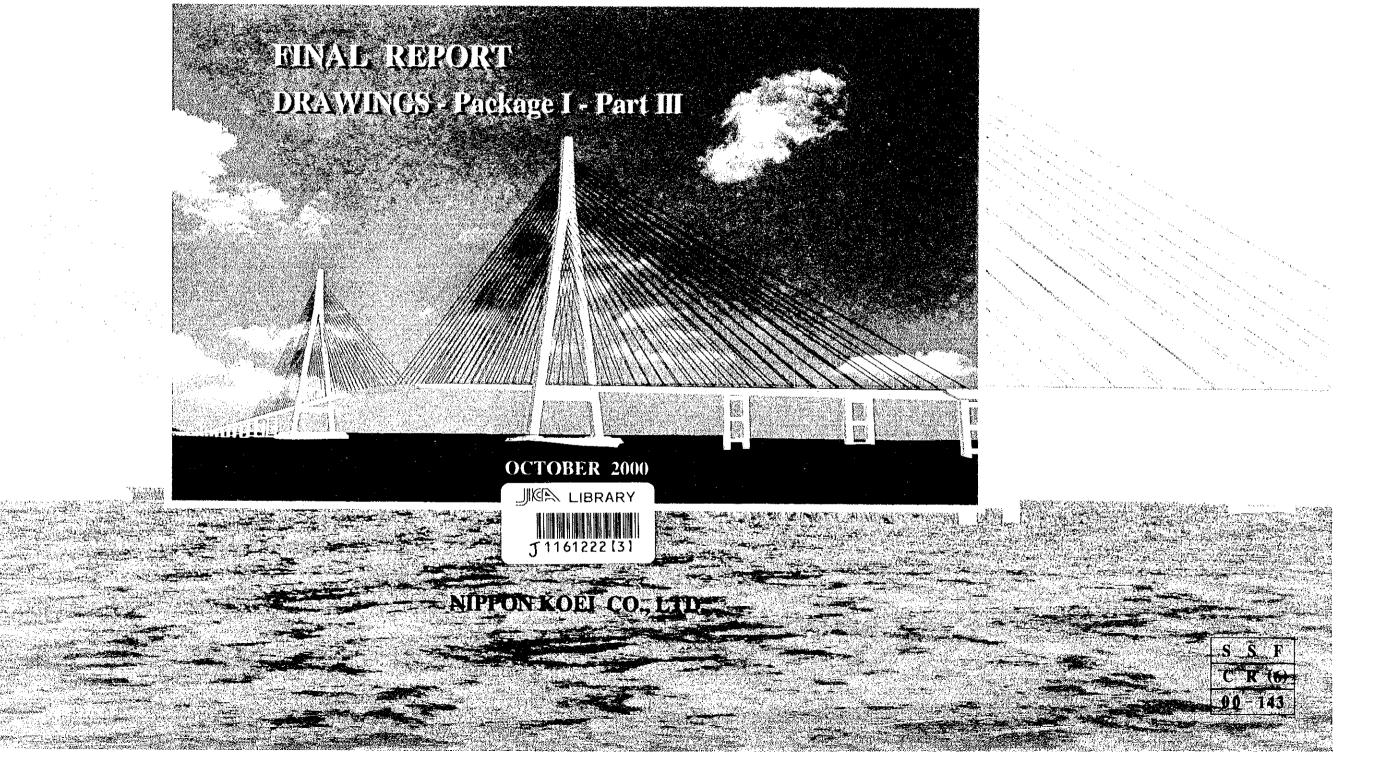
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY OF TRANSPORT
SOCIALIST REPUBLIC OF VIET NAM

THE DETAILED DESIGN ON THE CAN THO BRIDGE CONSTRUCTION IN SOCIALIST REPUBLIC OF VIET NAM



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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY OF TRANSPORT
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THE DETAILED DESIGN ON THE CAN THO BRIDGE CONSTRUCTION IN SOCIALIST REPUBLIC OF VIET NAM

FINAL REPORT

DRAWINGS - Package I - Part III

OCTOBER 2000

NIPPON KOEI CO., LTD.



PACKAGE I (PART – 3)

P1/BR3 TRA ON BRIDGE

P1/BR4 INTERCHANGE WITH NH.54 - OVERBRIDGE

DRAWING LIST (1/2)

| RAWING NO. | DRAWING TITLE TRA ON BRIDGE | DRAWING NO. P1/BR3/0460 | DRAWING TITLE SEGMENT REINFORCEMENT - SHEET 1 |
|--------------|--|--|--|
| 1000 | GENERAL | P1/BR3/0470 | SEGMENT REINFORCEMENT - SHEET 1 |
| BR3/0010 | DRAWING LIST | and the second of the second o | SEGMENT REINFORCEMENT - SHEET 2 |
| | . I consider the contract of t | P1/BR3/0480 | and the array of the array of the contraction of th |
| 3R3/0020 | ABBREVIATIONS AND SYMBOLS | P1/BR3/0490 | SEGMENT REINFORCEMENT - SHEET 4 |
| 3R3/0030 | STRUCTURAL NOTES | P1/BR3/0500 | SEGMENT REINFORCEMENT - SHEET 5 |
| BR3/0040 | LOCATION MAP | P1/BR3/0510 | SEGMENT REINFORCEMENT - SHEET 6 |
| BR3/0050 | COORDINATES OF BRIDGE | P1/BR3/0520 | SEGMENT REINFORCEMENT - SHEET 7 |
| BR3/0060 | GENERAL VIEW - SHEET 1 | P1/BR3/0530 | SEGMENT REINFORCEMENT - SHEET 8 |
| BR3/0070 | GENERAL VIEW - SHEET 2 | P1/BR3/0540 | SEGMENT REINFORCEMENT - SHEET 9 |
| BR3/0080 | GENERAL VIEW - SHEET 3 | P1/BR3/0550 | SEGMENT REINFORCEMENT - SHEET 10 |
| BR3/0090 | QUANTITY TABLE OF BRIDGE | P1/BR3/0560 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 1 |
| | SUPERSTRUCTURE - APPROACH BRIDGE | P1/BR3/0570 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 2 |
| BR3/0100 | GIRDER LAYOUT SHEET - 1 | P1/BR3/0580 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 3 |
| 'BR3/0110 | GIRDER LAYOUT SHEET - 2 | P1/BR3/0590 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 4 |
| BR3/0120 | GENERAL VIEW OF GIRDER SHEET 1 | P1/BR3/0600 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 5 |
| BR3/0130 | GENERAL VIEW OF GIRDER SHEET 2 | P1/BR3/0610 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 6 |
| /BR3/0140 | TENDONS ARRANGEMENT OF GIRDER SHEET 1 | P1/BR3/0620 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 7 |
| /BR3/0150 | TENDONS ARRANGEMENT OF GIRDER SHEET 2 | P1/BR3/0630 | DETAILS OF EXPANSION JOINT |
| /BR3/0160 | TENDONS ARRANGEMENT OF GIRDER SHEET 3 | P1/BR3/0640 | DETAILS OF BEARINGS - SHEET 1 |
| /BR3/0170 | TENDONS ARRANGEMENT OF GIRDER SHEET 4 | P1/BR3/0650 | DETAILS OF BEARINGS - SHEET 2 |
| /BR3/0180 | TENDONS ARRANGEMENT OF CONNECTION DIAPHRAGM > | P1/BR3/0660 | MANHOLE COVER |
| /BR3/0190 | REINFORCEMENT OF GIRDER SHEET 1 | P1/BR3/0670 | QUANTITY TABLE OF SUPERSTRUCTURE - MAIN BRIDGE |
| /BR3/0200 | REINFORCEMENT OF GIRDER SHEET 2 | | ABUTMENTS |
| /BR3/0210 | REINFORCEMENT OF GIRDER SHEET 3 | P1/BR3/0680 | ABUTMENT A1 & A2 - GENERAL VIEW |
| /BR3/0220 | REINFORCEMENT OF DIAPHRAGM | P1/BR3/0690 | ABUTMENT A1 & A2 - BORED CAST IN SITU PILE DETAILS - L=79M |
| /BR3/0230 | DECK SLAB REINFORCEMENT - SHEET 1 | P1/BR3/0700 | ABUTMENT A1 REINFORCEMENT - SHEET 1 |
| /BR3/0240 | DECK SLAB REINFORCEMENT - SHEET 2 | P1/BR3/0710 | ABUTMENT A1 REINFORCEMENT - SHEET 2 |
| /BR3/0250 | DECK SLAB REINFORCEMENT - SHEET 3 | P1/BR3/0720 | ABUTMENT A1 REINFORCEMENT - SHEET 3 |
| /BR3/0260 | DECK SLAB REINFORCEMENT - SHEET 4 | P1/BR3/0730 | ABUTMENT A2 REINFORCEMENT - SHEET 1 |
| /BR3/0270 | DECK SLAB REINFORCEMENT - SHEET 5 | P1/BR3/0740 | ABUTMENT A2 REINFORCEMENT - SHEET 2 |
| /BR3/0280 | DETAILS OF EXPANSION JOINT | P1/BR3/0750 | ABUTMENT A2 REINFORCEMENT - SHEET 3 |
| /BR3/0290 | DETAILS OF BEARINGS | P1/BR3/0760 | ABUTMENT A1 & A2 - EARTHWORKS SLOPE PROTECTION |
| /BR3/0300 | QUANTITY TABLE OF SUPERSTRUCTURE - APPROACH BRIDGE | P1/BR3/0770 | DETAILS OF APPROACH SLAB |
| 7 DIX37 0300 | SUPERSTRUCTURE - MAIN BRIDGE | The second secon | Committee in the contract of t |
| /PP2 /0210 | order to the contract of the c | P1/BR3/0780 | QUANTITY TABLE OF ABUTMENTS |
| /BR3/0310 | GENERAL ARRANGEMENT OF SEGMENTS - SHEET 1 | P1 / PP2 / OFF | PIERS |
| /BR3/0320 | GENERAL ARRANGEMENT OF SEGMENTS - SHEET 2 | P1/BR3/0790 | PIER1 & PIER6 - GENERAL VIEW |
| /BR3/0330 | CONSTRUCTION SEQUENCE - SHEET 1 | P1/BR3/0800 | PIER2 & PIER5 - GENERAL VIEW |
| /BR3/0340 | CONSTRUCTION SEQUENCE - SHEET 2 | P1/BR3/0810 | PIER3 & PIER4 - GENERAL VIEW |
| /BR3/0350 | GENERAL SECTIONS | P1/BR3/0820 | PIERS PROTECTION |
| /BR3/0360 | ANCHOR & DEVIATOR DETAILS - SHEET 1 | P1/BR3/0830 | PIER1 & PIER4 - BORED PILE DETAILS - L=77M |
| /BR3/0370 | ANCHOR & DEVIATOR DETAILS - SHEET 2 | P1/BR3/0840 | PIER2 & PIER3 - BORED PILE DETAILS - L=71M |
| /BR3/0380 | ANCHOR & DEVIATOR DETAILS - SHEET 3 | P1/BR3/0850 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 1 |
| /BR3/0390 | ANCHOR & DEVIATOR DETAILS - SHEET 4 | P1/BR3/0860 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 2 |
| /BR3/0400 | ANCHOR & DEVIATOR DETAILS - SHEET 5 | P1/BR3/0870 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 3 |
| /BR3/0410 | ARRANGEMENT OF TENDONS - SHEET 1 | P1/BR3/0880 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 4 |
| /BR3/0420 | ARRANGEMENT OF TENDONS - SHEET 2 | P1/BR3/0890 | PIER3 & PIER4 - REINFORCEMENT - SHEET 1 |
| I/BR3/0430 | ARRANGEMENT OF TENDONS - SHEET 3 | P1/BR3/0900 | PIER3 & PIER4 - REINFORCEMENT - SHEET 2 |
| I/BR3/0440 | ARRANGEMENT OF TENDONS - SHEET 4 | P1/BR3/0910 | QUANTITY TABLE OF PIERS |

| PROJECT NAME | IMPLEMENTATION AGENCY | EXECUTING AGENCY | JICA STUDY TEAM | | PREPARED BY | CHECKED BY | APPROVED BY | DRAWING TITLE | DWG NO. |
|----------------------|-----------------------|----------------------------------|----------------------------|-----------|-------------|--------------|-------------|-------------------------------|-------------|
| DETAILED DESIGN OF | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | | NAME | T. Kametani | K.Matsumoto | K. Enomoto | GENERAL | |
| THE CAN THO BRIDGE | COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | (NK) NIPPON KOEI CO., LTD. | SIGNATURE | 200 | E. Hatternet | ليسانعا | DRAWING LIST (PART - 3) (1/2) | P1/PA3/0010 |
| CONSTRUCTION PROJECT | (JICA) | MY THUAN PROJECT MANAGEMENT UNIT | | DATE | 20/9/2000 | 29/9/2000 | 5/10/2000 | Diditing Biot (That "5) (112) | ļ |

DRAWING LIST (2/2)

| DRAWING NO. | DRAWING TITLE |
|-----------------|---|
| | MISCELLANEOUS |
| P1/BR3/0920 | PARAPET AND RAILING DETAILS |
| P1/BR3/0930 | BRIDGE NAME PLAQUE |
| P1/BR3/0940 | DRAINAGE AND LIGHTING POLES LAYOUT |
| P1/BR3/0950 | DRAINAGE DETAILS - SHEET 1 |
| P1/BR3/0960 | DRAINAGE DETAILS - SHEET 2 |
| P1/BR3/0970 | LIGHTING POLE'S BASE DETAILS |
| P1/BR3/0980 | QUANTITY TABLE OF MISCELLANEOUS WORKS |
| P1/BR4 | INTERCUANCE OF VOVER BRIDGE |
| 11/084 | INTERCHANGE 2 FLYOVER BRIDGE |
| D1 / PD4 / 0010 | GENERAL |
| P1/BR4/0010 | DRAWING LIST |
| P1/BR4/0020 | ABBREVIATIONS AND SYMBOLS |
| P1/BR4/0030 | STRUCTURAL NOTES |
| P1/BR4/0040 | LOCATION MAP |
| P1/BR4/0050 | COORDINATES OF BRIDGE |
| P1/BR4/0060 | GENERAL VIEW SHEET 1 |
| P1/BR4/0070 | GENERAL VIEW SHEET 2 |
| P1/BR4/0080 | QUANTITY TABLE OF BRIDGE |
| | SUPERSTRUCTURE |
| P1/BR4/0090 | GENERAL VIEW OF HOLLOW SLAB - SHEET 1 |
| P1/BR4/0100 | GENERAL VIEW OF HOLLOW SLAB - SHEET 2 |
| P1/BR4/0110 | CONSTRUCTION SEQUENCE |
| P1/BR4/0120 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 1 |
| P1/BR4/0130 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 2 |
| P1/BR4/0140 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 3 |
| P1/BR4/0150 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 4 |
| P1/BR4/0160 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 5 |
| P1/BR4/0170 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 6 |
| P1/BR4/0180 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 7 |
| P1/BR4/0190 | TENDON ARRANGEMENT OF HOLLOW SLAB - SHEET 8 |
| P1/BR4/0200 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 1 |
| P1/BR4/0210 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 2 |
| P1/BR4/0220 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 3 |
| P1/BR4/0230 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 4 |
| P1/BR4/0240 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 5 |
| P1/BR4/0250 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 6 |
| P1/BR4/0260 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 7 |
| P1/BR4/0270 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 8 |
| P1/BR4/0280 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 9 |
| P1/BR4/0290 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 10 |
| P1/BR4/0300 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 11 |
| P1/BR4/0310 | REINFORCEMENT ARRANGEMENT OF HOLLOW SLAB - SHEET 12 |
| P1/BR4/0320 | EXPANSION JOINT DETAILS AT ABUTMENT A1 & A2 |
| P1/BR4/0330 | BEARING DETAILS AT ABUTMENT AT & A2 |
| P1/BR4/0340 | BEARING DETAILS AT PIER P1 & P4 |
| P1/BR4/0350 | QUANTITY TABLE OF SUPERSTRUCTURE |
| | ABUTMENTS |
| L | ANOLIMATIO |

| | DRAWING TITLE |
|---|--|
| P1/BR4/0370 | ABUTMENT A1 & A2 - BORED PILES DETAILS L=71M |
| P1/BR4/0380 | ABUTMENT A1 & A2 - REINFORCEMENT - SHEET 1 |
| P1/BR4/0390 | ABUTMENT A1 & A2 - REINFORCEMENT - SHEET 2 |
| P1/BR4/0400 | ABUTMENT A1 & A2 - REINFORCEMENT - SHEET 3 |
| P1/BR4/0410 | ABUTMENT A1 & A2 - EARTHWORK SLOPE PROTECTION |
| P1/BR4/0420 | DETAILS OF APPROACH SLAB |
| P1/BR4/0430 | QUANTITY TABLE OF ABUTMENTS |
| | PIERS |
| P1/BR4/0440 | PIER 1 & PIER 4 - GENERAL VIEW |
| P1/BR4/0450 | PIER 2 & PIER 3 - GENERAL VIEW |
| P1/BR4/0460 | PIER 1 & PIER 4 - BORED PILE DETAILS L=69M |
| P1/BR4/0470 | PIER 2 & PIER 3 - BORED PILE DETAILS L=69M |
| P1/BR4/0480 | PIER 1 & PIER 4 - REINFORCEMENT - SHEET 1 |
| P1/BR4/0490 | PIER 1 & PIER 4 - REINFORCEMENT - SHEET 2 |
| P1/BR4/0500 | PIER 2 & PIER 3 - REINFORCEMENT - SHEET 1 |
| P1/BR4/0510 | PIER 2 & PIER 3 - REINFORCEMENT - SHEET 2 |
| P1/BR4/0520 | QUANTITY TABLE OF PIERS |
| | MISCELLANEOUS |
| P1/BR4/0530 | PARAPET AND RAILING DETAILS |
| P1/BR4/0540 | BRIDGE NAME PLAQUE |
| P1/BR4/0550 | DRAINAGE AND LIGHTING POLES LAYOUT |
| P1/BR4/0560 | DRAINAGE DETAILS |
| P1/BR4/0570 | BASE DETAILS OF LIGHTING POLES |
| P1/BR4/0580 | QUANTITY TABLE OF MISCELLANEOUS WORKS |
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| PROJECT NAME | IMP | LEMENTATION AGENCY | EXECUTING AGENCY | J | ICA STUDY TEAM | |
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| DETAILED DESIGN OF | | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | A | | N. |
| THE CAN THO BRIDGE | ADIL | COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | ((NK)) | NIPPON KOEI CO.,LTD. | SIGN |
| CONSTRUCTION PROJECT | l | (JICA) | MY THUAN PROJECT MANAGEMENT UNIT | | <u> </u> | D |

| | PREPARED BY | CHECKED BY | APPROVED BY | |
|-----------|-------------|-------------|-------------|---|
| NAME | T. Kametani | K.Matsumoto | K. Enomoto | |
| SIGNATURE | 266 | E. Hebuston | Milwi | |
| DATE | 20/9/2000 | 29/9/2000 | 5/10/2000 | · |

P1/BR3 TRAON BRIDGE

DRAWING LIST OF TRA ON BRIDGE

| DRAWING NO. | DRAWING TITLE |
|---------------------------|--|
| P1/BR3 | TRA ON BRIDGE |
| | GENERAL |
| P1/BR3/0010 | DRAWING LIST |
| P1/BR3/0020 | ABBREVIATIONS AND SYMBOLS |
| P1/BR3/0030 | STRUCTURAL NOTES |
| P1/BR3/0040 | LOCATION MAP |
| P1/BR3/0050 | COORDINATES OF BRIDGE |
| P1/BR3/0060 | GENERAL VIEW - SHEET 1 |
| P1/BR3/0070 | GENERAL VIEW - SHEET 2 |
| P1/BR3/0080 | GENERAL VIEW - SHEET 3 |
| P1/BR3/0090 | QUANTITY TABLE OF BRIDGE |
| 1 1/ 11 11 11 11 11 11 11 | SUPERSTRUCTURE - APPROACH BRIDGE |
| P1/BR3/0100 | GIRDER LAYOUT SHEET - 1 |
| P1/BR3/0110 | GIRDER LAYOUT SHEET - 2 |
| P1/BR3/0120 | GENERAL VIEW OF GIRDER SHEET 1 |
| P1/BR3/0130 | GENERAL VIEW OF GIRDER SHEET 2 |
| P1/BR3/0140 | TENDONS ARRANGEMENT OF GIRDER SHEET 1 |
| P1/BR3/0150 | TENDONS ARRANGEMENT OF GIRDER SHEET 2 |
| P1/BR3/0160 | TENDONS ARRANGEMENT OF GIRDER SHEET 3 |
| P1/BR3/0170 | TENDONS ARRANGEMENT OF GIRDER SHEET 4 |
| | TENDONS ARRANGEMENT OF CONNECTION DIAPHRAGM |
| P1/BR3/0180 | REINFORCEMENT OF GRIDER SHEET 1 |
| P1/BR3/0190 | REINFORCEMENT OF GIRDER SHEET 2 |
| P1/BR3/0200 | REINFORCEMENT OF GIRDER SHEET 3 |
| P1/BR3/0210 | |
| P1/BR3/0220 | REINFORCEMENT OF DIAPHRAGM |
| P1/BR3/0230 | DECK SLAB REINFORCEMENT - SHEET 1 |
| P1/BR3/0240 | DECK SLAB REINFORCEMENT - SHEET 2 |
| P1/BR3/0250 | DECK SLAB REINFORCEMENT - SHEET 3 |
| P1/BR3/0260 | DECK SLAB REINFORCEMENT - SHEET 4 |
| P1/BR3/0270 | DECK SLAB REINFORCEMENT - SHEET 5 |
| P1/BR3/0280 | DETAILS OF EXPANSION JOINT |
| P1/BR3/0290 | DETAILS OF BEARINGS |
| P1/BR3/0300 | QUANTITY TABLE OF SUPERSTRUCTURE - APPROACH BRIDGE |
| De I Prog Londo | SUPERSTRUCTURE - MAIN BRIDGE |
| P1/BR3/0310 | GENERAL ARRANGEMENT OF SEGMENTS - SHEET 1 |
| P1/BR3/0320 | GENERAL ARRANGEMENT OF SEGMENTS - SHEET 2 |
| P1/BR3/0330 | CONSTRUCTION SEQUENCE - SHEET 1 |
| P1/BR3/0340 | CONSTRUCTION SEQUENCE - SHEET 2 |
| P1/BR3/0350 | GENERAL SECTIONS ANGLIOD * DEMATOR DETAILS: CHEET 1 |
| P1/BR3/0360 | ANCHOR & DEVIATOR DETAILS - SHEET 1 |
| P1/BR3/0370 | ANCHOR & DEVIATOR DETAILS - SHEET 3 |
| P1/BR3/0380 | ANCHOR & DEVIATOR DETAILS - SHEET 3 |
| P1/BR3/0390 | ANCHOR & DEVIATOR DETAILS - SHEET 4 |
| P1/BR3/0400 | ANCHOR & DEVIATOR DETAILS - SHEET 5 |
| P1/BR3/0410 | ARRANGEMENT OF TENDONS - SHEET 1 |
| P1/BR3/0420 | ARRANGEMENT OF TENDONS - SHEET 2 |
| P1/BR3/0430 | ARRANGEMENT OF TENDONS - SHEET 3 |
| P1/BR3/0440 | ARRANGEMENT OF TENDONS - SHEET 4 |
| P1/BR3/0450 | TRANSVERSE PRESTRESS OF TOP SLAB |
| P1/BR3/0460 | SEGMENT REINFORCEMENT - SHEET 1 |
| P1/BR3/0470 | SEGMENT REINFORCEMENT - SHEET 2 |
| P1/BR3/0480 | SEGMENT REINFORCEMENT - SHEET 3 |
| P1/BR3/0490 | SEGMENT REINFORCEMENT - SHEET 4 |

| DRAWING NO. | DRAWING TITLE |
|-------------------------------------|--|
| P1/BR3/0500 | SEGMENT REINFORCEMENT - SHEET 5 |
| P1/BR3/0510 | SEGMENT REINFORCEMENT - SHEET 6 |
| P1/BR3/0520 | SEGMENT REINFORCEMENT - SHEET 7 |
| P1/BR3/0530 | SEGMENT REINFORCEMENT - SHEET 8 |
| P1/BR3/0540 | SEGMENT REINFORCEMENT - SHEET 9 |
| P1/BR3/0550 | SEGMENT REINFORCEMENT - SHEET 10 |
| P1/BR3/0560 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 1 |
| P1/BR3/0570 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 2 |
| P1/BR3/0580 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 3 |
| P1/BR3/0590 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 4 |
| P1/BR3/0600 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 5 |
| P1/BR3/0610 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 6 |
| P1/BR3/0620 | ANCHOR & DEVIATOR REINFORCEMENT - SHEET 7 |
| P1/BR3/0630 | DETAILS OF EXPANSION JOINT |
| and the committee of the service of | |
| P1/BR3/0640 | DETAILS OF BEARINGS - SHEET 1 |
| P1/BR3/0650 | DETAILS OF BEARINGS - SHEET 2 |
| P1/BR3/0660 | MANHOLE COVER |
| P1/BR3/0670 | QUANTITY TABLE OF SUPERSTRUCTURE - MAIN BRIDGE |
| | ABUTMENTS |
| P1/BR3/0680 | ABUTMENT A1 & A2 - GENERAL VIEW |
| P1/BR3/0690 | ABUTMENT A1 & A2 - BORED CAST IN SITU PILE DETAILS - L=79M |
| P1/BR3/0700 | ABUTMENT A1 REINFORCEMENT - SHEET 1 |
| P1/BR3/0710 | ABUTMENT A1 REINFORCEMENT - SHEET 2 |
| P1/BR3/0720 | ABUTMENT A1 REINFORCEMENT - SHEET 3 |
| P1/BR3/0730 | ABUTMENT A2 REINFORCEMENT - SHEET 1 |
| P1/BR3/0740 | ABUTMENT A2 REINFORCEMENT - SHEET 2 |
| P1/BR3/0750 | ABUTMENT A2 REINFORCEMENT - SHEET 3 |
| P1/BR3/0760 | ABUTMENT A1 & A2 - EARTHWORKS SLOPE PROTECTION |
| P1/BR3/0770 | DETAILS OF APPROACH SLAB |
| P1/BR3/0780 | QUANTITY TABLE OF ABUTMENTS |
| | PIERS |
| P1/BR3/0790 | PIER1 & PIER6 - GENERAL VIEW |
| P1/BR3/0800 | PIER2 & PIER5 - GENERAL VIEW |
| P1/BR3/0810 | PIER3 & PIER4 - GENERAL VIEW |
| P1/BR3/0820 | PIERS PROTECTION |
| P1/BR3/0830 | PIER1 & PIER4 - BORED PILE DETAILS - L=77M |
| P1/BR3/0840 | PIER2 & PIER3 - BORED PILE DETAILS - L=71M |
| P1/BR3/0850 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 1 |
| P1/BR3/0860 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 2 |
| P1/BR3/0870 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 3 |
| P1/BR3/0880 | PIERS P1, P2, P5 & P6 - REINFORCEMENT - SHEET 4 |
| P1/BR3/0890 | PIER3 & PIER4 - REINFORCEMENT - SHEET 1 |
| P1/BR3/0900 | PIER3 & PIER4 - REINFORCEMENT - SHEET 2 |
| P1/BR3/0910 | QUANTITY TABLE OF PIERS |
| 17 0037 0310 | The state of the s |
| D1 /RP2 //020 | MISCELLANEOUS PARAPET AND RAILING DETAILS |
| P1/BR3/0920 | PARAPET AND RAILING DETAILS |
| P1/BR3/0930 | BRIDGE NAME PLAQUE |
| P1/BR3/0940 | DRAINAGE AND LIGHTING POLES LAYOUT |
| P1/BR3/0950 | DRAINAGE DETAILS - SHEET 1 |
| PI/BR3/0960 | DRAINAGE DETAILS - SHEET 2 |
| P1/BR3/0970 | LIGHTING POLE'S BASE DETAILS |
| P1/BR3/0980 | QUANTITY TABLE OF MISCELLANEOUS WORKS |

| - 1 | PROJECT NAME | IMPLEMENTATION AGENCY | EXECUTING AGENCY | JICA STUDY TEAM | PREPARED BY | CHECKED BY APPROVED BY | DRAWING TITLE | DWG NO. |
|-----|----------------------|-----------------------|----------------------------------|-----------------------------|-------------|------------------------|---------------|-------------|
| . | DETAILED DESIGN OF | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | A | NAME | | TRA ON BRIDGE | |
| | THE CAN THO BRIDGE | COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | ((NK)) NIPPON KOEI CO.,LTD. | SIGNATURE | | GENERAL | P1/BR3/0010 |
| | CONSTRUCTION PROJECT | | MY THUAN PROJECT MANAGEMENT UNIT | Y | DATE | <u> </u> | DRAWING LIST | |

I. GENERAL

ABBREVIATIONS AND SYMBOLS

| A | PARAMETER OF CLOTHOID CURVE | | I.P | POINT OF INTERSECTION |
|----------|--------------------------------|---|----------------|--|
| e · | AT | | KG | KILOGRAM |
| ABUT | ABUTMENT | | KM | KILOMETER |
| AC | ASPHALT CONCRETE | | КРН | KILOMETER PER HOUR |
| APPR | APPROACH | | L | LEGNTH OF CURVE WITH SPIRAL |
| ASPH | ASPHALT | | LC | LENGTH OF CIRCULAR CURVE |
| & | AND | · | LS | LENGTH OF SPIRAL CURVE |
| A > B | A IS LARGER THAN B | | LVC | LENGTH OF VERTICAL CURVE |
| BOR | BORING | | LIN.M | LINEAR METER |
| BR | BRIDGE | | M | METER |
| BX | BOX CULVERT | | м ² | SQUARE METER |
| C | CUT | | M | CUBIC METER |
| CTC | CENTER TO CENTER | | MAX | MAXIMUM |
| Ę | CENTERLINE | · | MiN | MINIMUM |
| CM | CENTIMETER | | MOA | MOVABLE |
| CONC | CONCRETE | | N.G.L | NATURAL GROUND LEVEL |
| CONST | CONSTRUCTION | | OV | over bridge |
| CONT | CONTINUOUS | | % | PERCENT |
| C.S | CIRCULAR CURVE TO SPIRAL CURVE | , | P | PIPE CULVERT |
| CU.M | CUBIC METER | | PC | BEGINNING POINT OF SIMPLE CURVE |
| DIA or # | DIAMETER | | PE.W | PARAPET WALL |
| DC | DRAINAGE CATCHBASIN | | P.C | PRESTRESSED CONCRETE |
| DI | DRAINAGE INLET | · | P/C | PRE - CAST |
| ÐL | DATUM LINE | | PH | PLAN HEIGHT |
| DO | DRAINAGE OUTLET | | P.I | POINT OF INTERSECTION FOR HORIZONTAL ALIGNMENT |
| DS | DRAINAGE SIDEDITCH | | PT | END OF POINT OF SIMPLE CURVE |
| DW | MORTARED RUBBLE PAVED WATERWAY | | PC | PLATE COVER |
| E.P | END POINT | | R | RADIUS OF CIRCULAR CURVE |
| E.V | MIDDLE ORDINATE VERTICAL CURVE | | R.C | REINFORCED CONCRETE |
| EL | ELEVATION | • | R.O.W | RIGHT OF WAY |
| EQ | EQUAL | | RW . | RETAINING WALL |
| EXC | EXCAVATION | | S.C | SPIRAL CURVE TO CIRCULAR CURVE |
| EXP | EXPANSION | | S.P | SLOPE PROTECTION |
| F | FILL | | S.P.P | steel pipe pile |
| FG | FINISHED GRADE | | Q2 | SQUARE |
| FIX | FIXEO | | SQ.M | SQUARE METER |
| FR · | FRONTAGE ROAD | | S.T | SPIRAL CURVE TO TANGENT |
| FTOF | FACE TO FACE | | STA | STATION |
| G.F | GUARD FENCE | | SM | STONE MASONRY |
| GR | GUARD RAIL | | T | THICKNESS |
| GIR | GIRDER | | T.S | TANCENT TO SPIRAL |
| Н | HEICHT | | T.L | TANGENT LENGTH OF CIRCULAR CURVE |
| D.F.W.L | DATUM FLOODED WATER LEVEL | | Ta | TANGENT LENGTH OF SPIRAL |
| HWY | HIGHWAY | | , v | design speed in KPH |
| i | GRADIENT | | ₩ | нтом |
| I.C | INTERCHANGE | | χ . | EASTING COORDINATE IN METERS |
| | | | • | |

| | | | | · · | | | <u> </u> | | | | |
|---|----------------------|-----------------------|----------------------------------|-----------------------------|-----------|-------------|-------------|-------------|---------------------------|-------------|---|
| 1 | PROJECT NAME | IMPLEMENTATION AGENCY | EXECUTING AGENCY | JICA STUDY TEAM | | PREPARED BY | CHECKED BY | APPROVED BY | DRAWING TITLE | DWG NO. | i |
| | DETAILED DESIGN OF | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | A | NAME | T. Kametani | K.Matsumoto | K. Enomoto | TRA ON BRIDGE | | i |
| | THE CAN THO BRIDGE | COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | ((NK)) NIPPON KOBI CO.,LTD. | SKINATURE | 更添茶 | E. Hatsungh | Lund | GENERAL | P1/BR3/0020 | i |
| | CONSTRUCTION PROJECT | (JICA) | MY THUAN PROJECT MANAGEMENT UNIT | | DATE | 20/9/2000 | 29/9/2000 | 5/10/2000 | ABBREVIATIONS AND SYMBOLS | | i |

STRUCTURAL NOTES

- 1. GENERAL
- 1.1. UNLESS OTHERWISE NOTED THESE NOTES ARE APPLIED TO ALL DRAWINGS.
- 1.2. THE SCALE INDICATED IN DRAWINGS IS FOR 'A3' SIZE.
- 1.3. ALL CHAINAGES, COORDIANATES, ELEVATIONS ARE IN METRES.
 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED.
- 1.4. THE ELEVATION SYSTEM IS REFERED TO THE MEAN SEA DATUM ELEVATION AT HONDAU DO SON. COORDINATE REFER TO THE NATIONAL CRID SYSTEM.

2. DESIGN CRITERIA & LOADS

2.1. DESIGN STANDARDS:

- AASHTO 1998 - LRFD BRIDGE DESIGN SPECIFICATIONS - AASHTO GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION

OF SEGMENTAL CONCRETE BRIDGES

JAPANESE HIGHWAY AND BRIDGE STANDARDS 1996

METNAMESE HIGHWAY BRIDGES STANDARDS 1979

2.2. DESIGN LOADS:

- B_LOADING IN ACCORDANCE WITH JAPANESE CODE - PEDESTRIAN LOAD : 3.6 kN

: 3.6 kN/M2 - AASHTO LRFD98 160 KM/H - AASHTO LRFD 98

- BASIC WIND VELOCITY : 160 F - LATERAL SEISMIC RESPONSE COEFFICIENT : 0.12

: VIETNAMESE HIGHWAY BRIDGES STANDARDS 1979 : 17.7°C TO 36.7°C

VESSEL IMPACT

- TEMPERATURE RANGE : ±10°C

- UNIFORM TEMPERATURE
- TEMPERATURE DIFFERENTIAL 5°C

3, CONCRETE

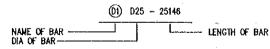
3.1. UNLESS OTHERWISE INDECATED CONCRETE SHALL BE OF THE FOLLOWING GRADES BASED ON

| CONCRETE CLASS | STRENGTH fc MPa | KIND OF STRUCTURE IN USE |
|-------------------|--------------------|--|
| В | 40 | PC BOX GIRDER, I-GIRDER |
| С | 35 | HOLLOW SLAB |
| D | 30 | in—situ deck slab, bored pile |
| E | 24 | PIER, ABUTMENT, PILE CAP, RETAINING WALL, PARAPET, BARRIER, KERB |
| G | .15 | LEAN CONCRETE |

- 3.2. WHEREVER FORMS ARE NOT USED REINFORCED CONCRETE SHALL BE PLACED AGAINST 100mm MINIMUM THICKNESS LEAN CONCRETE.
- 3.3. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 20x20mm UNLESS OTHERWISE NOTED.
- 3.4. ALL CONSTRUCTION JOINTS ARE TO BE LOCATED AS SHOWN ON THE DRAWINGS OR AS ENGINEER'S APPROVAL.

4. REINFORCEMENT

- 4.1. REINFORCEMENT SHALL BE DEFORMED, EXCEPT THAT PLAIN BARS OR PLAIN WIRE MAY BE USED FOR SPIRALS, HOOPS, AND WIRE FABRIC.
- 4.2. REINFORCEMENT SHALL BE 50390 OR EQUIVALENT. PLAIN ROUND BAR WITH (Mmin) 250 MPa and high yield deformed bars with yield strength not less than (mmin) 390 MPa shall be used.
- 4.3. REINFORCEMENT IS NOTED ON THE DRAWINGS AS FOLLOWS:



- 4.4. ALL REINFORCEMENTS ARE SHOWN AS
- 4.5. SPLICES IN ADJACENT BARS SHALL BE STAGGERED EXCEPT WHERE NOTED ON THE DRAWINGS. SPLICES OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY ONLY BE MADE WITH THE ENGINEER'S
- 4.6. MINIMUM SPLICE LENGTH SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998.
- 4.7. STANDARD HOOKS AND MINIMUM BEND DIAMETER SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998.

4. REINFORCEMENT (CONTINUED)

- 4.8. REINFORCEMENTS INDECATED AS RANDOM LENGTH MAY BE LAP SPLICED AS NECESSARY SUBJECT TO THE FOLLOWING CONDITIONS:

 - A) LAP SPLICES IN ADJACENT BARS SHALL BE STAGGERED
 B) MINIMUM LAP LENGTHS SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998, EXCEPT
 BORED PILE SHALL BE 40 BAR DIAMETERS
 C) NOT MORE THAN ONE BAR PER LINE IS TO BE SHORTER THAN 12 METRES FOR ANY DIAMETER
- 4.9. UNLESS OTHERWISE INDECATED ON THE DRAWINGS, THE MINIMUM COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS:

75mm BORED PILE, RETAINING WALL & ABUTMENT 50mm PILE CAP, DECK SLAB, PIER & ABUTMENT, PARAPET, KERB, APPROACH SLAB, etc... TOLERANCE ON COVER IS +/-5MM

5. PRESTRESSING

5.1. NOMINAL DIAMETER, YIELD AND TENSILE STRENGTH OF PRESTRESSED TENDON ARE SPECIFIED AS FOLLOWS:

| UTILIZATION | NOMINAL DIAMETER (mm) | TENSILE Strength (MPa) | YIELD Strength (MPa) | JACKING FORCE (kN) | |
|----------------|-------------------------------|------------------------------|----------------------------|----------------------------|--|
| INTERNAL CABLE | 12512.7 | 1860 1675 16 | | | |
| EXTERNAL CABLE | 12515.2 | 1860 | 1675 | 2320 | |
| TOP SLAB CABLE | 3512.7 | 1860 | 1675 | 415 | |

- 5.2. PRESTRESSED TENDONS SHALL BE FORMED FROM THE STRANDS OF 12.7mm OR 15.2mm DIAMETER MADE BY 7 LOW RELAXATION MIRES GRADE 270 CORRESPONDING WITH ASTM A416M. THE ACTUAL TENDON SIZES AND INITIAL PRESTRESSED FORCE ARE GIVEN ON THE DETAIL DRAWINGS.
- 5.3. PRESTRESSED SYSTEMS TO BE ADOPTED SHALL BE IN ACCORDANCE WITH THE ENGINEER'S APPROVAL.
- 5.4. DUCTS FOR INTERNAL TENDONS SHALL BE SEMI-RIGID GALVANISED SHEATHING UNLESS OTHERWSE NOTED AND SHALL BE RIGIDLY SUPPORTED AT NOT MORE THAN 750mm FROM CENTRES.
- 5.5. THE METHOD TO FIX THE DUCTS AND THE METHOD OF JOINTING AND SEALING OF DUCTS AT CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE ENGINEER'S APPROVAL.
- 5.6. TENDON PROFILES ARE SPECIFIED TO THE CENTER OF SHEATHING. THE TENDON ARE TO BE PLACED TO SMOOTH PROFILES PASSING THROUGH THE SPECIFIED POINTS.
- 5.7. EACH TENDON SHALL BE KEPT STRAIGHT FOR A MINIMUM LENGTH OF 1000mm FROM ANCHORAGE FACES.
- 5.8. CROUTING POINTS SHALL BE PROVIDED AT ALL CROWN POINTS, SAG POINTS, ANCHORAGES AND DEVIATORS.

6. WATERPROOF

- 6.1. ALL REINFORCED CONCRETE SURFACES IN CONTACT WITH BACKFILL SHALL BE COATED WITH TWO COATS OF BITUMINOUS MEMBRANE.
- 6.2. THE BRIDGE DECK SHALL BE WATERPROOFED WITH APPROVED PROPRIETARY WATERPROOFING SYSTEM IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

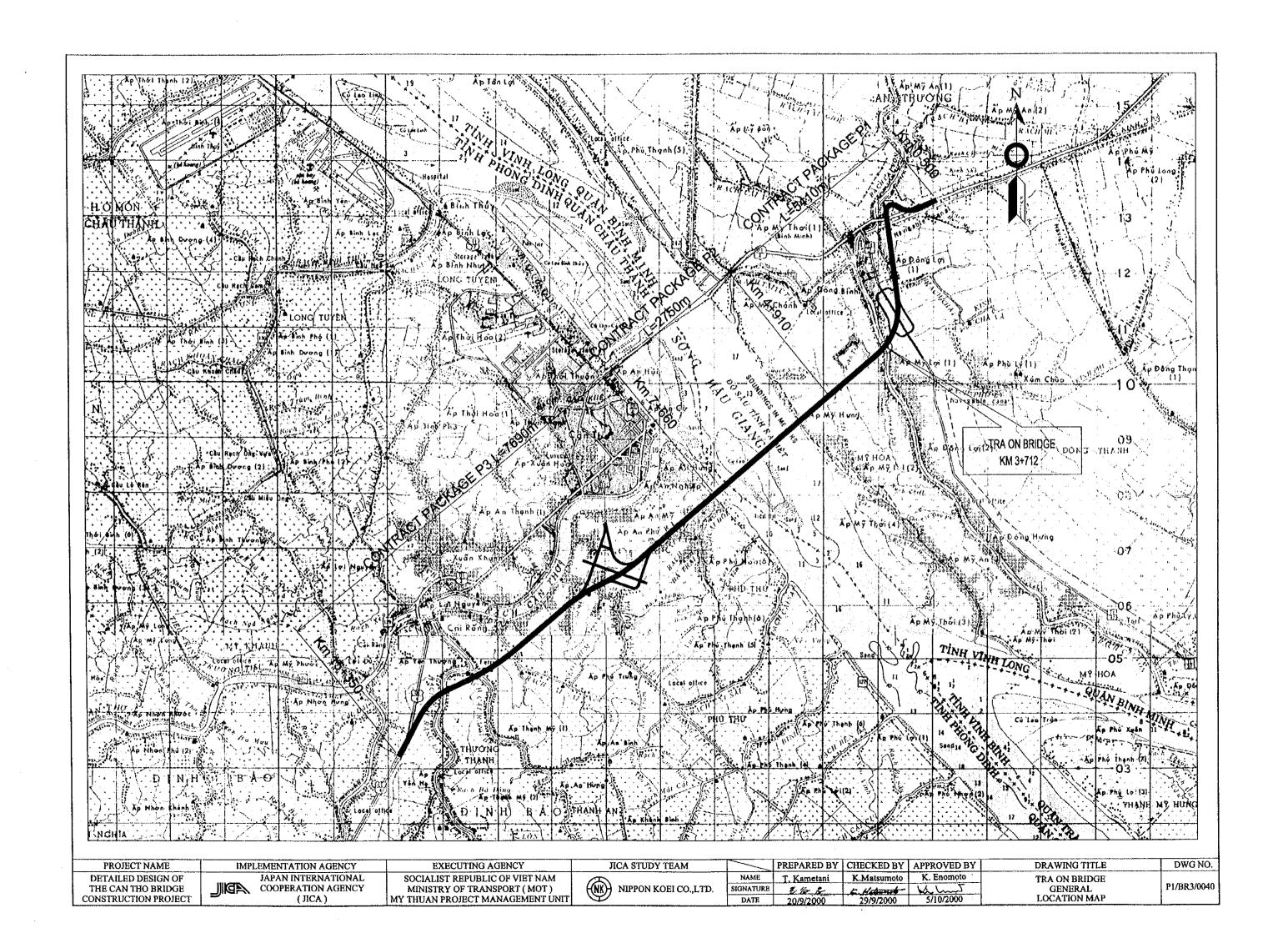
7. SUPERSTRUCTURE

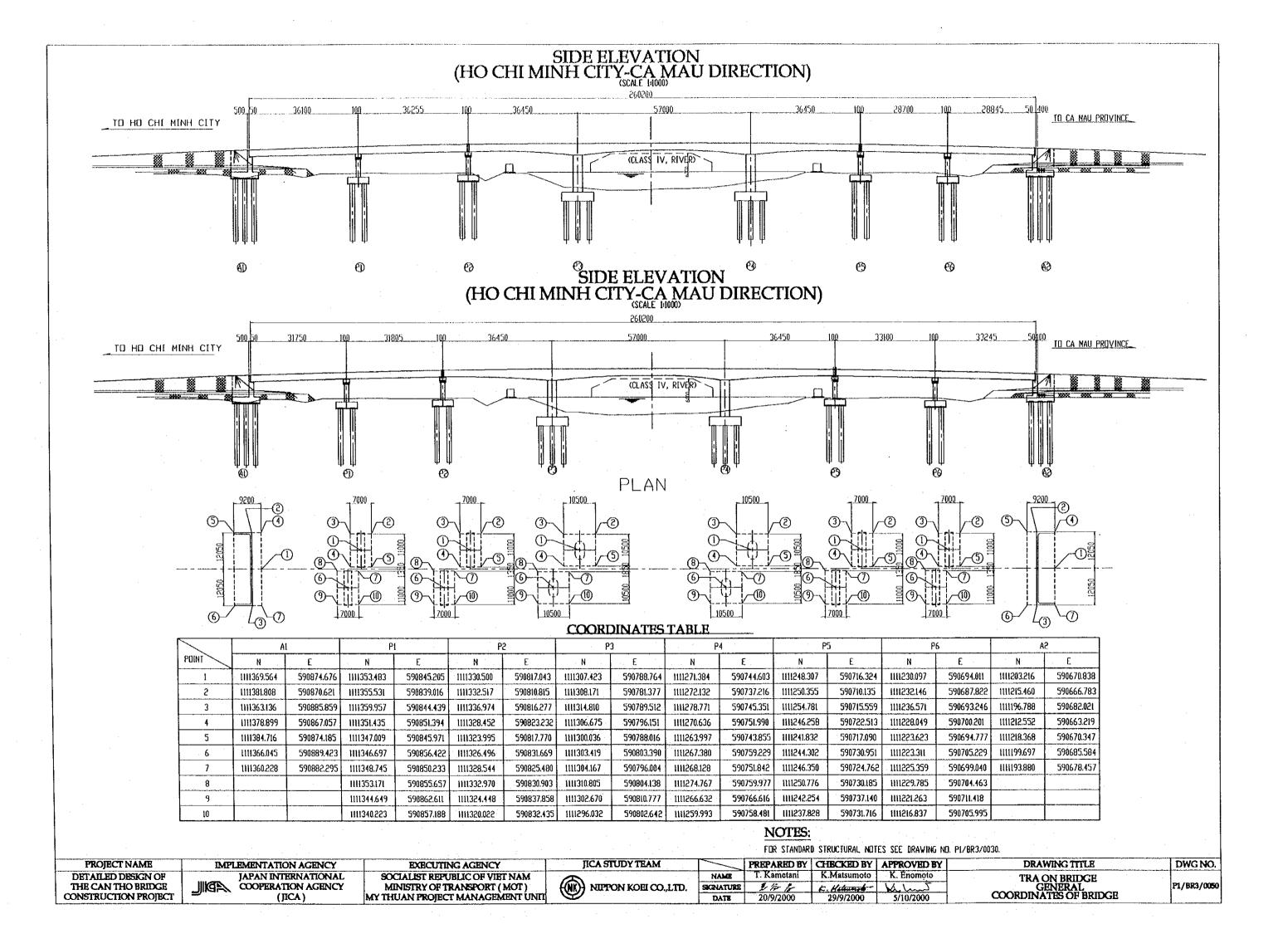
- 7.1. SUPERSTRUCTURE IS DESIGNED ON THE BASIS OF CONSTRUCTION SEQUENCE DETAILED ON THE DRAWNGS. ANY CHANGES TO THE CONSTRUCTION SEQUENCE WILL REQUIRE A RE-DESIGN OF THE BRIDGE.
- 7.2. THE SUPERSTRUCTURE DESIGN IS BASED ON THE USE OF BOTH INTERNAL & EXTERNAL PRESTRESSING WITH THE FOLLOWING PARAMETERS:

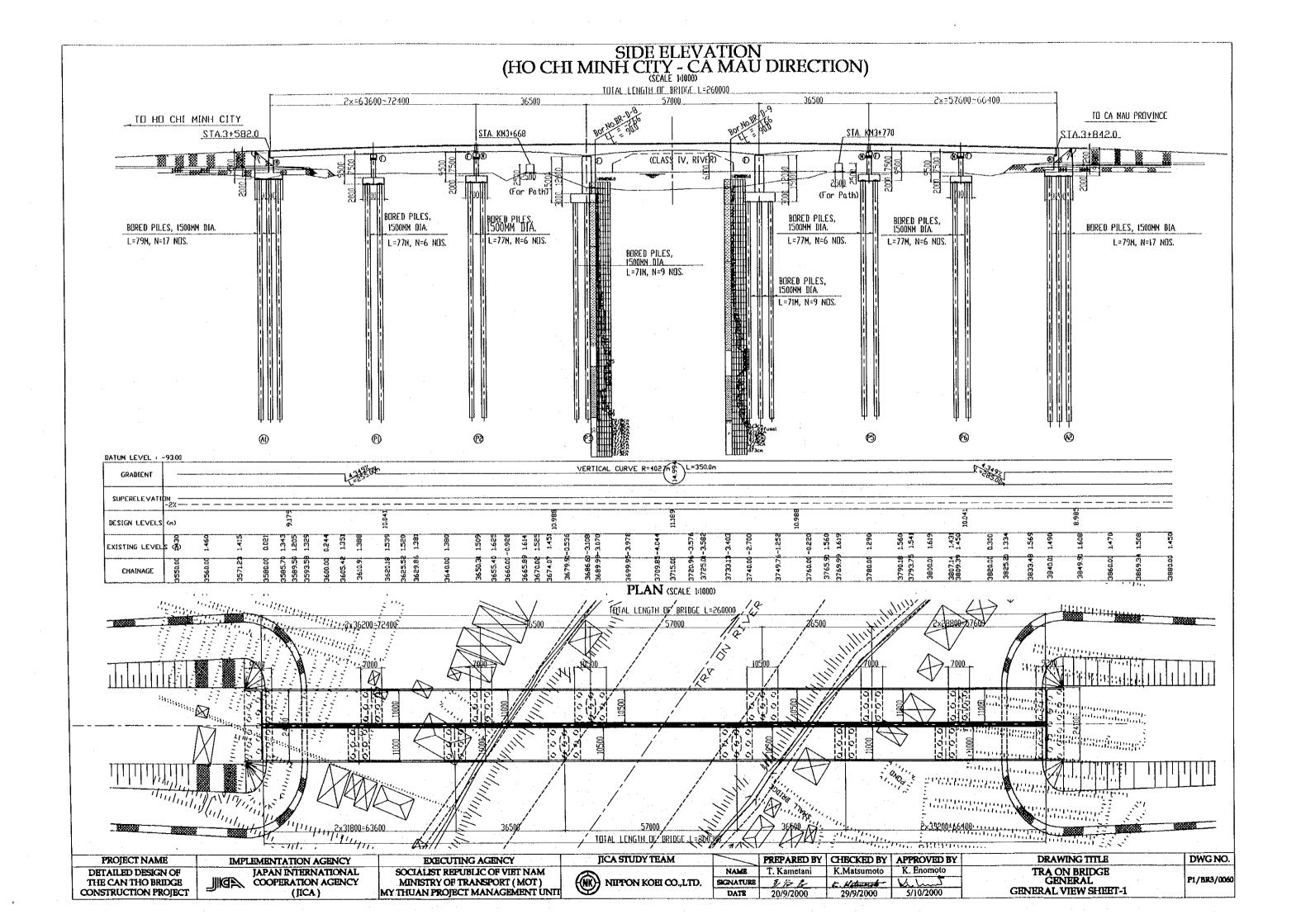
| COEFFICIENT OF FRICTION PER RADIAN | 0.25 |
|---|-------|
| WOBBLE FACTOR K - 1/m (FOR INTERNAL ONLY) | 0.004 |
| DRAW-IN | 5 mm |
| RELATIVE HUMIDITY | 85% |

7.3. ANCHOR BAR SHALL BE CONFORMING TO THE REQUIREMENTS OF SS400 OF JIS G3101.

| | PROJECT NAME | IMPLEMENTATION AGENCY | EXECUTING AGENCY | JICA STUDY TEAM | | PREPARED BY | CHECKED BY | APPROVED BY | DRAWING TITLE | DWG NO. |
|---|----------------------|-----------------------|----------------------------------|-----------------------------|-----------|-------------|-------------|-------------|------------------|-------------|
| ı | DETAILED DESIGN OF | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | | NAME | T. Kametani | K.Matsumoto | K. Enomoto | TRAON BRIDGE | |
| 1 | THE CAN THO BRIDGE | COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | ((NK)) NIPPON KOEI CO.,LTD. | SIGNATURE | 215 5 | E. Hateurch | Khund | GENERAL | P1/BR3/0030 |
| | CONSTRUCTION PROJECT | (JICA) | MY THUAN PROJECT MANAGEMENT UNIT | 9 | DATE | 20/9/2000 | 29/9/2000 | 5/10/2000 | STRUCTURAL NOTES | |

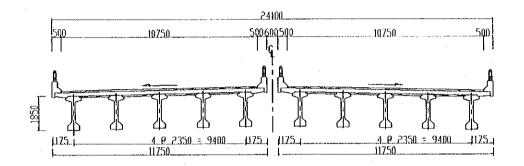




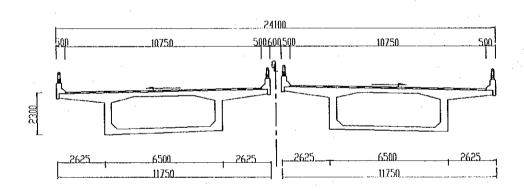


TYPICAL SECTIONS FOR SUPERSTUCTURE (SCALE 1:200)

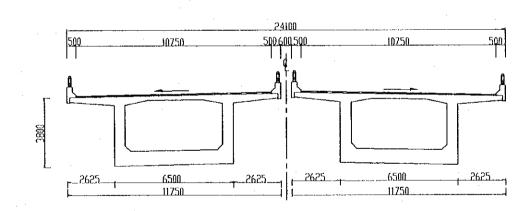
AT ABUTMENT A1,A2&PIER P1,P4



AT CENTER SPAN&END SPAN



AT PIER P2&PIER P3



| ļ | PROJECT NAME | IMPLEMENTATION AGENCY | EXECUTING AGENCY | JICA STUDY TEAM | | PREPARED BY | CHECKED BY | APPROVED BY | DRAWING TITLE | DWG NO. |
|---|----------------------|--------------------------|----------------------------------|------------------------------|-----------|-------------|-------------|-------------|---------------------|-------------|
| | DETAILED DESIGN OF | JAPAN INTERNATIONAL | SOCIALIST REPUBLIC OF VIET NAM | A | NAME | T. Kametani | K.Matsumoto | K. Enomoto | TRA ON BRIDGE | |
| | THE CAN THO BRIDGE | LINES COOPERATION AGENCY | MINISTRY OF TRANSPORT (MOT) | ((NK)) NIPPON KOEI CO., LTD. | SICNATURE | まおな | E. Hatoward | Milmed | GENERAL | P1/BR3/0070 |
| | CONSTRUCTION PROJECT | | MY THUAN PROJECT MANAGEMENT UNIT | | DATE | 20/9/2000 | 29/9/2000 | 5/10/2000 | GENERAL VIEW-SHEET2 | . 1 |

