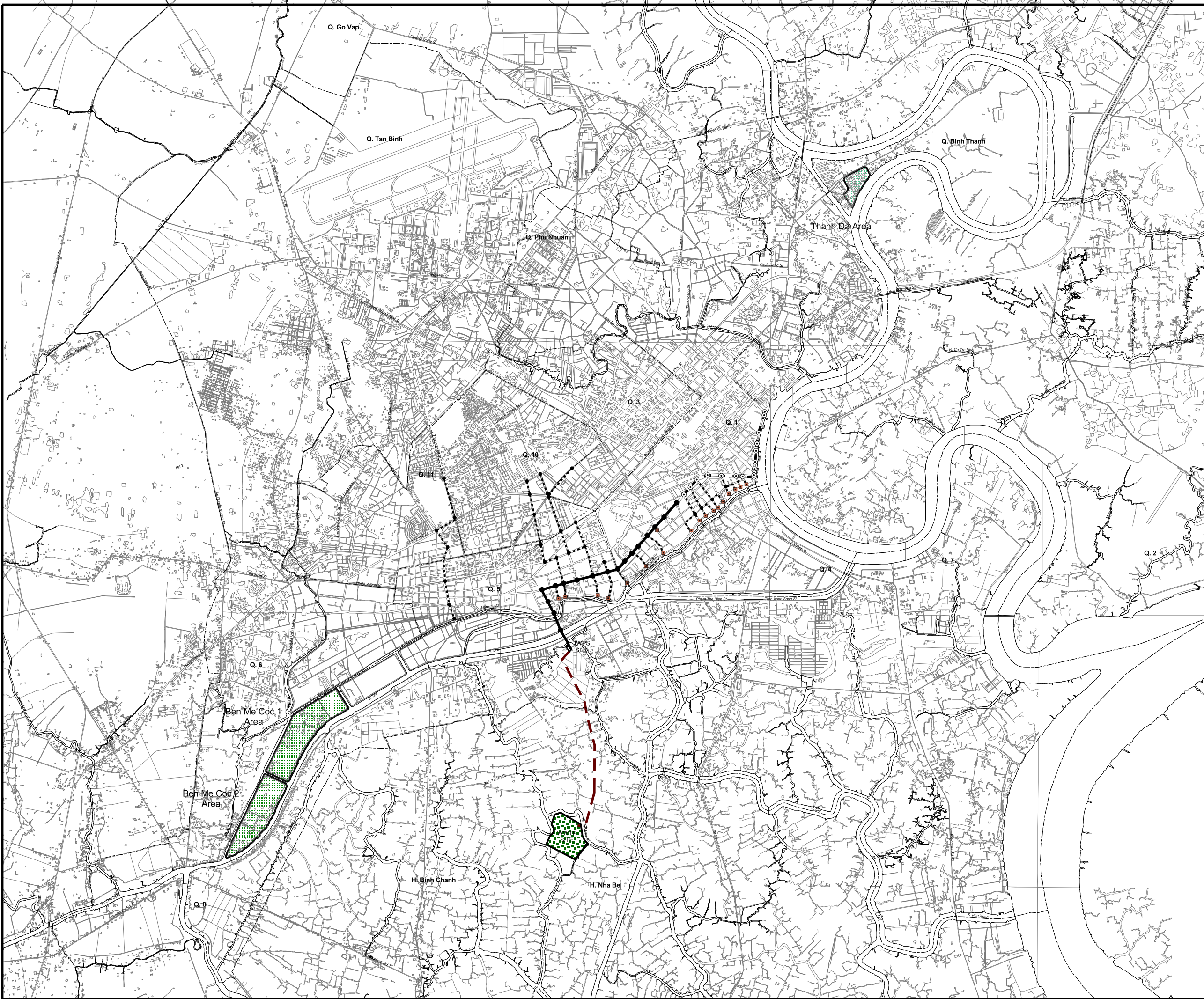
**LIST OF DRAWINGS ON PACKAGE C**  
**(INTERCEPTOR SEWER, INTERMEDIATE WASTEWATER PUMPING STATION, AND PROCUREMENT OF SEWER CLEANING EQUIPMENT)**

DRAWING NO.	TITLE	SCALE	DRAWING NO.	TITLE	SCALE
	<b>GENERAL</b>				
PC-ISC, IWPS-101	LOCATION OF INTERCEPTOR SEWER AND INTERMEDIATE WASTEWATER PUMPING STATION	1/25,000	PC-ISC-251	CROSS SECTION OF MAIN INTERCEPTOR (3)	1/100
PC-ISC, IWPS-102	TOPOGRAPHIC SURVEY DATA AND INFORMATION	1/30,000	PC-ISC-252	CROSS SECTION OF MAIN INTERCEPTOR (4)	1/100
PC-ISC, IWPS-103	GEOLOGICAL DATA AND INFORMATION	1/30,000	PC-ISC-253	CROSS SECTION OF MAIN INTERCEPTOR (5)	1/100
PC-ISC, IWPS-104	GEOLOGICAL PROFILE FOR INTERCEPTOR SEWER AND INTERMEDIATE WASTEWATER PUMPING STATION (1)	SH = 1/2,000,SV = 1/400	PC-ISC-254	CROSS SECTION OF MAIN INTERCEPTOR (6)	1/100
PC-ISC, IWPS-105	GEOLOGICAL PROFILE FOR INTERCEPTOR SEWER AND INTERMEDIATE WASTEWATER PUMPING STATION (2)	SH = 1/2,000,SV = 1/400	PC-ISC-255	CROSS SECTION OF MAIN INTERCEPTOR (7)	1/100
PC-ISC, IWPS-106	GEOLOGICAL PROFILE FOR INTERCEPTOR SEWER AND INTERMEDIATE WASTEWATER PUMPING STATION (3)	SH = 1/2,000, 1/1,000 SV = 1/400	PC-ISC-256	CROSS SECTION OF MAIN INTERCEPTOR (8)	1/100
PC-ISC, IWPS-107	GENERAL INFORMATION (1/2)	N.T.S.	PC-ISC-257	CROSS SECTION OF MAIN INTERCEPTOR (9)	1/100
PC-ISC, IWPS-108	GENERAL INFORMATION (2/2)	N.T.S.	PC-ISC-258	CROSS SECTION OF SECONDARY INTERCEPTOR (1)	1/100
	<b>INTERCEPTOR SEWER CONSTRUCTION</b>		PC-ISC-259	CROSS SECTION OF SECONDARY INTERCEPTOR (2)	1/100
PC-ISC-201	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (1)	1/100, 1/500	PC-ISC-260	CROSS SECTION OF SECONDARY INTERCEPTOR (3)	1/100
PC-ISC-202	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (2)	1/100, 1/500	PC-ISC-261	CROSS SECTION OF SECONDARY INTERCEPTOR (4)	1/100
PC-ISC-203	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (3)	1/100, 1/500	PC-ISC-262	CROSS SECTION OF SECONDARY INTERCEPTOR (5)	1/100
PC-ISC-204	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (4)	1/100, 1/500	PC-ISC-263	CROSS SECTION OF SECONDARY INTERCEPTOR (6)	1/100
PC-ISC-205	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (5)	1/100, 1/500	PC-ISC-264	CROSS SECTION OF SECONDARY INTERCEPTOR (7)	1/100
PC-ISC-206	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (6)	1/100, 1/500	PC-ISC-265	CROSS SECTION OF SECONDARY INTERCEPTOR (8)	1/100
PC-ISC-207	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (7)	1/100, 1/500	PC-ISC-266	CROSS SECTION OF SECONDARY INTERCEPTOR (9)	1/100
PC-ISC-208	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (8)	1/100, 1/500	PC-ISC-267	CROSS SECTION OF SECONDARY INTERCEPTOR (10)	1/100
PC-ISC-209	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (9)	1/100, 1/500	PC-ISC-268	CROSS SECTION OF SECONDARY INTERCEPTOR (11)	1/100
PC-ISC-210	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (10)	1/100, 1/500	PC-ISC-269	CROSS SECTION OF SECONDARY INTERCEPTOR (12)	1/100
PC-ISC-211	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (11)	1/100, 1/500	PC-ISC-270	CROSS SECTION OF SECONDARY INTERCEPTOR (13)	1/100
PC-ISC-212	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (12)	1/100, 1/500	PC-ISC-271	CROSS SECTION OF SECONDARY INTERCEPTOR (14)	1/100
PC-ISC-213	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (13)	1/100, 1/500	PC-ISC-272	CROSS SECTION OF SECONDARY INTERCEPTOR (15)	1/100
PC-ISC-214	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (14)	1/100, 1/500	PC-ISC-273	CROSS SECTION OF SECONDARY INTERCEPTOR (16)	1/100
PC-ISC-215	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (15)	1/100, 1/500	PC-ISC-274	CROSS SECTION OF SECONDARY INTERCEPTOR (17)	1/100
PC-ISC-216	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (16)	1/100, 1/500	PC-ISC-275	CROSS SECTION OF SECONDARY INTERCEPTOR (18)	1/100
PC-ISC-217	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (17)	1/100, 1/500	PC-ISC-276	CROSS SECTION OF SECONDARY INTERCEPTOR (19)	1/100
PC-ISC-218	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (18)	1/100, 1/500	PC-ISC-277	CROSS SECTION OF SECONDARY INTERCEPTOR (20)	1/100
PC-ISC-219	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (19)	1/100, 1/500	PC-ISC-278	CROSS SECTION OF SECONDARY INTERCEPTOR (21)	1/100
PC-ISC-220	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (20)	1/100, 1/500	PC-ISC-279	CROSS SECTION OF SECONDARY INTERCEPTOR (22)	1/100
PC-ISC-221	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (21)	1/100, 1/500	PC-ISC-280	CROSS SECTION OF SECONDARY INTERCEPTOR (23)	1/100
PC-ISC-222	PLAN AND PROFILE OF MAIN INTERCEPTOR SEWER (22)	1/100, 1/500	PC-ISC-281	CROSS SECTION OF SECONDARY INTERCEPTOR (24)	1/100
PC-ISC-223	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (1)	1/100, 1/500	PC-ISC-282	CROSS SECTION OF SECONDARY INTERCEPTOR (25)	1/100
PC-ISC-224	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (2)	1/100, 1/500	PC-ISC-283	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (1)	1/60
PC-ISC-225	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (3)	1/100, 1/500	PC-ISC-284	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (2)	1/60
PC-ISC-226	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (4)	1/100, 1/500	PC-ISC-285	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (3)	1/60
PC-ISC-227	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (5)	1/100, 1/500	PC-ISC-286	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (4)	1/60
PC-ISC-228	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (6)	1/100, 1/500	PC-ISC-287	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (5)	1/60
PC-ISC-229	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (7)	1/100, 1/500	PC-ISC-288	TYPICAL PLAN AND SECTION OF MANHOLE FOR MAIN INTERCEPTOR (6)	1/60
PC-ISC-230	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (8)	1/100, 1/500	PC-ISC-289	TYPICAL PLAN AND SECTION OF MANHOLE FOR SECONDARY INTERCEPTOR	1/60
PC-ISC-231	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (9)	1/100, 1/500	PC-ISC-290	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (1)	1/60
PC-ISC-232	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (10)	1/100, 1/500	PC-ISC-291	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (2)	1/60
PC-ISC-233	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (11)	1/100, 1/500	PC-ISC-292	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (3)	1/60
PC-ISC-234	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (12)	1/100, 1/500	PC-ISC-293	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (4)	1/60
PC-ISC-235	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (13)	1/100, 1/500	PC-ISC-294	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (5)	1/60
PC-ISC-236	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (14)	1/100, 1/500	PC-ISC-295	TYPICAL BAR ARRANGEMENT OF MAIN INTERCEPTOR MANHOLE (6)	1/60
PC-ISC-237	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (15)	1/100, 1/500	PC-ISC-296	TYPICAL BAR ARRANGEMENT OF SECONDARY INTERCEPTOR MANHOLE	1/60
PC-ISC-238	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (16)	1/100, 1/500	PC-ISC-297	TYPICAL PLAN AND SECTION OF DIVERSION CHAMBER(1)	1/50
PC-ISC-239	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (17)	1/100, 1/500	PC-ISC-298	TYPICAL PLAN AND SECTION OF DIVERSION CHAMBER(2)	1/50
PC-ISC-240	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (18)	1/100, 1/500	PC-ISC-299	TYPICAL PLAN AND SECTION OF DIVERSION CHAMBER(3)	1/50
PC-ISC-241	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (19)	1/100, 1/500	PC-ISC-300	TYPICAL PLAN AND SECTION OF DIVERSION CHAMBER(4)	1/50
PC-ISC-242	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (20)	1/100, 1/500	PC-ISC-301	TYPICAL PLAN AND SECTION OF DIVERSION CHAMBER(5)	1/50
PC-ISC-243	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (21)	1/100, 1/500	PC-ISC-302	TYPICAL BAR ARRANGEMENT OF DIVERSION CHAMBER (1)	1/50
PC-ISC-244	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (22)	1/100, 1/500	PC-ISC-303	TYPICAL BAR ARRANGEMENT OF DIVERSION CHAMBER (2)	1/50
PC-ISC-245	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (23)	1/100, 1/500	PC-ISC-304	TYPICAL BAR ARRANGEMENT OF DIVERSION CHAMBER (3)	1/50
PC-ISC-246	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (24)	1/100, 1/500	PC-ISC-305	TYPICAL BAR ARRANGEMENT OF DIVERSION CHAMBER (4)	1/50
PC-ISC-247	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (25)	1/100, 1/500	PC-ISC-306	DETAILS OF MANHOLE COVER (1)	1/10
PC-ISC-248	PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (26)	1/100, 1/500	PC-ISC-307	DETAILS OF MANHOLE COVER (2)	1/10
PC-ISC-249	CROSS SECTION OF MAIN INTERCEPTOR (1)	1/100	PC-ISC-308	DETAILS OF FLAP GATE	N.T.S.
PC-ISC-250	CROSS SECTION OF MAIN INTERCEPTOR (2)	1/100	PC-ISC-309	TYPICAL SECTION OF BEDDING FOR INTERCEPTOR SEWER	N.T.S.
			PC-ISC-310	WATER LEVEL ALARM SYSTEM	N.T.S.
			PC-ISC-311	LIST OF MANHOLE AND DIVERSION CHAMBER FOR MAIN INTERCEPTOR	N.T.S.
			PC-ISC-312	LIST OF MANHOLE AND DIVERSION CHAMBER FOR SECONDARY INTERCEPTOR (1)	N.T.S.
			PC-ISC-313	LIST OF MANHOLE AND DIVERSION CHAMBER FOR SECONDARY INTERCEPTOR (2)	N.T.S.
			PC-ISC-314	TEMPORARY STRUCTURE OF TRENCH FOR OPEN CUT METHOD (1) (REFERENCE)	1/100
			PC-ISC-315	TEMPORARY STRUCTURE OF TRENCH FOR OPEN CUT METHOD (2) (REFERENCE)	1/100

DRAWING NO.	TITLE	SCALE
PC-ISC-316	TEMPORARY STRUCTURE OF TRENCH FOR OPEN CUT METHOD (3) (REFERENCE)	1/100
PC-ISC-317	TEMPORARY STRUCTURE OF TRENCH FOR OPEN CUT METHOD (4) (REFERENCE)	1/100
PC-ISC-318	TEMPORARY STRUCTURE OF SHAFT FOR PIPE JACKING METHOD (1) (REFERENCE)	1/100
PC-ISC-319	TEMPORARY STRUCTURE OF SHAFT FOR PIPE JACKING METHOD (2) (REFERENCE)	1/100
PC-ISC-320	TEMPORARY STRUCTURE OF SHAFT FOR PIPE JACKING METHOD (3) (REFERENCE)	1/100
PC-ISC-321	TEMPORARY STRUCTURE OF SHAFT FOR PIPE JACKING METHOD (4) (REFERENCE)	1/100
PC-ISC-322	GROUND IMPROVEMENT FOR JACKING METHOD (1) (REFERENCE)	1/100
PC-ISC-323	GROUND IMPROVEMENT FOR JACKING METHOD (2) (REFERENCE)	1/100
PC-ISC-324	GROUND IMPROVEMENT FOR JACKING METHOD (3) (REFERENCE)	1/100
PC-ISC-325	PLAN AND PROFILE OF REINFORCED CONCRETE PIPE JACKING PIPE (REFERENCE)	N.T.S.
<b>INTERMEDIATE WASTEWATER PUMPING STATION (CIVIL WORKS)</b>		
PC-IWPS-201	GENERAL LAYOUT OF INTERMEDIATE WASTEWATER PUMPING STATION	1/250
PC-IWPS-202	PLAN AND SECTION OF PUMPING STATION AND GRIT CHAMBER	1/200
PC-IWPS-203	PLAN OF INTAKE AND PUMP PIT OF PUMPING STATION	1/100
PC-IWPS-204	PLAN OF BASEMENT 2 FLOOR OF PUMPING STATION	1/100
PC-IWPS-205	PLAN OF BASEMENT 1 FLOOR OF PUMPING STATION	1/100
PC-IWPS-206	PLAN OF GROUND FLOOR OF PUMPING STATION	1/50, 1/100
PC-IWPS-207	PROFILE OF PUMPING STATION	1/10, 1/50, 1/100
PC-IWPS-208	SECTION OF INTAKE AND PUMP PIT (1/2)	1/50, 1/100
PC-IWPS-209	SECTION OF INTAKE AND PUMP PIT (2/2)	1/100
PC-IWPS-210	PLAN AND SECTION OF GRIT CHAMBER (1/2)	1/100
PC-IWPS-211	PLAN AND SECTION OF GRIT CHAMBER (2/2)	1/100
PC-IWPS-212	BAR ARRANGEMENT OF INTAKE AND PUMP PIT (1/3)	1/60
PC-IWPS-213	BAR ARRANGEMENT OF INTAKE AND PUMP PIT (2/3)	1/60
PC-IWPS-214	BAR ARRANGEMENT OF INTAKE AND PUMP PIT (3/3)	1/60
PC-IWPS-215	BAR ARRANGEMENT OF GRID CHAMBER	1/50
PC-IWPS-216	BAR ARRANGEMENT OF DIAPHRAM WALL	1/50
PC-IWPS-217	TEMPORARY SUPPORTING PLAN	1/100
PC-IWPS-218	TEMPORARY SUPPORTING SECTION (1)	1/100
PC-IWPS-219	TEMPORARY SUPPORTING SECTION (2)	1/100
PC-IWPS-220	INNER ROAD AND STORMWATER DRAINAGE PLAN	1/10, 1/100, 1/250
PC-IWPS-221	PLAN AND SECTION OF MANHOLE AND OUTLET	1/10, 1/20, 1/50
<b>(ARCHITECTURAL WORKS)</b>		
PC-IWPS-301	PUMP HOUSE AND O/M OFFICE: GROUND FLOOR PLAN	1/100
PC-IWPS-302	PUMP HOUSE AND O/M OFFICE: BASEMENT 1 FLOOR PLAN	1/100
PC-IWPS-303	PUMP HOUSE AND O/M OFFICE: ROOF PLAN	1/100
PC-IWPS-304	PUMP HOUSE, O/M OFFICE AND ELECTRIC ROOM: SECTION A-A	1/100
PC-IWPS-305	PUMP HOUSE, O/M OFFICE AND ELECTRIC ROOM: SECTION B-B	1/100
PC-IWPS-306	PUMP HOUSE AND O/M OFFICE: ELEVATION LINE A AND G	1/100
PC-IWPS-307	PUMP HOUSE AND O/M OFFICE: ELEVATION LINE 1 AND 5	1/100
PC-IWPS-308	PUMP HOUSE AND O/M OFFICE: GROUND FLOOR - CEILING PLAN	1/100
PC-IWPS-309	PUMP HOUSE, O/M OFFICE AND GENERATOR ROOM: DOOR AND WINDOW SCHEDULE, AND FINISH SCHEDULE	N.T.S.
PC-IWPS-310	GENERAL: DETAILS OF DOORS, WINDOWS AND LOUVER	N.T.S.
PC-IWPS-311	PUMP HOUSE AND O/M OFFICE: DETAILS OF FLOOR PLAN, SECTIONS AND ELEVATIONS	1/20, 1/50
PC-IWPS-312	PUMP HOUSE AND O/M OFFICE: LINTEL SCHEDULE	N.T.S.
PC-IWPS-313	PUMP HOUSE AND O/M OFFICE: PLAN AND DETAILS OF COLUMNS AND ROOF BEAMS	N.T.S.
PC-IWPS-314	PUMP HOUSE AND O/M OFFICE: DETAILS OF ROOF WALL AND TRUSS	N.T.S.
PC-IWPS-315	PUMP HOUSE AND O/M OFFICE: PLAN AND SINGLE LINE DIAGRAM OF LIGHTING (GROUND FLOOR)	1/100
PC-IWPS-316	PUMP HOUSE AND O/M OFFICE: PLAN AND SINGLE LINE DIAGRAM OF LIGHTING (BASEMENT 1 FLOOR)	1/100
PC-IWPS-317	PUMP HOUSE AND O/M OFFICE: PLAN AND SINGLE LINE DIAGRAM OF LIGHTING (BASEMENT 2 FLOOR)	1/100
PC-IWPS-318	PUMP HOUSE AND O/M OFFICE: PLAN OF VENTILATION (GROUND FLOOR)	1/100
PC-IWPS-319	PUMP HOUSE AND O/M OFFICE: VENTILATION AIR FLOW FOR BASEMENT 1 & 2	1/100
PC-IWPS-320	PUMP HOUSE AND O/M OFFICE: PLAN OF VENTILATION FOR BASEMENT 1 & 2 (1/3)	1/100
PC-IWPS-321	PUMP HOUSE AND O/M OFFICE: PLAN OF VENTILATION FOR BASEMENT 1 & 2 (2/3)	1/100
PC-IWPS-322	PUMP HOUSE AND O/M OFFICE: PLAN OF VENTILATION FOR BASEMENT 1 & 2 (3/3)	1/100
PC-IWPS-323	PUMP HOUSE AND O/M OFFICE: SECTION OF VENTILATION FOR BASEMENT 1 & 2 (1/2)	1/100
PC-IWPS-324	PUMP HOUSE AND O/M OFFICE: SECTION OF VENTILATION FOR BASEMENT 1 & 2 (2/2)	1/100
PC-IWPS-325	PUMP HOUSE AND O/M OFFICE: PLAN AND SECTION OF FIRE ARARM PLAN AND LIGHTNING (GROUND FLOOR)	1/100

DRAWING NO.	TITLE	SCALE
PC-IWPS-326	PUMP HOUSE AND O/M OFFICE: PLAN AND SECTION OF FIRE ARARM PLAN AND LIGHTNING (BASEMENT 1 FLOOR)	1/100
PC-IWPS-327	PUMP HOUSE AND O/M OFFICE: PLAN AND SECTION OF FIRE ARARM PLAN AND LIGHTNING (BASEMENT 2 FLOOR)	1/100
PC-IWPS-328	PUMP HOUSE AND O/M OFFICE: PLUMBING AND DRAINAGE PLAN, AND ISOMETRIC	1/50, 1/100
PC-IWPS-329	UNDERGROUND WATER TANK AND PIPING DETAILS	1/10, 1/25
PC-IWPS-330	GENERATOR BUILDING: PLANS, SECTION AND ELEVATIONS	1/100
PC-IWPS-331	GENERATOR BUILDING: DETAILS OF WALL AND ROOF	1/20
PC-IWPS-332	GENERATOR BUILDING: PLAN AND SECTIONS OF FOUNDATION, COLUMNS AND BEAMS	1/20, 1/100
PC-IWPS-333	GENERATOR BUILDING: PLAN AND SECTIONS OF ROOF SLAB , BEAMS AND COLUMNS	1/20, 1/100
PC-IWPS-334	GENERATOR BUILDING: PLAN AND SECTION OF GROUND FLOOR SLAB AND GENERATOR FOUNDATION	1/20, 1/100
PC-IWPS-335	GENERATOR BUILDING: PLAN AND SINGLE LINE DIAGRAM OF ELECTRICAL WORKS (LIGHTING AND VENTILATION)	1/100
PC-IWPS-336	GUARD HOUSE: PLAN, SECTIONS, ELEVATIONS AND SECTION DETAIL	1/20, 1/100
PC-IWPS-337	GUARD HOUSE: PLAN AND DETAILS OF FOUNDATIONS, COLUMNS AND BEAMS	1/20, 1/100
PC-IWPS-338	GUARD HOUSE: PLAN OF LIGHTING, PLUMBING, DRAINAGE AND SEPTIC TANK	1/30, 1/100
PC-IWPS-339	LANDSCAPE WORKS	1/10, 1/30, 1/250
PC-IWPS-340	DETAILS OF GATE, GATE POST AND FENCE (TYPE A)	1/10, 1/20, 1/50
<b>(MECHANICAL WORKS)</b>		
PC-IWPS-401	GENERAL LAYOUT FOR MECHANICAL EQUIPMENT OF IWPS (1/3)	1/150
PC-IWPS-402	GENERAL LAYOUT FOR MECHANICAL EQUIPMENT OF IWPS (2/3)	1/150
PC-IWPS-403	GENERAL LAYOUT FOR MECHANICAL EQUIPMENT OF IWPS (3/3)	1/150
PC-IWPS-404	FOUNDATIONS, BROCKOUTS AND OPENINGS FOR MECHANICAL EQUIPMENT (1/3)	1/50, 1/150
PC-IWPS-405	FOUNDATIONS, BROCKOUTS AND OPENINGS FOR MECHANICAL EQUIPMENT (2/3)	1/30, 1/150
PC-IWPS-406	FOUNDATIONS, BROCKOUTS AND OPENINGS FOR MECHANICAL EQUIPMENT (3/3)	1/150
PC-IWPS-407	DETAIL OF OPENING COVER FOR INSTALLATION OF ELECTRICAL EQUIPMENT	1/20
PC-IWPS-408	DETAILS OF OPENING COVERS FOR INSTALLATION OF MAIN PUMPS	1/20
PC-IWPS-409	DETAILS OF OPENING COVERS FOR INLET PIT	1/20
PC-IWPS-410	FLAWSHEET OF IWPS	1/150
PC-IWPS-411	TYPICAL PUMP OUTLINE AND SECTION	N.T.S.
PC-IWPS-412	LAYOUT OF EMERGENCY GATE AND INLET GATE	N.T.S.
PC-IWPS-413	LAYOUT OF STOP LOG	1/50
PC-IWPS-414	LAYOUT OF AUTHOMATIC FINE SCREEN	1/150
PC-IWPS-415	LAYOUT OF GRAB BUCKET TYPE GRIT REMOVAL EQUIPMENT	1/150
<b>(ELECTRICAL WORKS)</b>		
PC-IWPS-501	GENERAL LAYOUT OF ELECTRICAL EQUIPMENT	1/200
PC-IWPS-502	CONNECTION DIAGRAM OF 22KV SUBSTATION TO EXISTING POWER WORK	1/10, 1/25
PC-IWPS-503	SINGLE LINE DIAGRAM FOR 22KV SUBSTATION AND ELECTRIC ROOM	N.T.S.
PC-IWPS-504	SINGLE LINE DIAGRAM FOR MOTOR CONTROL CENTER AND INSTRUMENTATION	N.T.S.
PC-IWPS-505	DIMENSION OF SWITCHGEARS AND CONTROL PANELS IN ELECTRIC ROOM	1/20
PC-IWPS-506	LAYOUT FOR 22KV SUBSTATION	1/30
PC-IWPS-507	LAYOUT OF ELECTRICAL EQUIPMENT IN GENERATOR ROOM	1/50
PC-IWPS-508	EQUIPMENT FOUNDATION FOR 22KV SUBSTATION AND GENERATOR	1/60
PC-IWPS-509	LAYOUT OF EARTHING SYSTEM FOR 22KV SUBSTATION	1/30
PC-IWPS-510	LAYOUT OF EARTHING SYSTEM FOR ELECTRIC ROOM	1/100
PC-IWPS-511	LAYOUT OF EARTHING SYSTEM FOR GENERATOR ROOM	1/50
PC-IWPS-512	LAYOUT OF ELECTRICAL EQUIPMENT IN ELECTRIC ROOM	1/100
PC-IWPS-513	LAYOUT OF PANELS IN CONTROL ROOM	1/50
PC-IWPS-514	WIRING AND PIPING PLAN FOR GROUND LEVEL AND OUT SIDE	1/200
PC-IWPS-515	WIRING AND PIPING PLAN FOR BASEMENT 1 FLOOR	1/100
PC-IWPS-516	WIRING AND PIPING PLAN AND SECTION FOR BASEMENT 2 FLOOR	1/150
PC-IWPS-517	SINGLE LINE DIAGRAM FOR RECEIVING SYSTEM (REFERENCE DRAWING)	N.T.S.
PC-IWPS-518	ROUTE OF TRANSMISSION LINE (REFERENCE DRAWINGS)	1/15,000
<b>CONVEYANCE SEWER CONSTRUCTION</b>		
PC-CSC-201	PLAN AND PROFILE OF CONVEYANCE SEWER AND O/M ROAD	1/100, 1/500
PC-CSC-202	CROSS SECTION OF CONVEYANCE SEWER AND O/M ROAD	1/100
PC-CSC-203	TYPICAL PLAN AND SECTION OF CONVEYANCE SEWER AND MANHOLE	1/50
PC-CSC-204	TYPICAL BAR ARRANGEMENT OF CONVEYANCE SEWER AND MANHOLE	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.

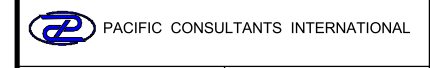
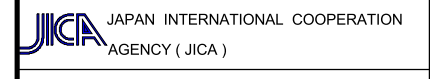
REVISIONS

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 C  
INTERCEPTOR SEWER CONSTRUCTION  
LOCATION OF INTERCEPTOR SEWER  
AND INTERMEDIATE WASTEWATER  
PUMPING STATION

SCALE : 1 : 25000



DESIGNED  
SATO NOBUYUKI

CHECKED  
KONDO MASAMI

DATE : JUNE 2001      DWG. No. PC - ISC, IWPS - 101



BENCH MARK DATA				
NO	EL.	X	Y	REMARKS
204K	2.440			Mui Nai
208K	1.905			Mui Nai
210K	2.342			Mui Nai
217-2k	2.231	1189343.056	573745.643	Mui Nai
276-3k	1.805	1189288.364	573477.709	Mui Nai
429K	1.955			Mui Nai
523K	1.863			Mui Nai
BM(Mc1)	1.593			Mui Nai
LC 1	4.651			Mui Nai
LC 2	2.197			Mui Nai
LC 3	1.466			Mui Nai

**LEGEND**

- Bench Mark and Number of Bench Mark
- District Boundary
- Ward Boundary


NO.	DATE	DESCRIPTIONS	BY	APRO.
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 C  
INTERCEPTOR SEWER CONSTRUCTION  
TOPOGRAPHIC SURVEY DATA  
AND INFORMATION

SCALE : 1 / 30000

JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED SATO NOBUYUKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001      DWG. No. PC - ISC, IWPS - 102