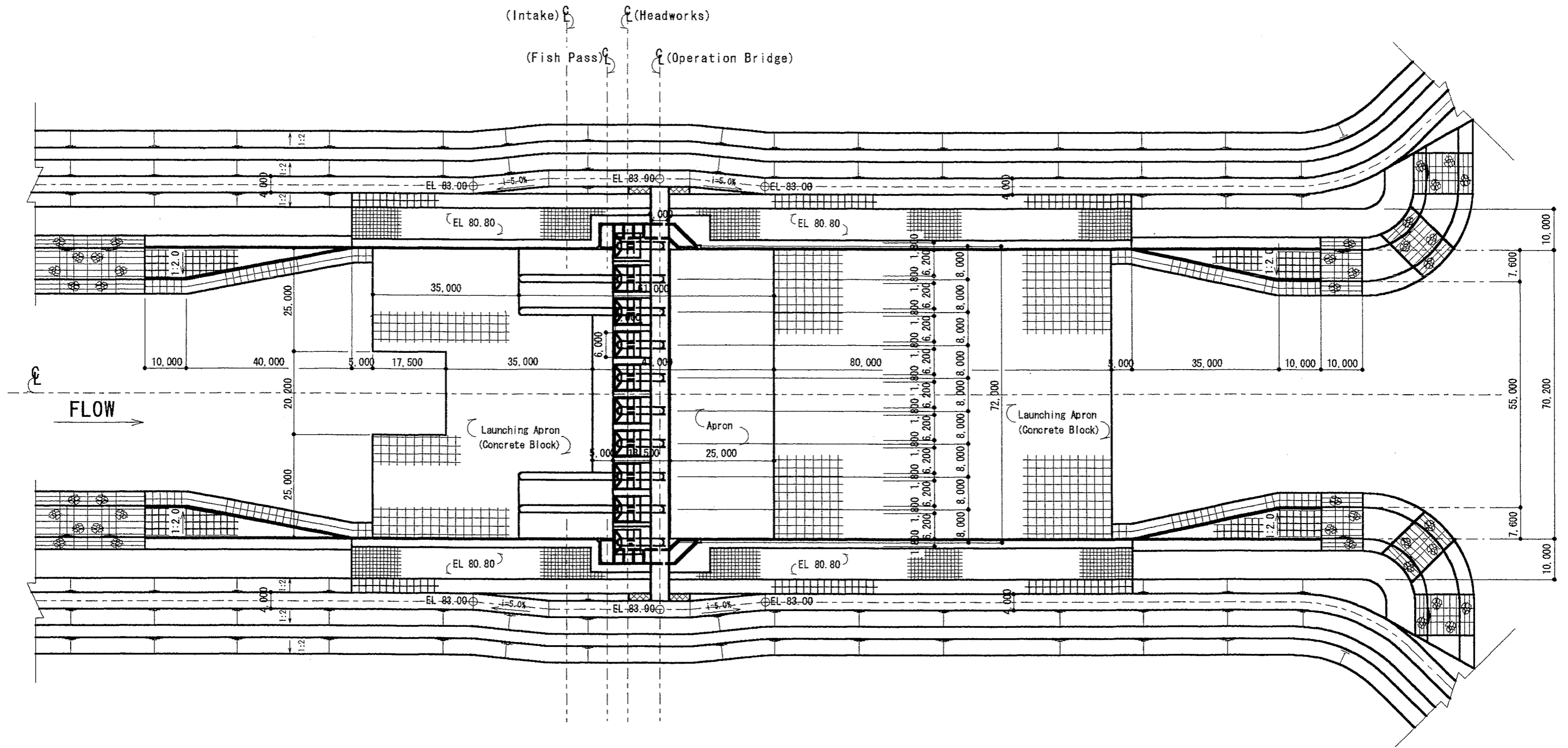


TYPICAL SECTION OF HEADWORKS

S=1:1,000

P L A N

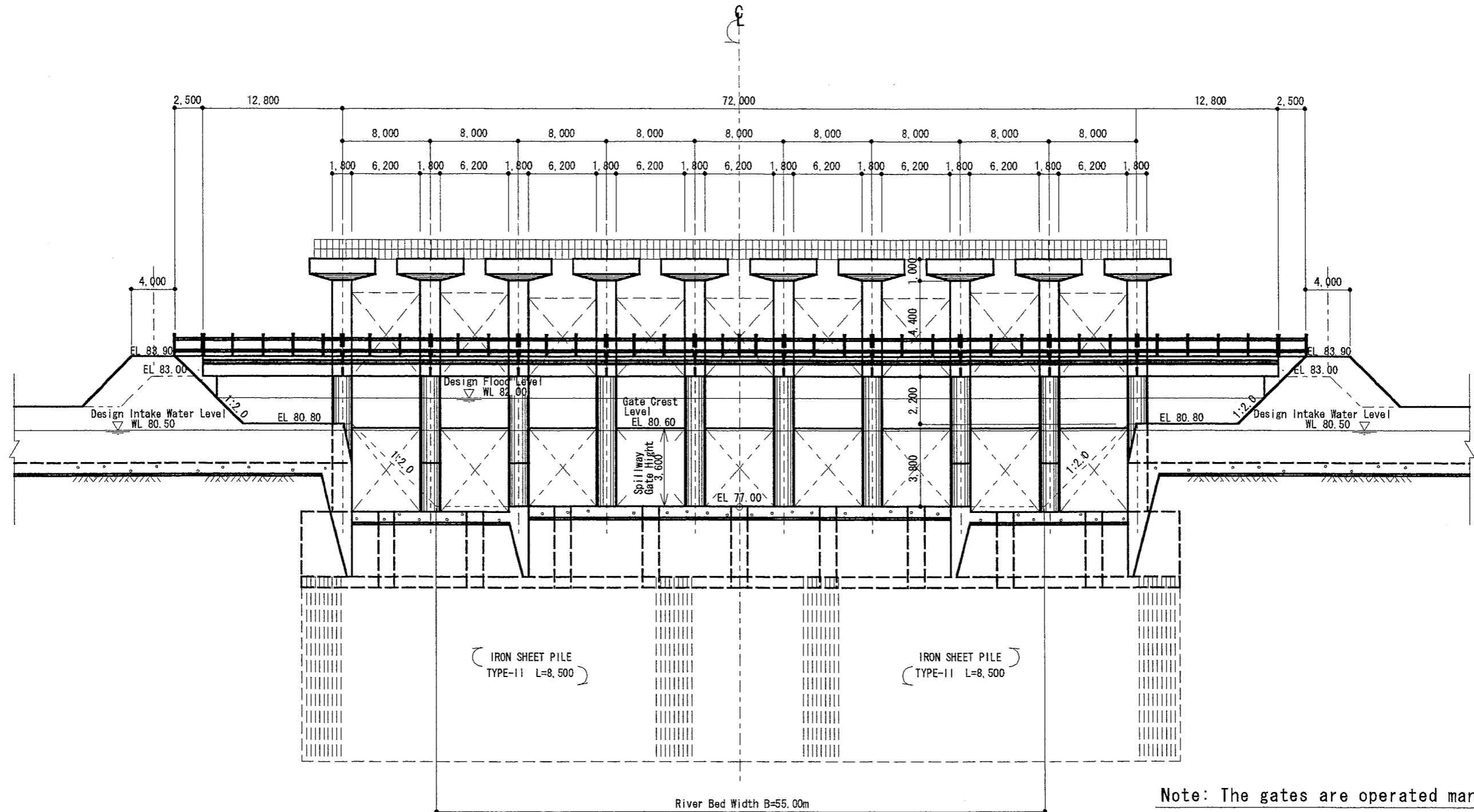


| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS - P L A N - |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-1 |

TYPICAL SECTION OF HEADWORKS

SCALE: V=1:200
H=1:400

ELEVATION



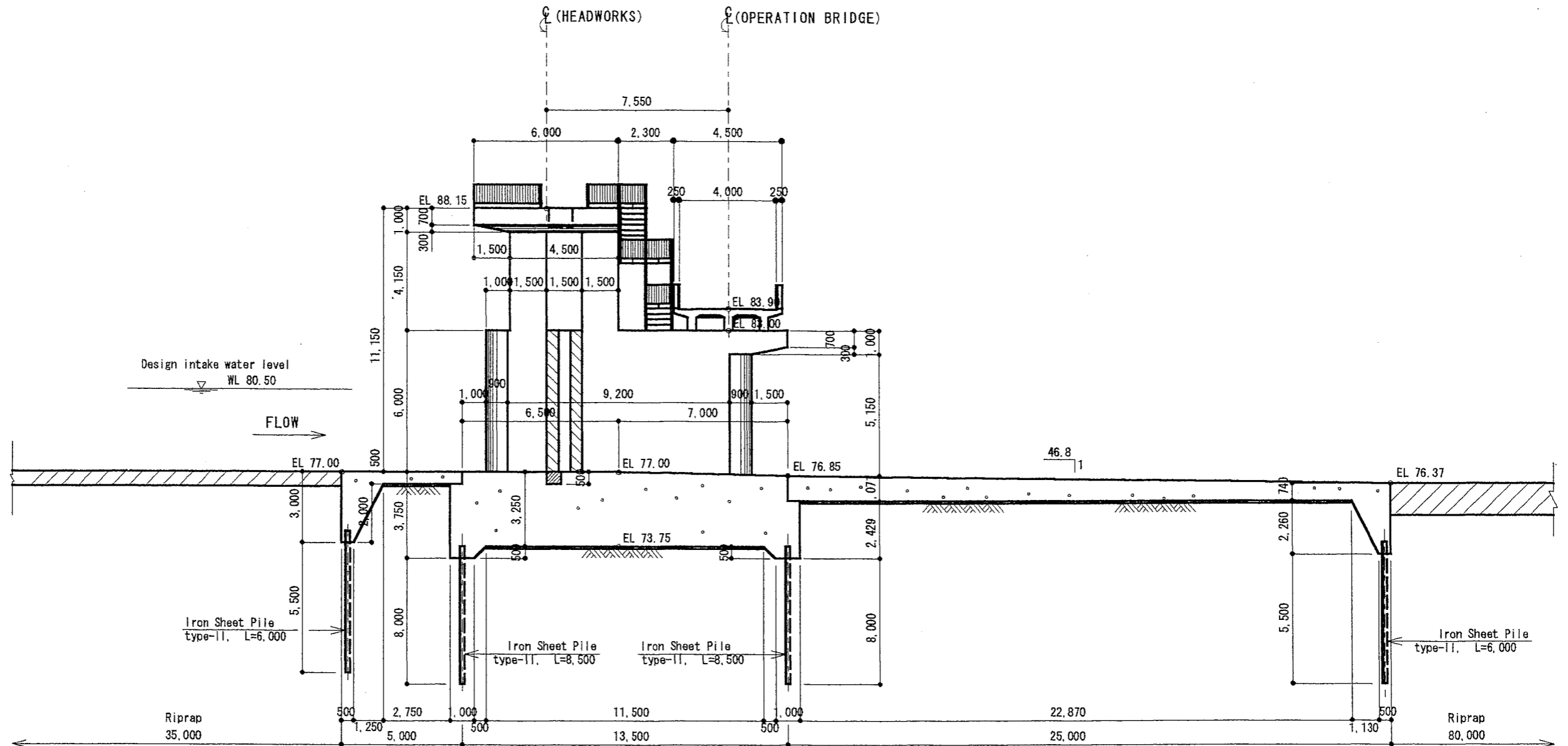
Note: The gates are operated manually.

| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS - ELEVATION - |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-2 |

TYPICAL SECTION OF HEADWORKS

S=1:200

PROFILE OF SPILLWAY

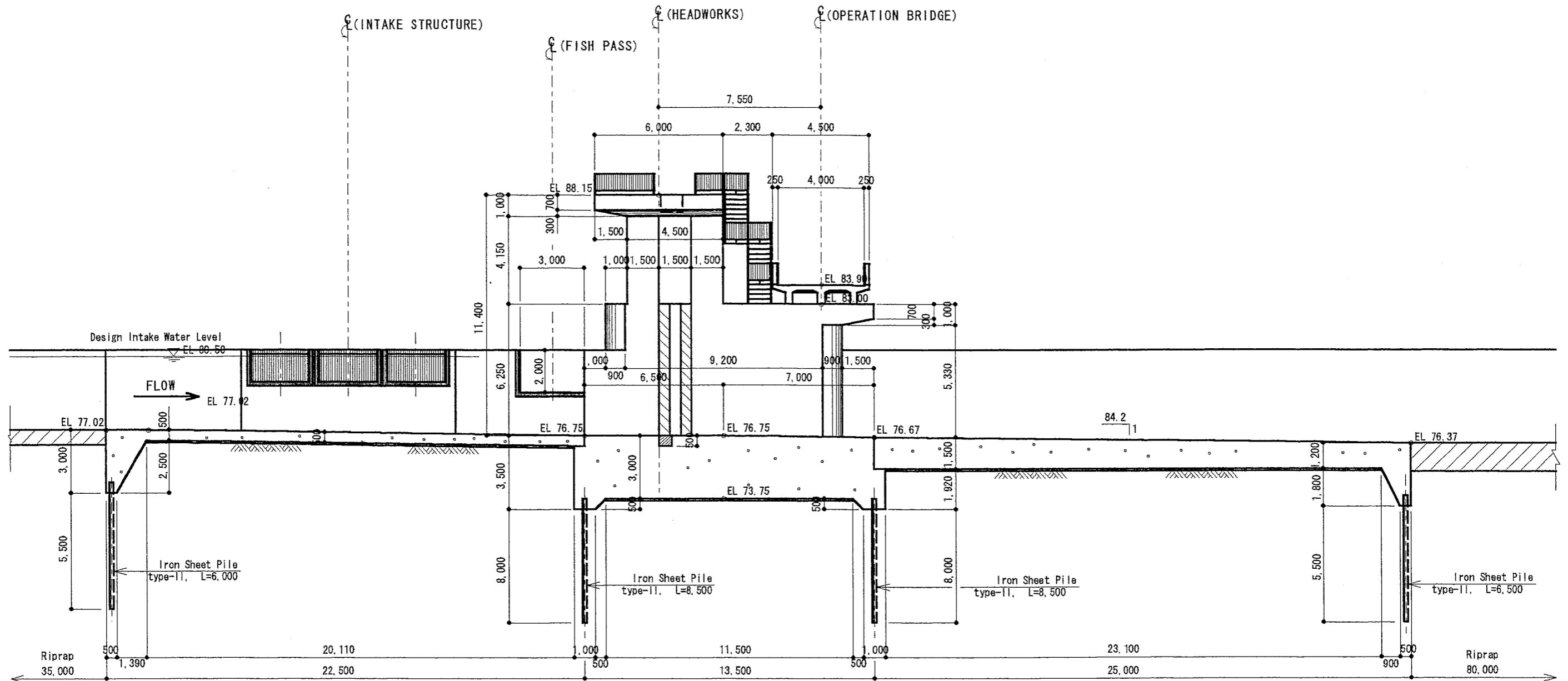


| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS -PROFILE OF SPILLWAY- |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-3 |

TYPICAL SECTION OF HEADWORKS

S=1:200

SCOURING SLUICE PROFILE

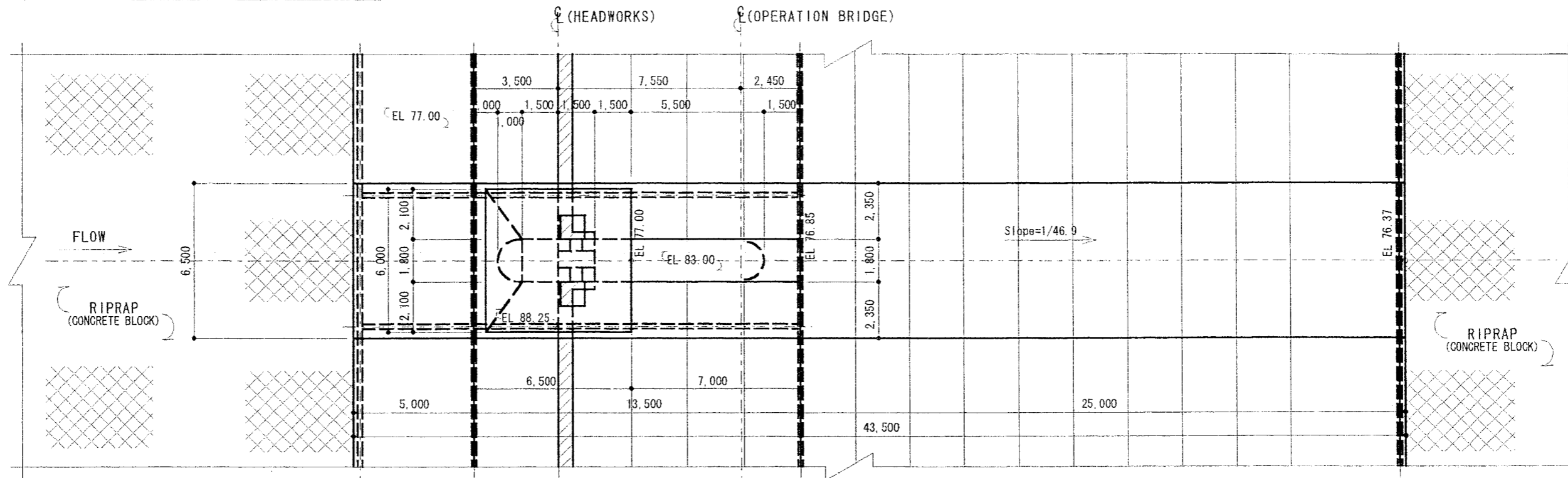


| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS -SCOURING SLUICE PROFILE- |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-4 |

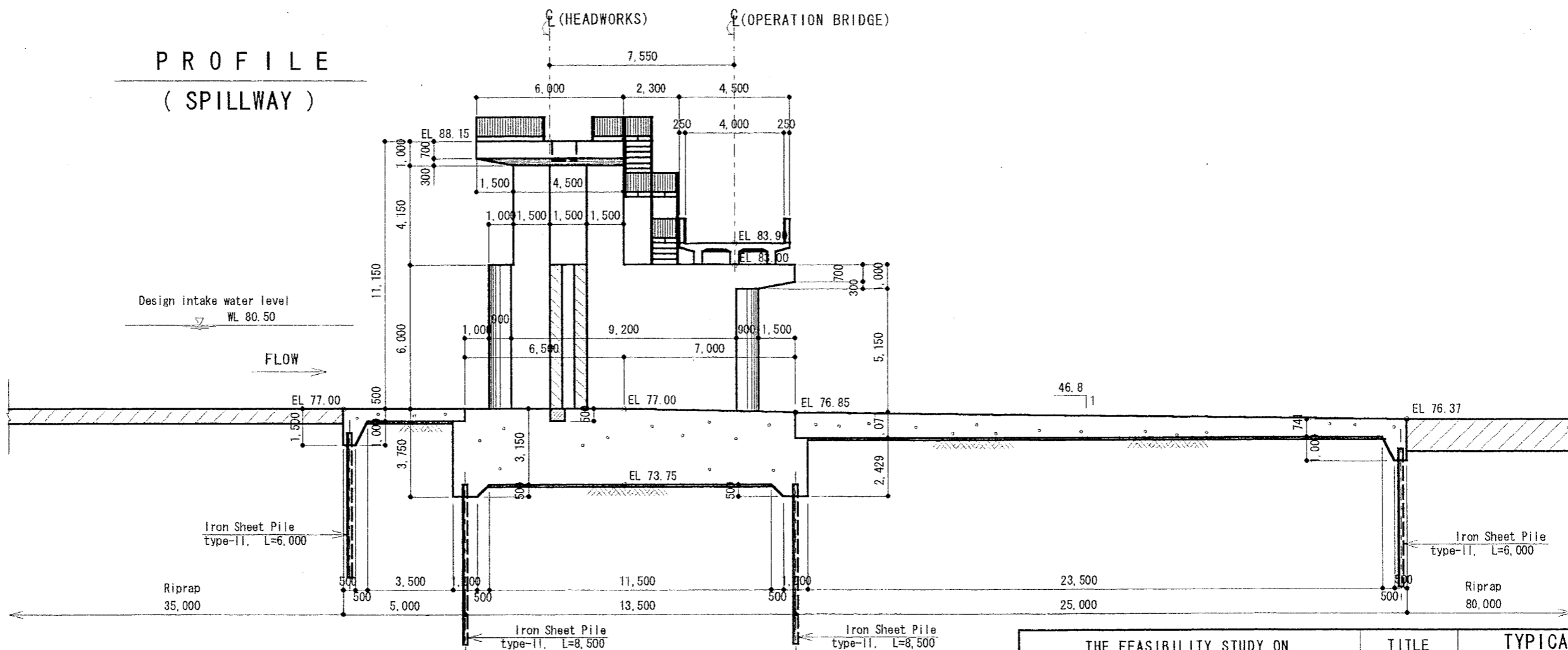
TYPICAL SECTION OF PIER

PLAN

S=1:200



PROFILE
(SPILLWAY)

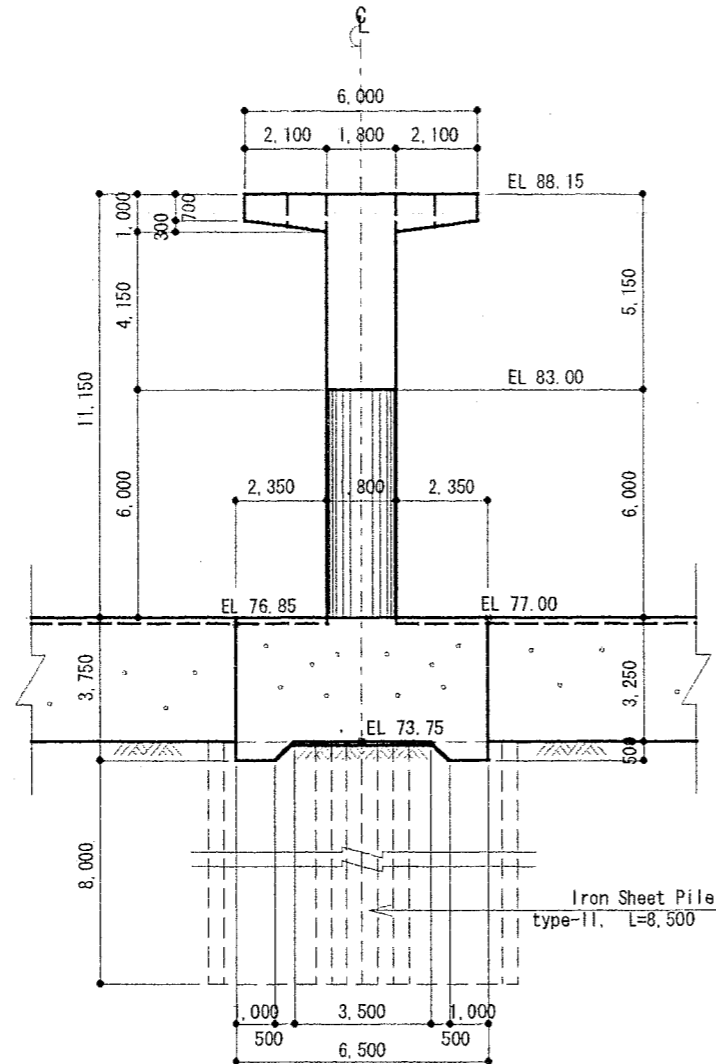


| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS - PIER (1/2) - |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-5 |

TYPICAL SECTION OF PIER

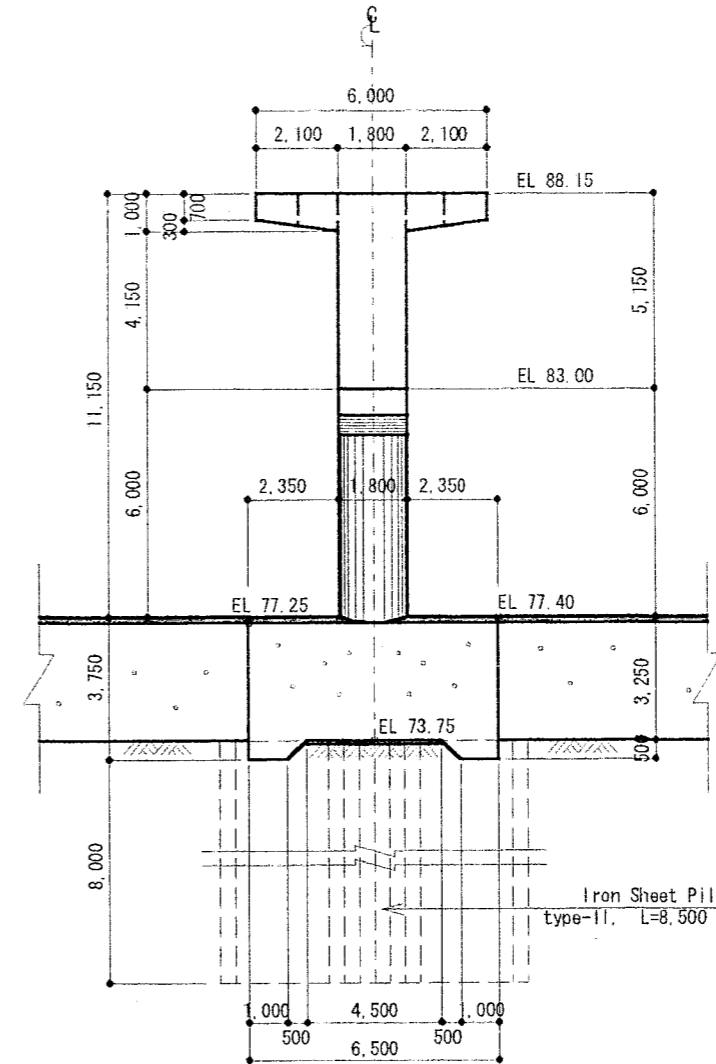
S=1:200

ELEVATION
(FRONT-SIGHT)



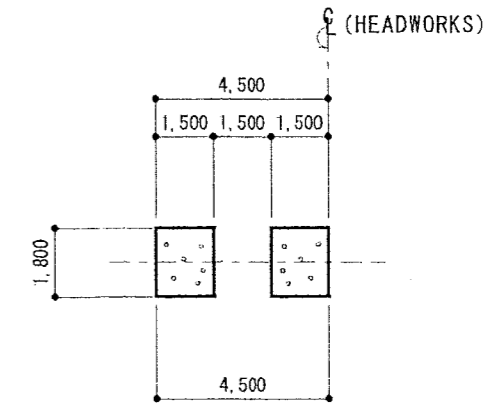
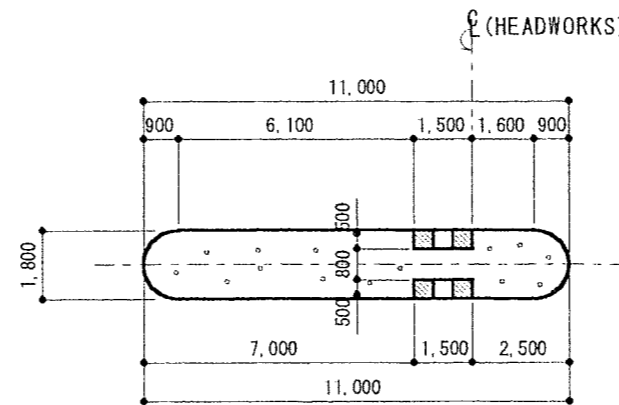
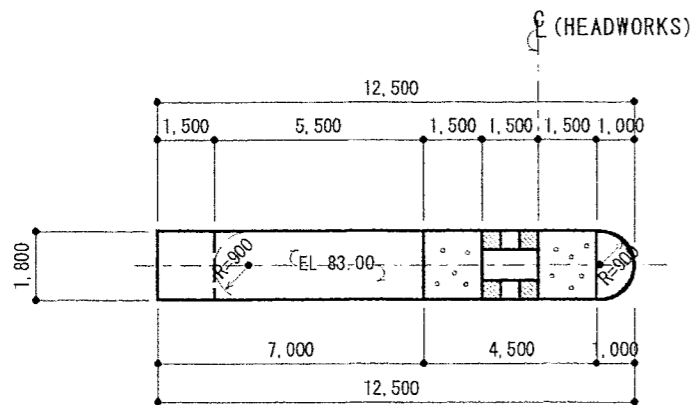
A - A

ELEVATION
(BACK-SIGHT)



B - B

C - C

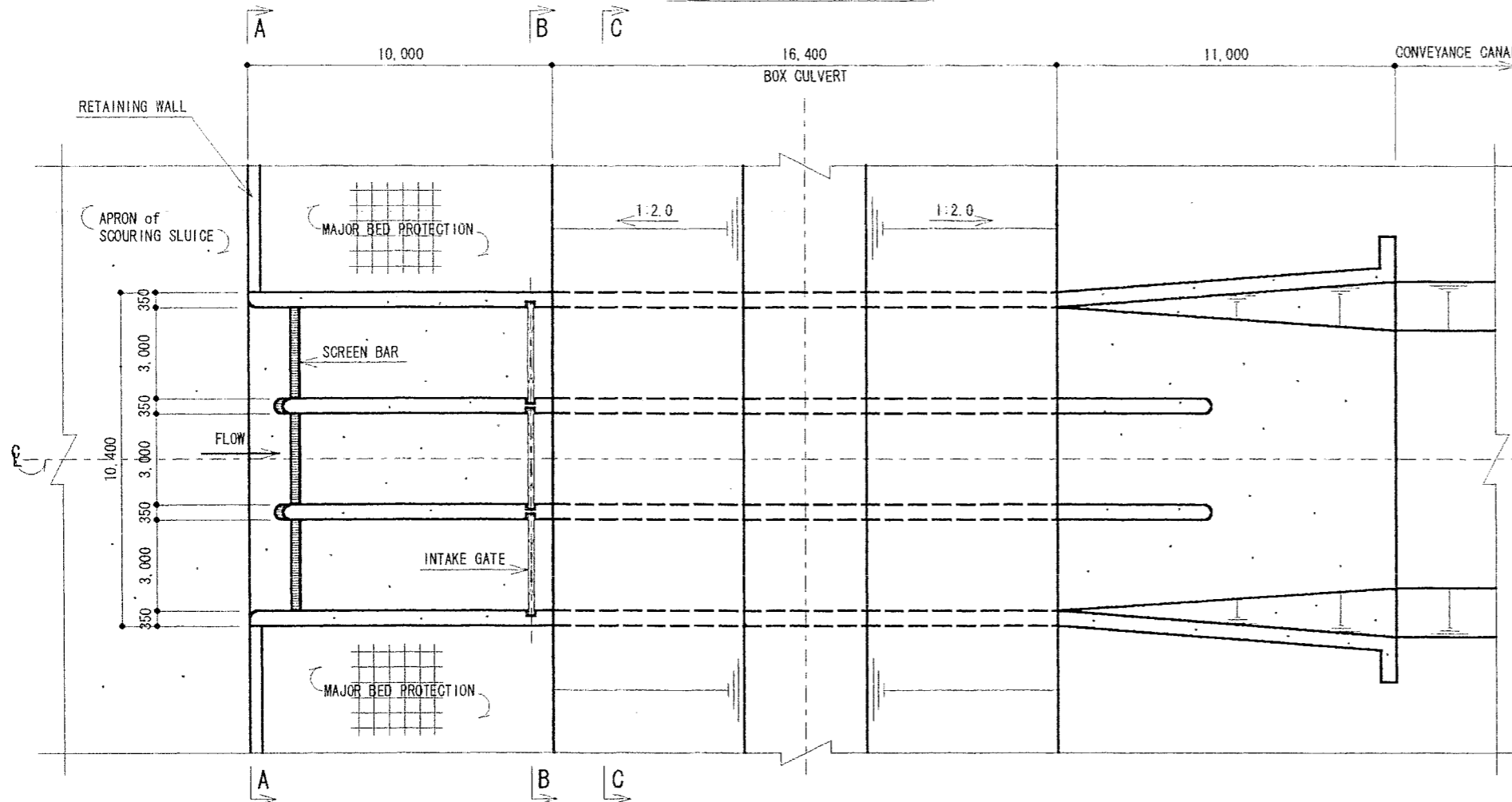


| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF HEADWORKS - PIRE (2/2) - |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-6 |

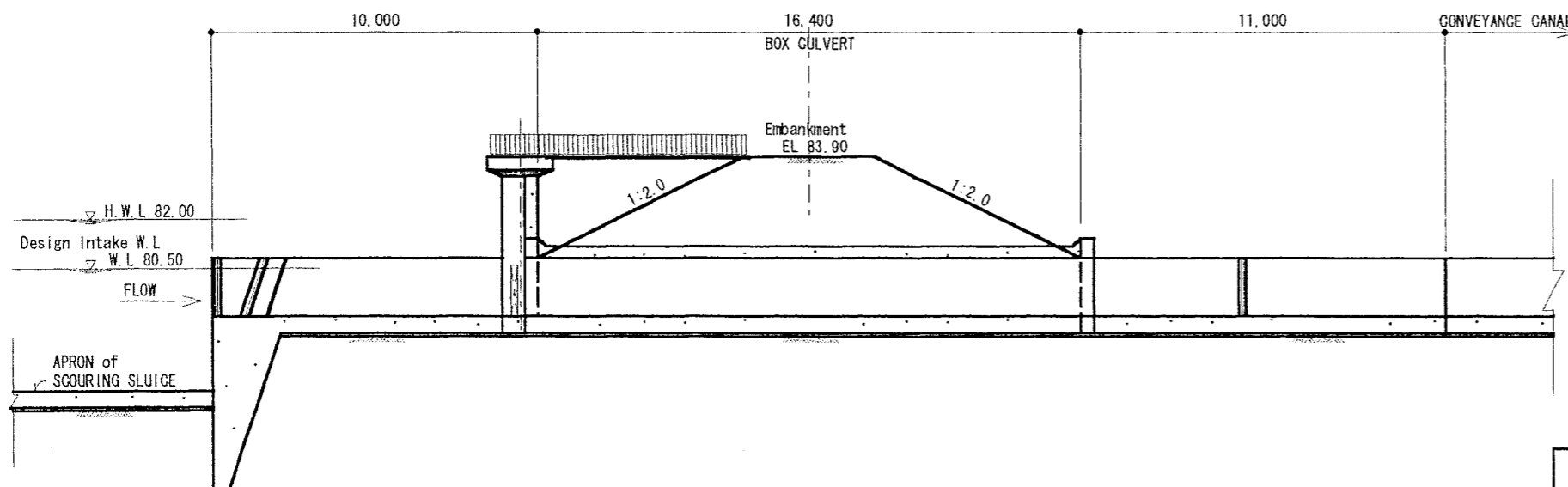
TYPICAL SECTION OF INTAKE STRUCTURE

S=1:200

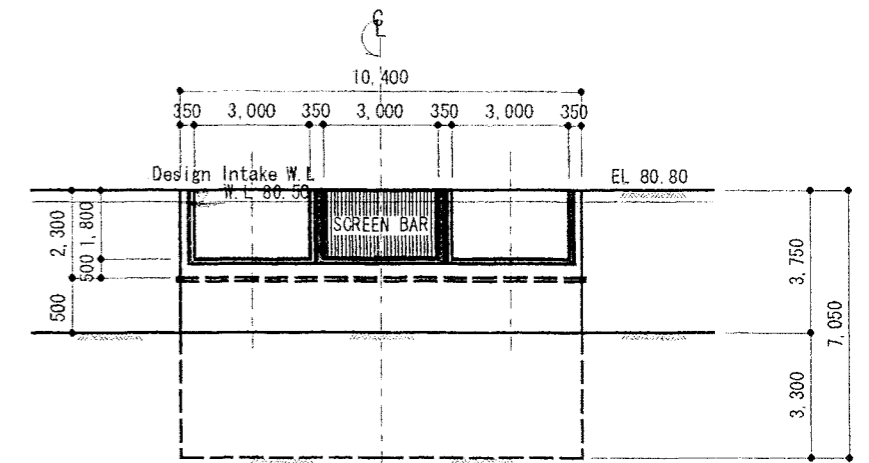
PLAN



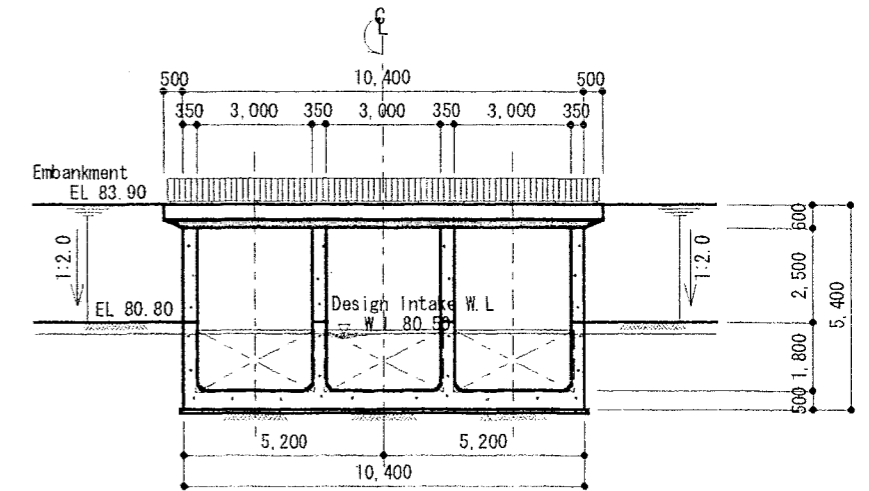
LONGITUDINAL



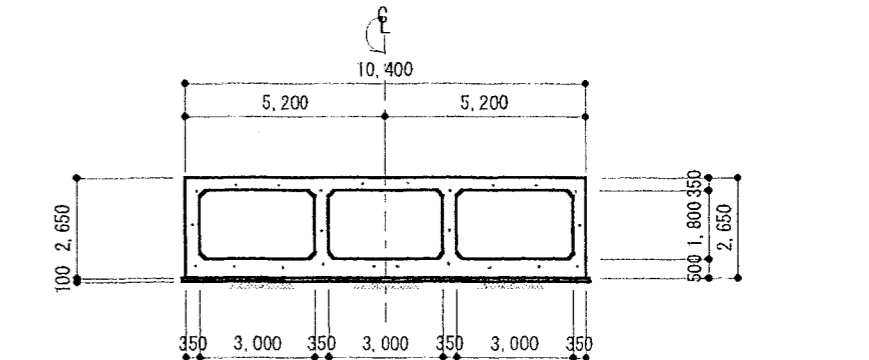
A - A



B - B



C - C

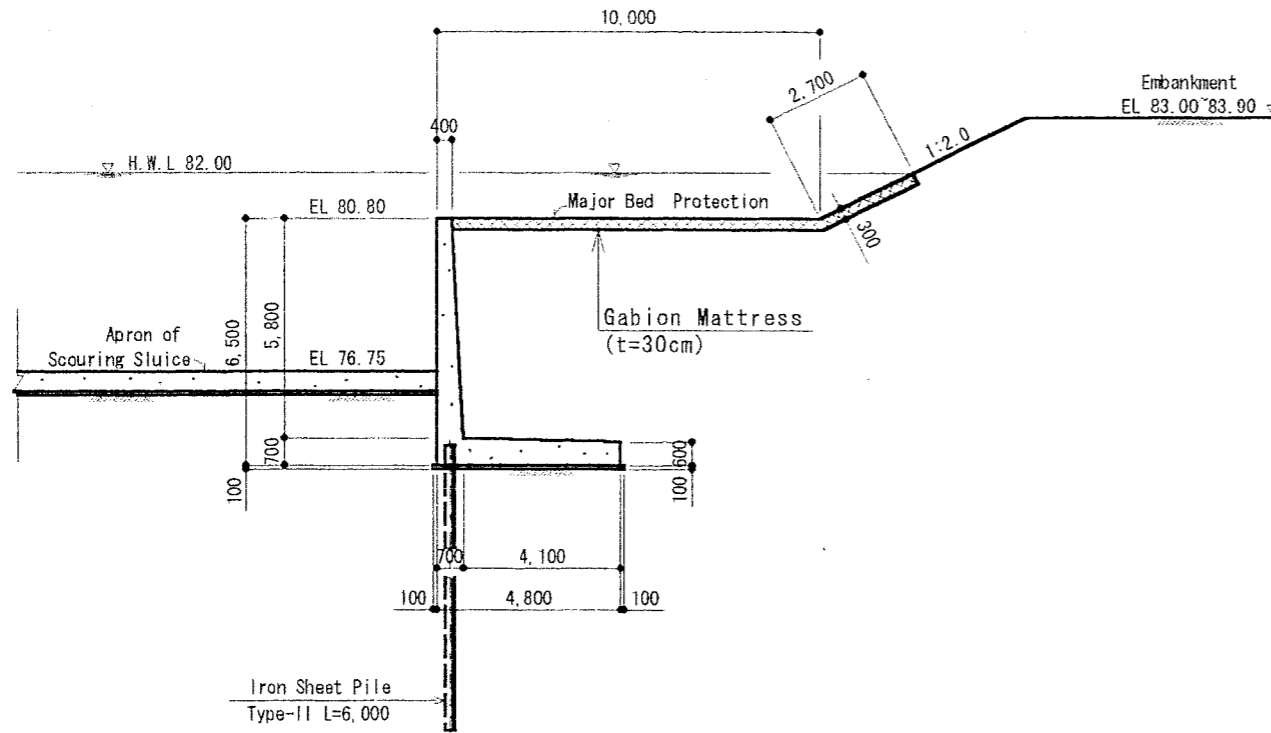


| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF INTAKE STRUCTURE |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-7 |

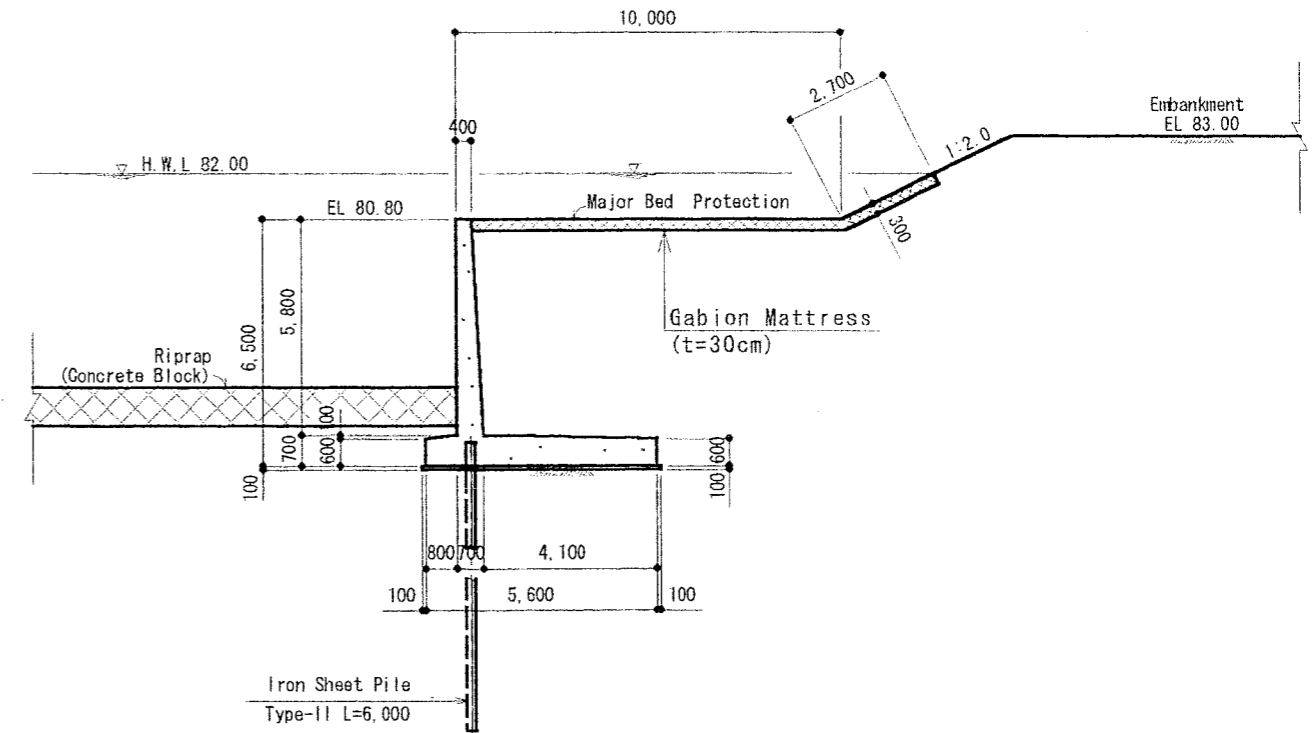
TYPICAL SECTION OF TRANSITION RETAINING WALL

S=1:200

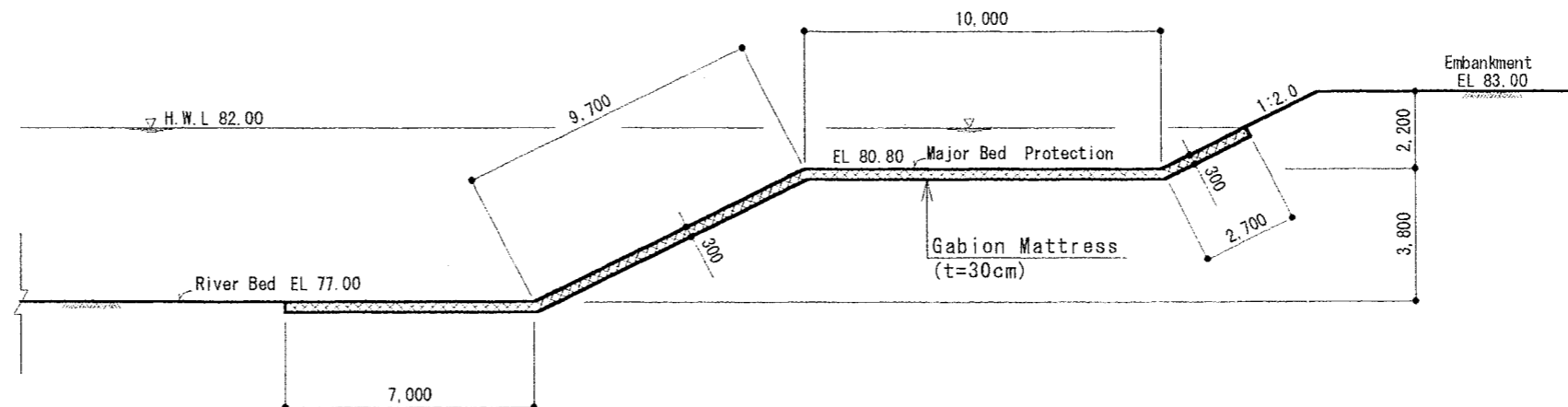
TYPE - A



TYPE - B



TYPE - C

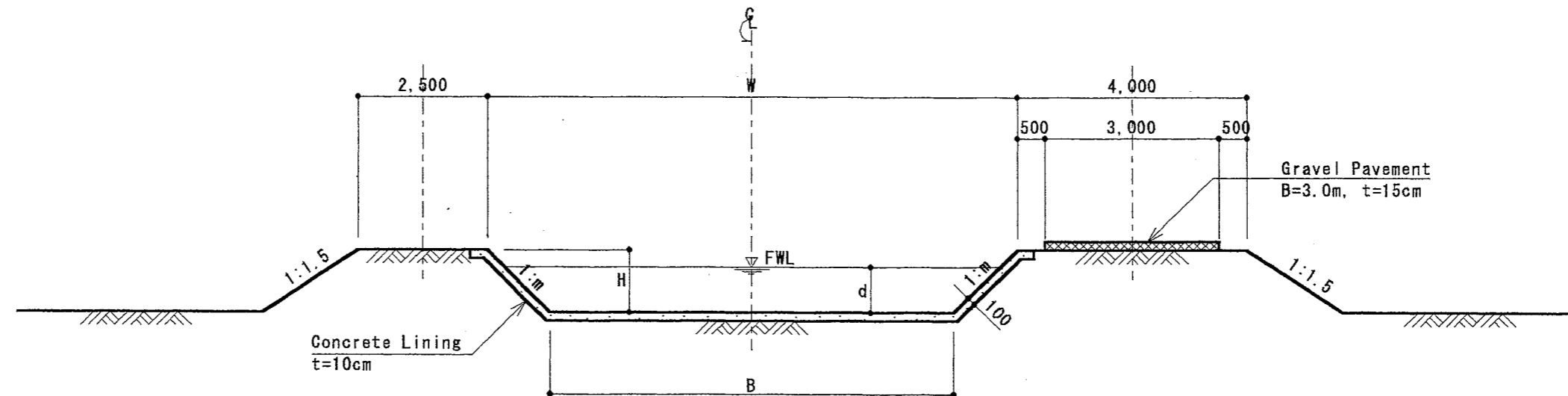


| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF TRANSITION RETAINING WALL |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | HW-8 |

PROPOSED DIMENSIONS OF HEAD RACE AND MAIN CANAL

S=1:100

CONCRETE LINING CANAL



SUKSENA MAIN CANAL DIMENSIONS

| TYPE | Q (m ³ /s) | B (m) | H (m) | d (m) | W (m) | V (m/s) | 1/l | 1:m | n | Distance and Length |
|--------------|-----------------------|-------|-------|-------|-------|---------|--------|------|-------|-----------------------------------|
| SSC1 | 9.30 | 6.80 | 1.60 | 1.195 | 10.00 | 0.973 | 1/4310 | 1.00 | 0.015 | H/W - No.2 Division L=1270m |
| SSC2 | 8.70 | 6.30 | 1.60 | 1.200 | 9.50 | 0.966 | 1/4310 | 1.00 | 0.015 | No.2 Div. - No.3 Div. L=1370m |
| SSC3 | 8.10 | 5.90 | 1.60 | 1.194 | 9.10 | 0.956 | 1/4310 | 1.00 | 0.015 | No.3 Div. - Conflu. (Ch2K)L= 678m |
| SSC4 | 8.10 | 5.20 | 1.60 | 1.196 | 8.40 | 1.059 | 1/3400 | 1.00 | 0.015 | Ch 2.00K - Ch 2.50K L= 500m |
| SSC5 | 7.10 | 4.50 | 1.60 | 1.199 | 7.70 | 1.039 | 1/3400 | 1.00 | 0.015 | Ch 2.50K - Ch 2.90K L= 400m |
| SSC6 | 6.50 | 4.10 | 1.60 | 1.198 | 7.30 | 1.024 | 1/3400 | 1.00 | 0.015 | Ch 2.90K - Ch 3.85K L= 950m |
| SSC7 | 5.90 | 3.70 | 1.60 | 1.196 | 6.90 | 1.007 | 1/3400 | 1.00 | 0.015 | Ch 3.85K - Ch 5.95K L=2100m |
| SSC8 | 4.20 | 2.50 | 1.50 | 1.200 | 5.50 | 0.946 | 1/3400 | 1.00 | 0.015 | Ch 5.95K - Ch 7.35K L=1285m |
| SIPHON | 4.20 | 1.50 | 1.50 | — | — | — | — | — | — | Ch 7.185K- Ch 7.30K L= 115m |
| SSC9 | 3.80 | 2.10 | 1.50 | 1.187 | 5.10 | 0.973 | 1/3000 | 1.00 | 0.015 | Ch 7.35K - Ch 7.45K L= 100m |
| SSC10 | 3.40 | 2.00 | 1.50 | 1.142 | 5.00 | 0.947 | 1/3000 | 1.00 | 0.015 | Ch 7.45K - Ch10.75K L=3300m |
| SSC11 | 2.60 | 2.00 | 1.30 | 1.030 | 4.60 | 0.833 | 1/3500 | 1.00 | 0.015 | Ch10.75K - Ch13.85K L=3100m |
| SSC12 | 1.50 | 2.00 | 1.30 | 0.789 | 4.60 | 0.682 | 1/4000 | 1.00 | 0.015 | Ch13.85K - Ch15.30K L=1450m |
| SSC13 | 0.80 | 2.00 | 1.30 | 0.552 | 4.60 | 0.568 | 1/4000 | 1.00 | 0.015 | Ch15.30K - Ch17.20K L=1900m |
| Total Length | | | | | | | | | | L=18518m |

REMARKS

- TYPE-SSC1, SSC2, SSC3 ===== HEAD RACE from HEADWORKS to SUKSENA MAIN CANAL.
- TYPE-SSC4 to SSC13 ===== SUKSENA MAIN CANAL.

SHANKARPUR MAIN CANAL DIMENSIONS

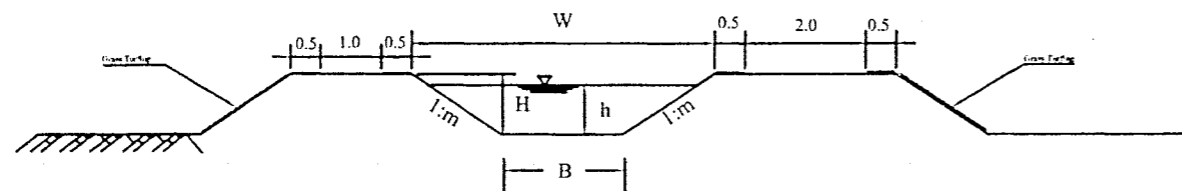
| TYPE | Q (m ³ /s) | B (m) | H (m) | d (m) | W (m) | V (m/s) | 1/l | 1:m | n | Distance and Length |
|--------------|-----------------------|-------|-------|-------|-------|---------|--------|------|-------|--------------------------------|
| SPC1 | 7.70 | 6.00 | 1.60 | 1.200 | 9.20 | 0.892 | 1/5000 | 1.00 | 0.015 | H/W - Conflu. (Ch2.4K) L=2012m |
| SPC2 | 7.70 | 4.50 | 1.60 | 1.188 | 7.70 | 1.139 | 1/2800 | 1.00 | 0.015 | Ch 2.40K - Ch 2.55K L= 150m |
| SPC3 | 6.90 | 4.00 | 1.60 | 1.188 | 7.20 | 1.119 | 1/2800 | 1.00 | 0.015 | Ch 2.55K - Ch 4.50K L=1950m |
| SPC4 | 6.20 | 3.50 | 1.60 | 1.198 | 6.70 | 1.101 | 1/2800 | 1.00 | 0.015 | Ch 4.50K - Ch 7.70K L=3200m |
| SPC5 | 5.20 | 2.90 | 1.60 | 1.192 | 6.10 | 1.066 | 1/2800 | 1.00 | 0.015 | Ch 7.70K - Ch 9.20K L=1436m |
| AQUEDUCT | 5.20 | 4.20 | 1.60 | 1.183 | 4.20 | 1.046 | 1/2800 | 0.00 | 0.015 | Ch 8.986K- Ch 9.05K L= 64m |
| SPC6 | 4.60 | 2.40 | 1.50 | 1.181 | 5.40 | 1.087 | 1/2500 | 1.00 | 0.015 | Ch 9.20K - Ch10.50K L=1300m |
| SPC7 | 4.20 | 2.10 | 1.40 | 1.193 | 5.10 | 1.069 | 1/2500 | 1.00 | 0.015 | Ch10.50K - Ch12.00K L=1500m |
| SPC8 | 3.30 | 2.00 | 1.40 | 1.070 | 4.80 | 1.000 | 1/2500 | 1.00 | 0.015 | Ch12.00K - Ch12.90K L= 900m |
| SPC9 | 2.70 | 2.00 | 1.30 | 0.959 | 4.60 | 0.951 | 1/2500 | 1.00 | 0.015 | Ch12.90K - Ch13.70K L= 800m |
| SPC10 | 1.80 | 2.00 | 1.30 | 0.766 | 4.60 | 0.849 | 1/2500 | 1.00 | 0.015 | Ch13.70K - Ch15.35K L=1650m |
| SPC11 | 1.00 | 2.00 | 1.30 | 0.548 | 4.60 | 0.716 | 1/2500 | 1.00 | 0.015 | Ch15.35K - Ch17.70K L=2350m |
| Total Length | | | | | | | | | | L=17312m |

REMARKS

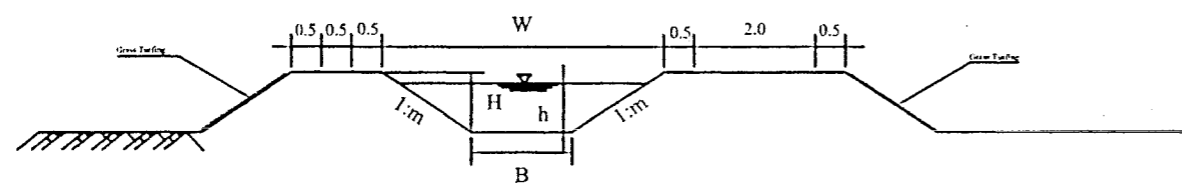
- TYPE-SPC1 ===== HEAD RACE from HEADWORKS to SHANKARPUR MAIN CANAL.
- TYPE-SPC1 to SPC11 ===== SHANKARPUR MAIN CANAL.

| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | PROPOSED DIMENSIONS OF HEAD RACE AND MAIN CANAL |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-1 |

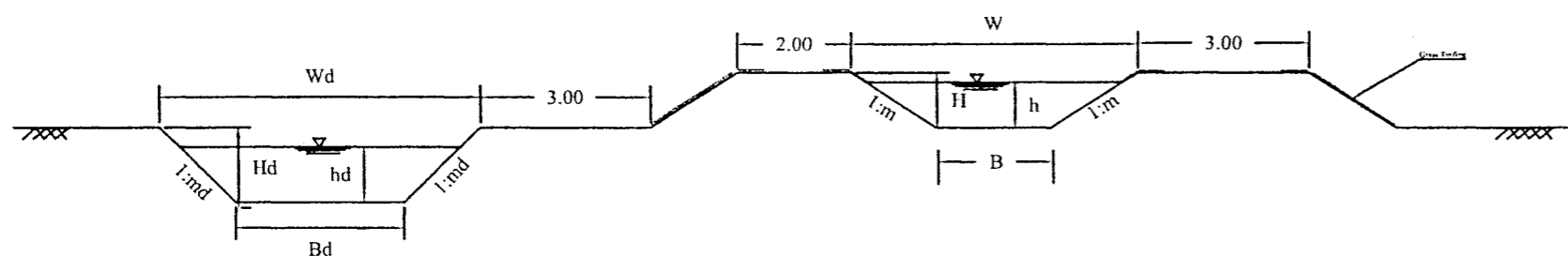
Typical Cross Section of Secondary Earth Canal



Typical Cross Section of Tertiary Canal



Typical Cross Section of Secondary Canal with Drain



Secondary Canal Dimensions

| Type | Q(m ³ /s) | h(m) | H(m) | B(m) | W(m) | V(m/s) | l:m | n | I |
|------|----------------------|------|------|-------|------|--------|------|------|--------|
| A | 0.0-0.2 | 0.55 | 0.75 | 0.55 | 2.80 | 0.33 | 1.50 | 0.03 | 1/2000 |
| B | 0.2-0.4 | 0.70 | 0.90 | 0.70 | 3.40 | 0.39 | 1.50 | 0.03 | 1/2000 |
| C | 0.4-0.5 | 0.75 | 0.95 | 0.75 | 3.60 | 0.41 | 1.50 | 0.03 | 1/2000 |
| D | 0.5-0.7 | 0.75 | 0.95 | 1.125 | 4.00 | 0.43 | 1.50 | 0.03 | 1/2000 |
| E | 0.7-0.8 | 0.80 | 1.10 | 1.20 | 4.50 | 0.45 | 1.50 | 0.03 | 1/2000 |
| F | 0.8-1.0 | 0.80 | 1.10 | 1.60 | 4.90 | 0.47 | 1.50 | 0.03 | 1/2000 |
| G | 1.0-1.25 | 0.85 | 1.15 | 1.70 | 5.20 | 0.49 | 1.50 | 0.03 | 1/2000 |
| H | 1.25-1.50 | 0.85 | 1.15 | 2.55 | 6.00 | 0.52 | 1.50 | 0.03 | 1/2000 |
| I | 1.50-1.75 | 0.90 | 1.20 | 2.70 | 6.30 | 0.54 | 1.50 | 0.03 | 1/2000 |
| J | 1.75-2.00 | 0.95 | 1.25 | 2.85 | 6.60 | 0.56 | 1.50 | 0.03 | 1/2000 |
| K | 2.00-2.50 | 1.00 | 1.40 | 3.00 | 7.20 | 0.58 | 1.50 | 0.03 | 1/2000 |
| L | 2.50-3.00 | 1.10 | 1.50 | 3.30 | 7.80 | 0.61 | 1.50 | 0.03 | 1/2000 |

Tertiary Canal Dimensions

| Type | Q(m ³ /s) | h(m) | H(m) | B(m) | W(m) | V(m/s) | l:m | n | I |
|------|----------------------|------|------|------|------|--------|-----|------|--------|
| T1 | 0.0-0.1 | 0.45 | 0.65 | 0.45 | 1.75 | 0.28 | 1.0 | 0.03 | 1/2000 |
| T2 | 0.1-0.2 | 0.50 | 0.70 | 0.75 | 2.15 | 0.33 | 1.0 | 0.03 | 1/2000 |
| T3 | 0.2-0.3 | 0.55 | 0.75 | 1.10 | 2.60 | 0.36 | 1.0 | 0.03 | 1/2000 |
| T4 | 0.3-0.4 | 0.60 | 0.80 | 1.20 | 2.80 | 0.39 | 1.0 | 0.03 | 1/2000 |
| T5 | 0.4-0.5 | 0.60 | 0.80 | 1.50 | 3.10 | 0.40 | 1.0 | 0.03 | 1/2000 |

Drainage Canal Dimensions

| Type | Q(m ³ /s) | hd(m) | Hd(m) | Bd(m) | Wd(m) | V(m/s) | l:md | n | I |
|------|----------------------|-------|-------|-------|-------|--------|------|-------|--------|
| D1 | 0.0-1.0 | 1.00 | 1.30 | 2.00 | 4.60 | 0.47 | 1.0 | 0.035 | 1/2000 |
| D2 | 1.0-2.0 | 1.00 | 1.30 | 3.00 | 5.70 | 0.50 | 1.0 | 0.035 | 1/2000 |

THE FEASIBILITY STUDY ON
THE SUNSARI RIVER IRRIGATION PROJECT
IN THE KINGDOM OF NEPAL

TITLE
OF
DRAWING

TYPICAL SECTION OF
SECONDARY AND
TERTIARY CANAL

JAPAN INTERNATIONAL COOPERATION AGENCY

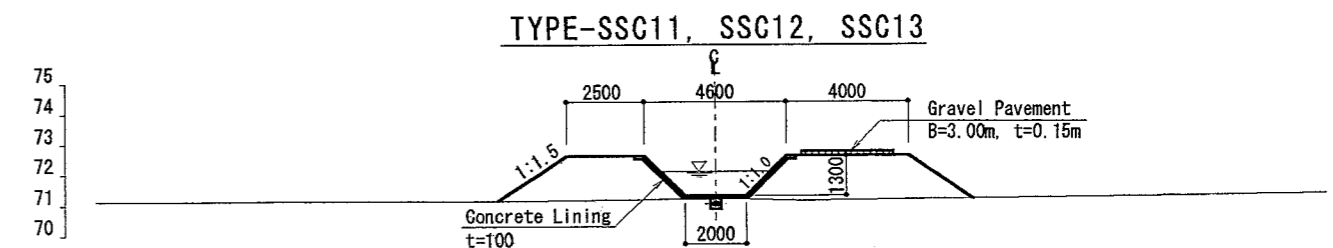
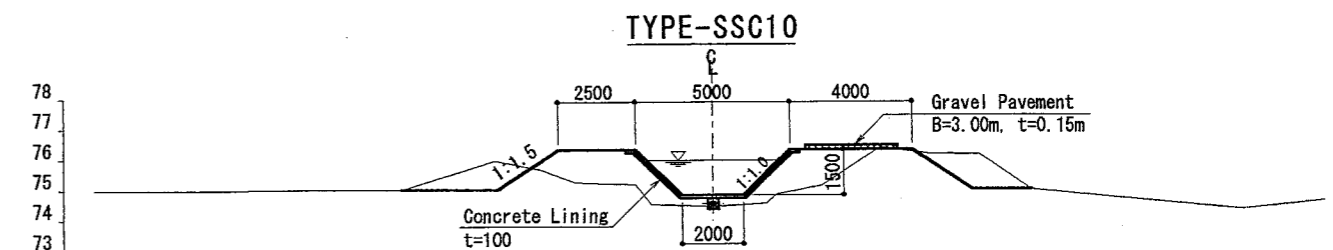
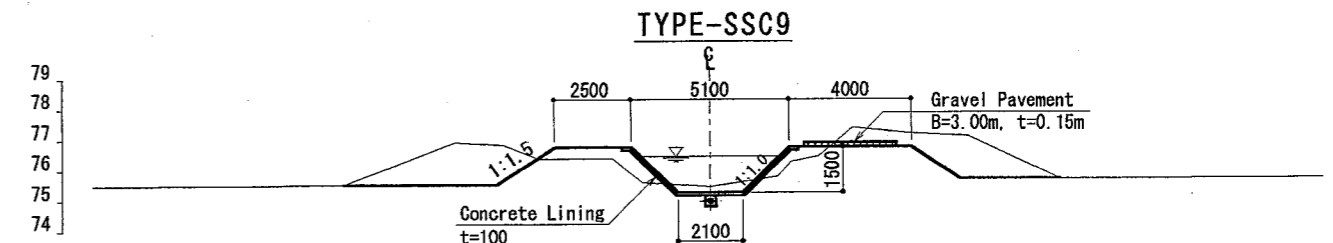
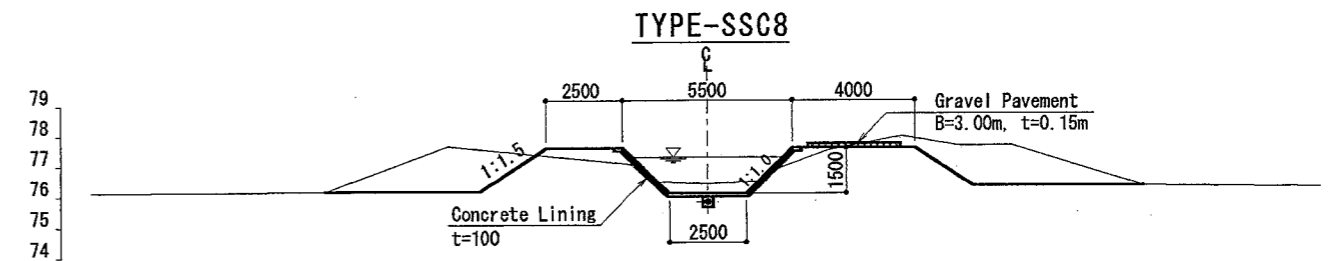
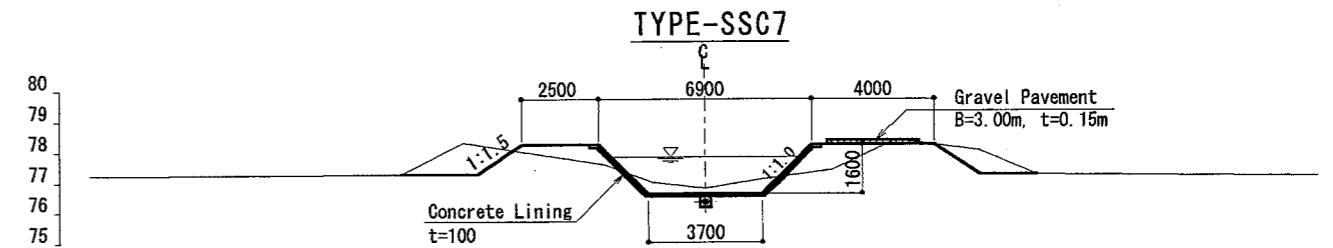
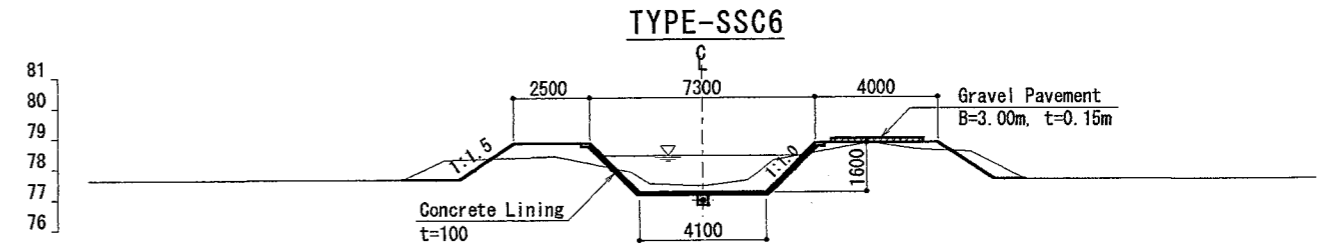
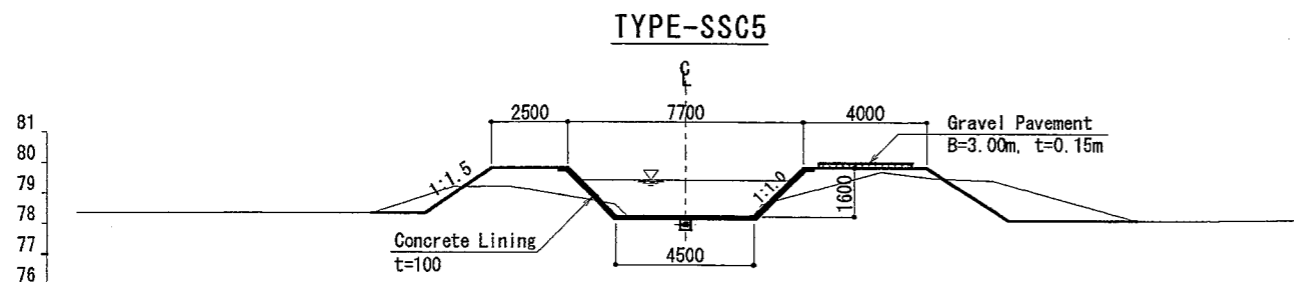
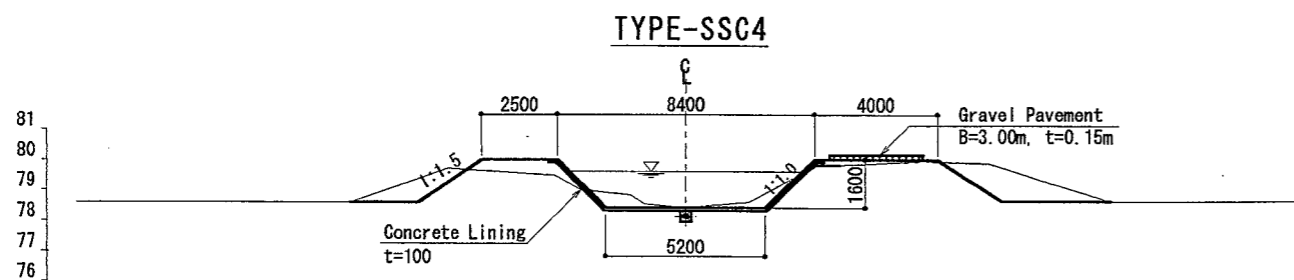
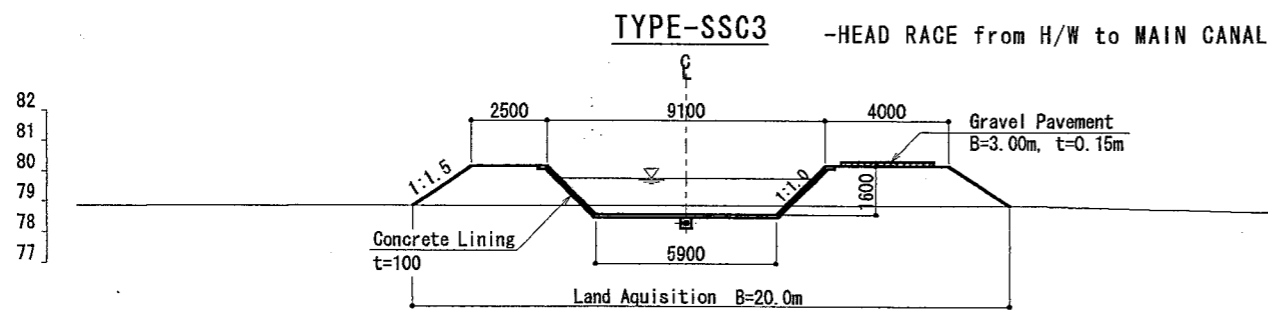
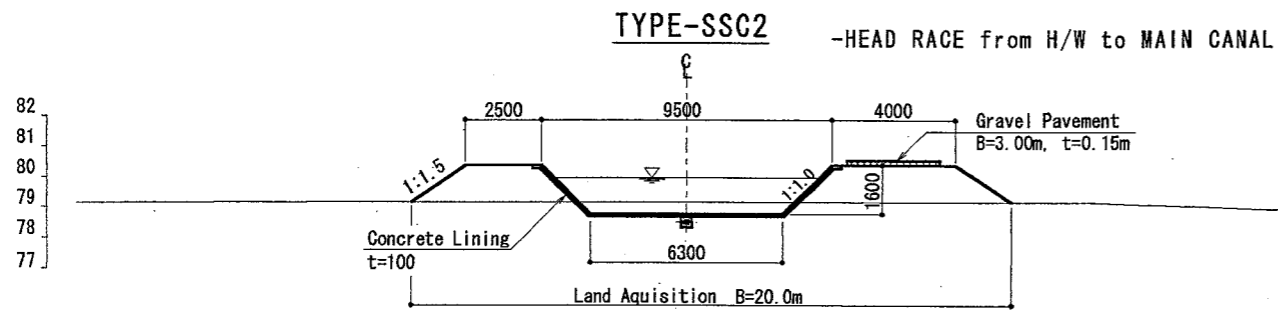
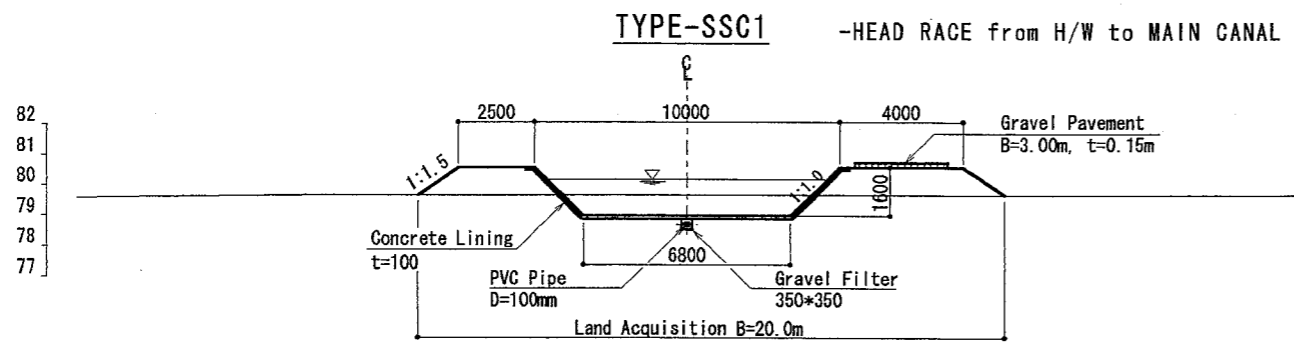
DRAWING NO.

CN-2

TYPICAL SECTION OF SUKSENA MAIN CANAL

S=1:250

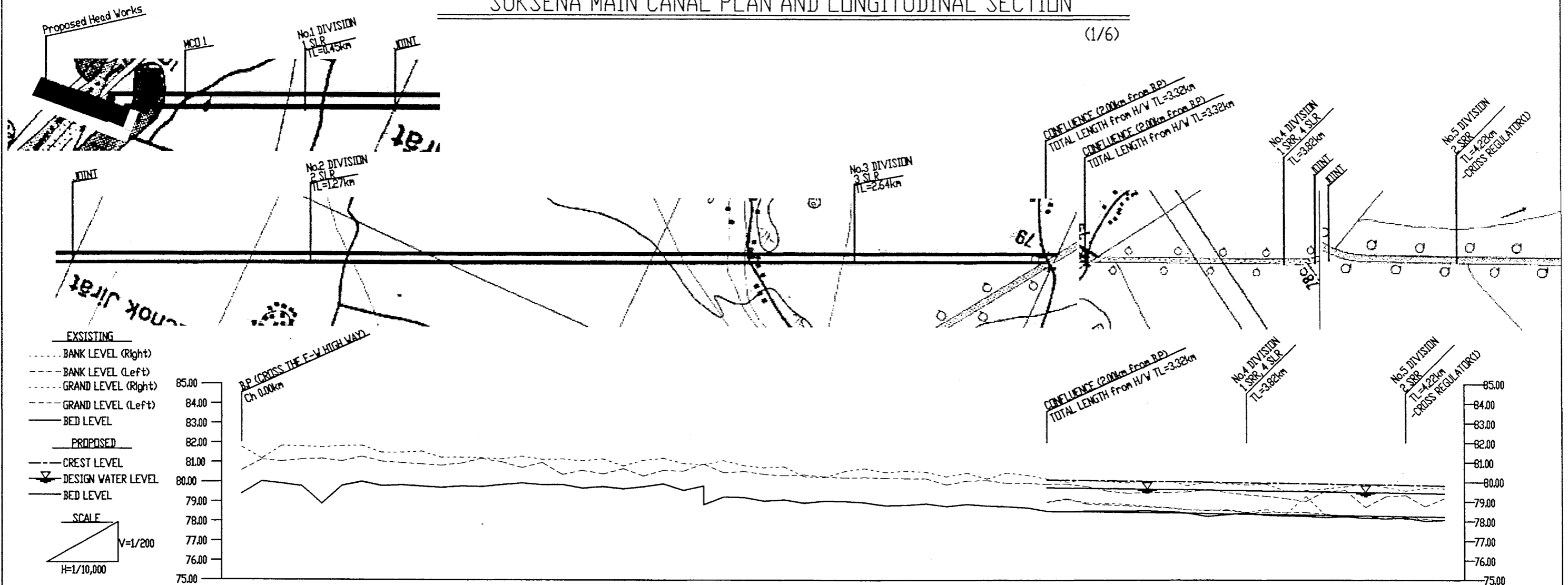
CONCRETE LINING CANAL



| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF SUKSENA MAIN CANAL |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-3 |

SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION

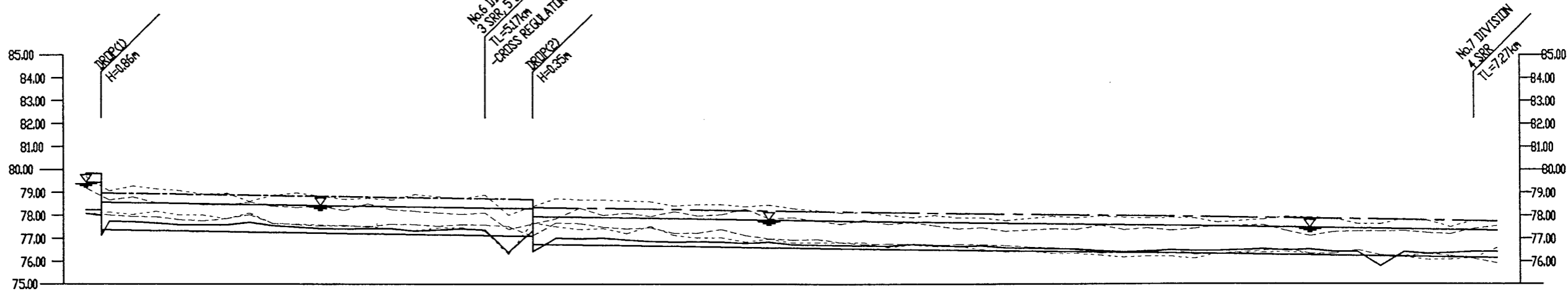
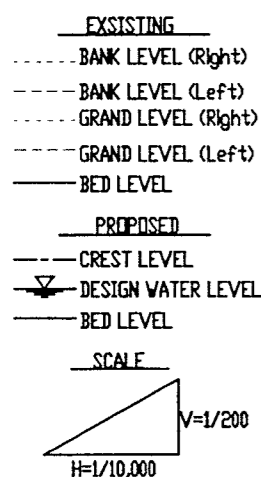
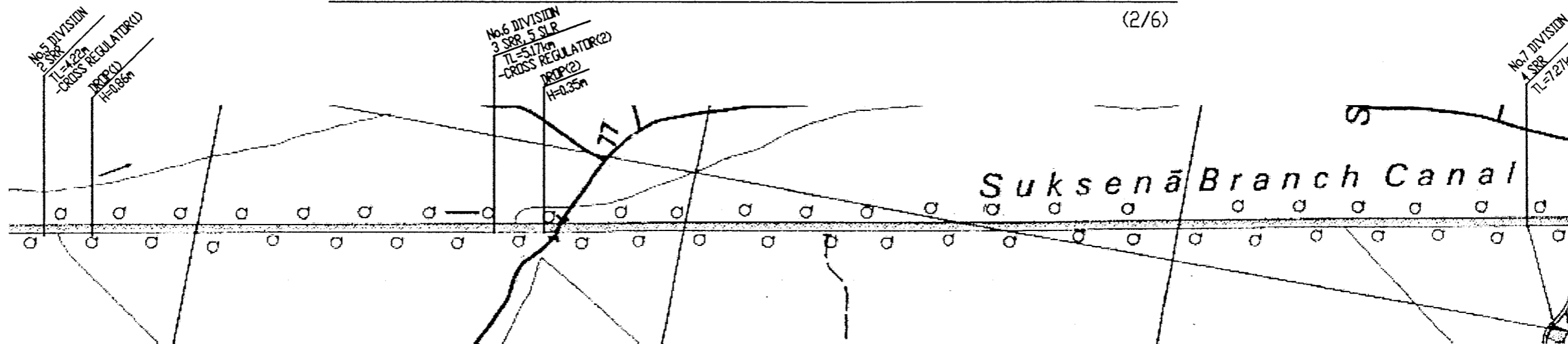
(1/6)



| EXISTING CONDITION | CHAINAGE (m) | PROPOSED | | | | | | | | | |
|--------------------|--------------|---------------------|----------------------------|-------------------|---|-------------------|----------------------------|---------------------|-------------------|----------------------------|---------------------|
| | | CREST LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) | BED LEVEL (EL. m) | CANAL DETAIL | BED LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) | CREST LEVEL (EL. m) | BED LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) | CREST LEVEL (EL. m) |
| | 0 | | | | HEADWORKS HEAD RACE to SUKSENA MAIN CANAL | | | | | | |
| | 50 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| | 150 | | | | | | | | | | |
| | 200 | | | | | | | | | | |
| | 250 | | | | | | | | | | |
| | 300 | | | | | | | | | | |
| | 350 | | | | | | | | | | |
| | 400 | | | | | | | | | | |
| | 450 | | | | | | | | | | |
| | 500 | | | | | | | | | | |
| | 550 | | | | | | | | | | |
| | 600 | | | | | | | | | | |
| | 650 | | | | | | | | | | |
| | 700 | | | | | | | | | | |
| | 750 | | | | | | | | | | |
| | 800 | | | | | | | | | | |
| | 850 | | | | | | | | | | |
| | 900 | | | | | | | | | | |
| | 950 | | | | | | | | | | |
| | 1000 | | | | | | | | | | |
| | 1050 | | | | | | | | | | |
| | 1100 | | | | | | | | | | |
| | 1150 | | | | | | | | | | |
| | 1200 | | | | | | | | | | |
| | 1250 | | | | | | | | | | |
| | 1300 | | | | | | | | | | |
| | 1350 | | | | | | | | | | |
| | 1400 | | | | | | | | | | |
| | 1450 | | | | | | | | | | |
| | 1500 | | | | | | | | | | |
| | 1550 | | | | | | | | | | |
| | 1600 | | | | | | | | | | |
| | 1650 | | | | | | | | | | |
| | 1700 | | | | | | | | | | |
| | 1750 | | | | | | | | | | |
| | 1800 | | | | | | | | | | |
| | 1850 | | | | | | | | | | |
| | 1900 | | | | | | | | | | |
| | 1950 | | | | | | | | | | |
| | 2000 | | | | | | | | | | |
| | 2050 | | | | | | | | | | |
| | 2100 | | | | | | | | | | |
| | 2150 | | | | | | | | | | |
| | 2200 | | | | | | | | | | |
| | 2250 | | | | | | | | | | |
| | 2300 | | | | | | | | | | |
| | 2350 | | | | | | | | | | |
| | 2400 | | | | | | | | | | |
| | 2500 | | | | | | | | | | |
| | 2550 | | | | | | | | | | |
| | 2600 | | | | | | | | | | |
| | 2650 | | | | | | | | | | |
| | 2700 | | | | | | | | | | |
| | 2750 | | | | | | | | | | |
| | 2800 | | | | | | | | | | |
| | 2850 | | | | | | | | | | |
| | 2900 | | | | | | | | | | |
| | 2950 | | | | | | | | | | |
| | 3000 | | | | | | | | | | |

SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION

(2/6)



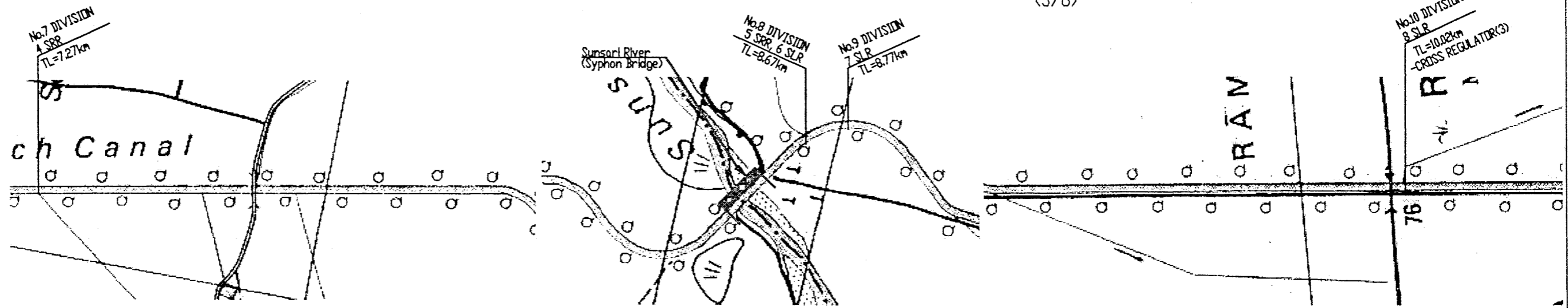
| PROPOSED | CREST LEVEL (EL. m) | 79.83 | 78.97 | 78.73 | 78.70 | 78.35 | 77.76 |
|-------------------|--|-------|-------|---|-------|-------|-------|
| | DESIGN WATER LEVEL (WL. m) | 79.43 | 78.57 | 78.33 | 78.30 | 77.95 | 77.56 |
| BED LEVEL (EL. m) | 78.23 | 77.37 | 77.13 | 77.10 | 76.75 | 76.16 | |
| CANAL DETAIL | Q=6.46 m ³ /s I=1/3400 L=950 m CANAL TYPE-SSC6 B=4.10 m Q=1.20 m V=1.02 m/s | | | Q=5.90 m ³ /s I=1/3400 L=2100 m CANAL TYPE-SSC7 B=3.70 m Q=1.20 m V=1.01 m/s | | | |

| EXISTING CONDITION | CHAINAGE (m) | 3000 | 3050 | 3100 | 3150 | 3200 | 3250 | 3300 | 3350 | 3400 | 3450 | 3500 | 3550 | 3600 | 3650 | 3700 | 3750 | 3800 | 3850 | 3900 | 3950 | 4000 | 4050 | 4100 | 4150 | 4200 | 4250 | 4300 | 4350 | 4400 | 4450 | 4500 | 4550 | 4600 | 4650 | 4700 | 4750 | 4800 | 4850 | 4900 | 4950 | 5000 | 5050 | 5100 | 5150 | 5200 | 5250 | 5300 | 5350 | 5400 | 5450 | 5500 | 5550 | 5600 | 5650 | 5700 | 5750 | 5800 | 5850 | 5900 | 5950 | 6000 | | | | | | | |
|--------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|
| | LEFT BANK LEVEL (EL. m) | 79.183 | 78.665 | 78.791 | 78.546 | 78.544 | 78.457 | 78.459 | 78.578 | 78.391 | 78.348 | 78.398 | 78.213 | 78.509 | 78.251 | 78.181 | 78.108 | 78.048 | 78.11 | 77.392 | 77.336 | 77.336 | 76.420 | 77.005 | 77.855 | 78.318 | 78.005 | 76.93 | 78.098 | 77.952 | 78.166 | 77.982 | 76.846 | 76.84 | 76.796 | 76.834 | 77.857 | 77.912 | 76.710 | 76.693 | 76.684 | 76.673 | 77.617 | 77.8 | 76.738 | 77.687 | 77.553 | 77.412 | 77.458 | 77.31 | 77.403 | 77.381 | 77.559 | 77.367 | 77.437 | 77.335 | 77.42 | 77.534 | 77.573 | 77.319 | 77.101 | 77.27 | 77.305 | 77.299 | 77.316 | 77.231 | 77.187 | 77.409 | 77.54 |
| | BED LEVEL (EL. m) | 78.078 | 77.987 | 77.735 | 77.718 | 77.661 | 77.587 | 77.59 | 77.58 | 77.694 | 77.55 | 77.484 | 77.432 | 77.411 | 77.426 | 77.425 | 77.319 | 77.371 | 77.41 | 77.356 | 76.386 | 77.336 | 76.420 | 77.005 | 77.855 | 78.318 | 78.005 | 76.93 | 78.098 | 77.952 | 78.166 | 77.982 | 76.846 | 76.84 | 76.796 | 76.834 | 77.857 | 77.912 | 76.710 | 76.693 | 76.684 | 76.673 | 77.617 | 77.8 | 76.738 | 77.687 | 77.553 | 77.412 | 77.458 | 77.31 | 77.403 | 77.381 | 77.559 | 77.367 | 77.437 | 77.335 | 77.42 | 77.534 | 77.573 | 77.319 | 77.101 | 77.27 | 77.305 | 77.299 | 77.316 | 77.231 | 77.187 | 77.409 | 77.54 |
| | RIGHT BANK LEVEL (EL. m) | 79.685 | 79.062 | 79.273 | 79.15 | 79.076 | 78.926 | 78.963 | 78.604 | 78.878 | 78.976 | 78.845 | 78.696 | 78.747 | 78.674 | 78.916 | 78.816 | 78.724 | 78.889 | 78.015 | 78.741 | 78.682 | 78.675 | 78.628 | 78.599 | 78.413 | 78.473 | 78.473 | 78.388 | 78.456 | 78.31 | 78.115 | 78.138 | 78.015 | 77.91 | 78.004 | 77.889 | 77.896 | 77.77 | 77.951 | 77.881 | 77.961 | 77.905 | 77.875 | 77.888 | 77.871 | 77.68 | 77.82 | 77.937 | 77.912 | 77.864 | 77.627 | 77.626 | 77.839 | 77.769 | 77.489 | 77.768 | 77.71 | | | | | | | | | | | |

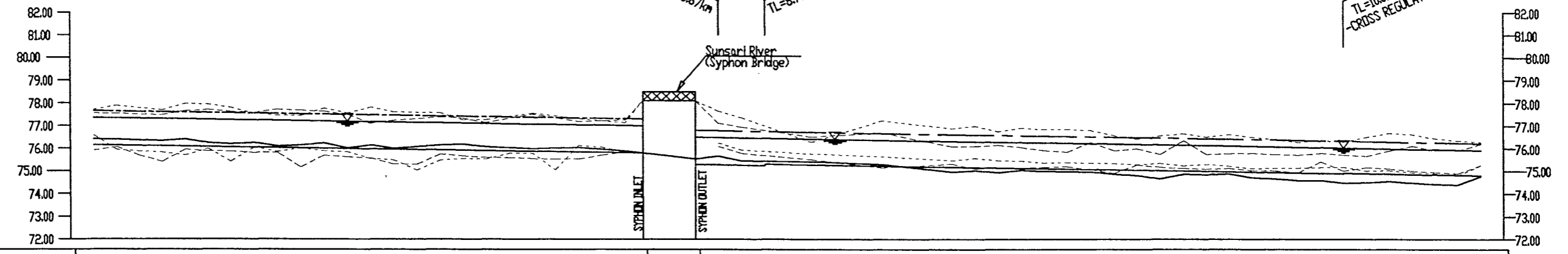
| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION (2/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-5 |

SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION

(3/6)



- EXISTING**
- BANK LEVEL (Right)
 - BANK LEVEL (Left)
 - GRAND LEVEL (Right)
 - GRAND LEVEL (Left)
 - BED LEVEL
- PROPOSED**
- CREST LEVEL
 - ▽ DESIGN WATER LEVEL
 - BED LEVEL
- SCALE
H=1/10,000
V=1/200



| PROPOSED | CREST LEVEL (EL. m) | | DESIGN WATER LEVEL (VL. m) | | BED LEVEL (EL. m) | | CANAL DETAIL |
|----------|---------------------|-------|----------------------------|-------|-------------------|-------|---|
| | | 77.30 | 76.90 | 76.50 | 76.48 | 75.80 | |
| | | 76.79 | 76.45 | 76.45 | 75.29 | 75.26 | $Q=4.16 \text{ m}^3/\text{s}$ $I=1/3000$ $L=50 \text{ m}$ CANAL TYPE-SSCB $B=2.50 \text{ m}$ $R=1.20 \text{ m}$ $V=0.95 \text{ m/s}$ |
| | | 76.76 | 76.03 | 76.03 | 74.89 | 74.89 | $Q=3.73 \text{ m}^3/\text{s}$ $I=1/3000$ $L=100 \text{ m}$ CANAL TYPE-SSC9 $B=2.10 \text{ m}$ $R=1.19 \text{ m}$ $V=0.97 \text{ m/s}$ |
| | | | | | | | $Q=3.40 \text{ m}^3/\text{s}$ $I=1/3000$ $L=1250 \text{ m}$ CANAL TYPE-SSC10 $B=2.00 \text{ m}$ $R=1.14 \text{ m}$ $V=0.95 \text{ m/s}$ |
| | | | | | | | $Q=3.12 \text{ m}^3/\text{s}$ $I=1/3000$ $L=2050 \text{ m}$ CANAL TYPE-SSC10 $B=2.00 \text{ m}$ $d=1.11 \text{ m}$ $V=0.93 \text{ m/s}$ |

| EXISTING CONDITION | CHAINAGE (m) | 6000 | 6050 | 6150 | 6200 | 6250 | 6300 | 6350 | 6400 | 6450 | 6500 | 6550 | 6600 | 6650 | 6750 | 6800 | 6850 | 6950 | 7050 | 7150 | 7185 | 7300 | 7350 | 7400 | 7450 | 7550 | 7700 | 7850 | 7900 | 7950 | 8000 | 8050 | 8100 | 8150 | 8200 | 8250 | 8300 | 8350 | 8400 | 8450 | 8500 | 8550 | 8600 | 8650 | 8700 | 8750 | 8800 | 8850 | 8900 | 8950 | 9000 | | |
|--------------------|--------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|--------|--------|--------|------|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | LEFT BANK LEVEL (EL. m) | 77.54 | 77.537 | 77.468 | 77.657 | 77.699 | 77.619 | 77.575 | 77.717 | 77.675 | 77.625 | 77.486 | 77.1 | 77.234 | 77.38 | 77.323 | 77.137 | 77.51 | 77.184 | 77.245 | | | 78.713 | 77.105 | 76.942 | | 76.515 | | 76.699 | 76.08 | 76.097 | 76.141 | 76.047 | 75.903 | 75.844 | 76.264 | 75.899 | 75.987 | 75.733 | 76.342 | 75.729 | 75.774 | 75.788 | 75.733 | 75.714 | 75.791 | 75.722 | 75.67 | 75.903 | 76.126 | 75.925 | 75.921 | 76.202 |
| | BED LEVEL (EL. m) | 76.41 | 76.389 | 76.323 | 76.407 | 76.239 | 76.199 | 76.249 | 76.1 | 76.146 | 76.229 | 76.016 | 76.146 | 76.004 | 76.145 | 76.179 | 76.079 | 75.993 | 76.032 | 75.889 | | | 75.534 | 75.665 | 75.459 | | 75.416 | | 75.302 | 74.963 | 75.022 | 74.939 | 75.041 | 74.992 | 74.983 | 74.967 | 74.874 | 74.81 | 74.664 | 74.869 | 74.845 | 74.882 | 74.71 | 74.664 | 74.585 | 74.585 | 74.485 | 74.51 | 74.537 | 74.493 | 74.429 | 74.41 | 74.702 |
| | RIGHT BANK LEVEL (EL. m) | 77.71 | 77.884 | 77.684 | 77.975 | 77.998 | 77.797 | 77.526 | 77.452 | 77.432 | 77.764 | 77.552 | 77.808 | 77.608 | 77.569 | 77.249 | 77.267 | 77.557 | 77.309 | 77.128 | | | 78.75 | 77.647 | 77.352 | | 76.28 | | 77.235 | 76.879 | 76.99 | 76.747 | 76.902 | 76.838 | 76.842 | 76.8 | 76.57 | 76.408 | 76.557 | 76.654 | 76.504 | 76.625 | 76.501 | 76.394 | 76.274 | 76.36 | 76.291 | 76.511 | 76.686 | 76.636 | 76.449 | 76.355 | 76.293 |

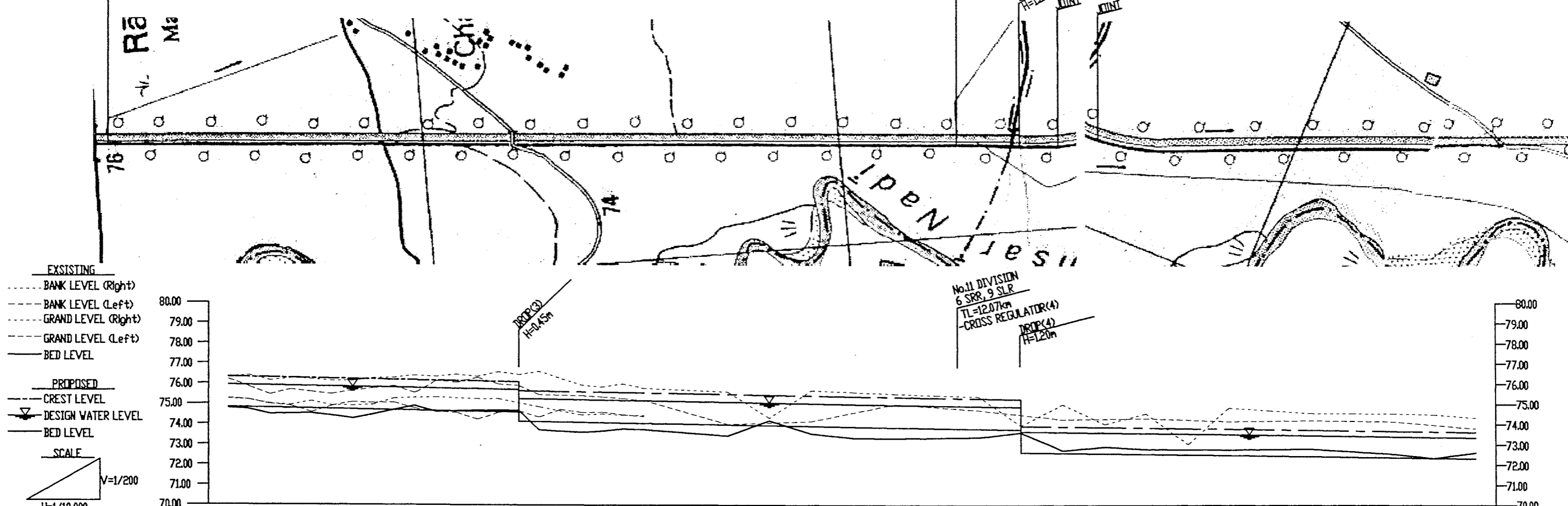
SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION

(4/6)

No.11 DIVISION
6 SRR, 9 SLR
TL=12.07km
-CROSS REGULATOR(4)

No.11 DIVISION
6 SRR, 9 SLR
TL=12.07km
-CROSS REGULATOR(4)

No.11 DIVISION
6 SRR, 9 SLR
TL=12.07km
-CROSS REGULATOR(4)



EXISTING
 - - - - - BANK LEVEL (Right)
 - - - - - BANK LEVEL (Left)
 - - - - - GRAND LEVEL (Right)
 - - - - - GRAND LEVEL (Left)
 - - - - - BED LEVEL
 PROPOSED
 - - - - - CREST LEVEL
 - - - - - DESIGN WATER LEVEL
 - - - - - BED LEVEL
 SCALE
 V=1/200
 H=1/10,000

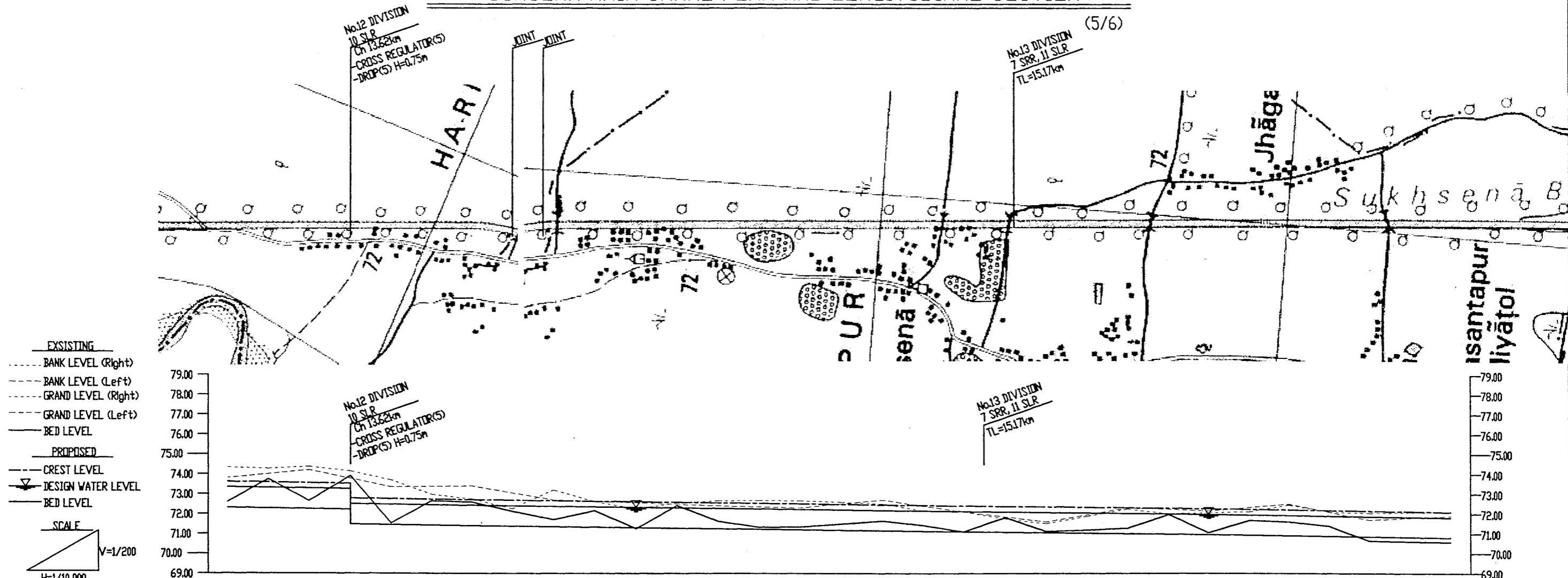
80.00
79.00
78.00
77.00
76.00
75.00
74.00
73.00
72.00
71.00
70.00

| PROPOSED | CREST LEVEL (EL. m) | 76.09 | 75.64 | 75.29 | 74.84 | 73.92 |
|-------------------|----------------------------|--|-------|-------|--|-------|
| | DESIGN WATER LEVEL (VL. m) | 75.70 | 75.25 | 74.90 | 74.85 | 73.65 |
| BED LEVEL (EL. m) | 74.59 | 74.14 | 73.79 | 73.54 | 72.62 | |
| CANAL DETAIL | | Q=3.12 m ³ /s I=1/3000 L=2050 m CANAL TYPE-SSC10 B=2.00 m R=1.11 m V=0.93 m/s | | | Q=2.54 m ³ /s I=1/3500 L=1550 m CANAL TYPE-SSC11 B=2.00 m R=1.03 m V=0.83 m/s | |

| EXISTING CONDITION | CHAINAGE (m) | 9000 | 9050 | 9100 | 9150 | 9200 | 9250 | 9300 | 9350 | 9400 | 9450 | 9500 | 9550 | 9600 | 9650 | 9700 | 9750 | 9850 | 9900 | 9950 | 10000 | 10100 | 10200 | 10300 | 10400 | 10500 | 10600 | 10700 | 10750 | 10800 | 10900 | 11000 | 11100 | 11150 | 11200 | 11300 | 11400 | 11500 | 11600 | 11700 | 11800 | 11900 | 12000 | |
|--------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | LEFT BANK LEVEL (EL. m) | 76.202 | 75.824 | 75.445 | 75.697 | 75.569 | 75.469 | 75.641 | 75.755 | 75.875 | 75.529 | 76.133 | 76.053 | 76.289 | 75.972 | 75.904 | 75.448 | 75.406 | 75.344 | 75.268 | 75.174 | | 74.00 | 74.15 | | 75.00 | | 74.70 | | 74.25 | | 74.30 | | 74.15 | | 74.20 | | 74.15 | | 74.15 | | 74.15 | | 73.80 |
| | BED LEVEL (EL. m) | 74.782 | 74.707 | 74.474 | 74.5 | 74.513 | 74.411 | 74.268 | 74.467 | 74.703 | 74.896 | 74.614 | 74.655 | 74.681 | 74.688 | 74.674 | 73.708 | 73.593 | 73.663 | 73.769 | 73.737 | | 73.43 | 74.18 | 73.53 | 73.33 | 73.31 | 73.34 | 73.37 | 73.60 | 72.71 | 72.90 | 72.78 | 74.40 | 72.75 | 72.77 | 72.79 | 72.67 | 72.54 | 72.34 | | 72.60 | | |
| | RIGHT BANK LEVEL (EL. m) | 76.293 | 76.395 | 76.137 | 76.244 | 76.204 | 76.124 | 76.118 | 76.258 | 76.285 | 76.396 | 76.347 | 76.451 | 76.348 | 76.581 | 76.443 | 76.603 | 75.928 | 75.836 | 75.992 | 75.769 | | 75.60 | 74.31 | 75.67 | 75.59 | 75.51 | 75.44 | 75.38 | 73.94 | 75.00 | 74.02 | 74.54 | 73.02 | 74.82 | 74.69 | 74.56 | 74.55 | 74.54 | 74.49 | | 74.33 | | |

| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION (4/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-7 |

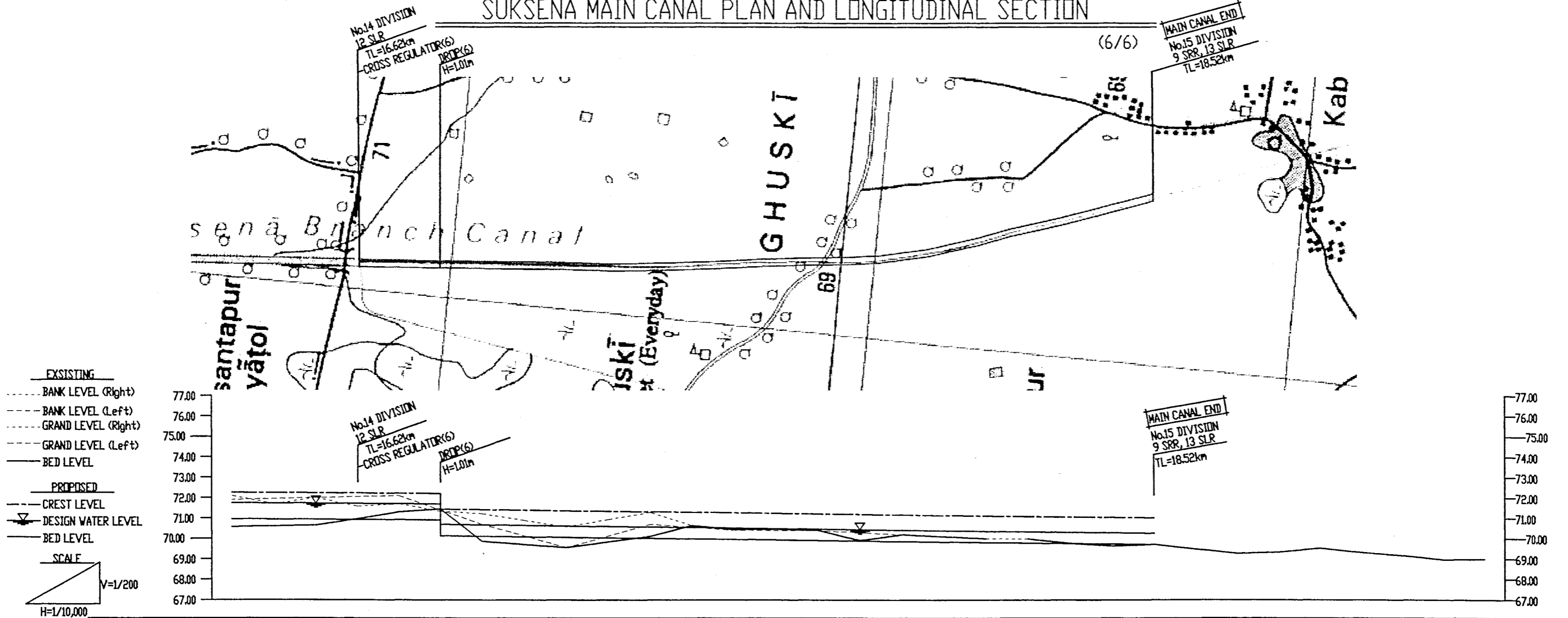
SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION



| PROPOSED | CREST LEVEL (EL. m) | | DESIGN WATER LEVEL (WL. m) | | BED LEVEL (EL. m) | | CANAL DETAIL | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--|-------|--|-------|--|-------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 73.52 | 72.70 | 73.25 | 72.50 | 72.22 | 71.40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CANAL TYPE-SSC11 B=2.00 m d=1.03 m V=0.83 m/s | | Q=2.54 m ³ /s I=1/3500 L=1550 m | | Q=2.31 m ³ /s I=1/4000 L=1550 m | | CANAL TYPE-SSC11 B=2.00 m d=1.02 m V=0.78 m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Q=1.42 m ³ /s I=1/4000 L=1450 m | | CANAL TYPE-SSC12 B=2.00 m d=0.79 m V=0.68 m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXISTING CONDITION | CHAINAGE (m) | 12000 | 12100 | 12200 | 12300 | 12400 | 12500 | 12600 | 12700 | 12750 | 12800 | 12900 | 13000 | 13100 | 13200 | 13300 | 13400 | 13500 | 13600 | 13700 | 13800 | 13850 | 13900 | 14000 | 14100 | 14200 | 14300 | 14400 | 14500 | 14600 | 14700 | 14800 | 14900 | 15000 |
| | LEFT BANK LEVEL (EL. m) | 73.80 | | 74.20 | | 73.35 | | 73.40 | | 72.70 | | 72.55 | | 72.40 | | 72.30 | | 72.70 | | 72.10 | | 71.60 | | 72.30 | | 72.15 | | 72.50 | | 71.70 | | 71.90 | | |
| | BED LEVEL (EL. m) | 72.60 | 73.75 | 72.65 | 73.90 | 71.54 | 72.65 | 72.58 | 72.12 | 71.70 | 72.16 | 71.26 | 72.41 | 71.62 | 71.33 | 71.34 | 71.49 | 71.64 | 71.43 | 71.10 | 71.82 | 71.12 | 71.18 | 71.28 | 71.96 | 71.05 | 71.67 | 71.60 | 71.39 | 70.65 | 70.61 | 70.58 | | |
| | RIGHT BANK LEVEL (EL. m) | 74.33 | 74.27 | 74.37 | 74.14 | 73.69 | 72.97 | 72.74 | 72.25 | 73.20 | 72.61 | 72.25 | 72.54 | 72.66 | 72.67 | 72.66 | 72.59 | 72.51 | 72.16 | 72.10 | 71.75 | 71.51 | 71.88 | 72.24 | 72.00 | 72.06 | 72.11 | 72.45 | 72.10 | 72.05 | 72.08 | 72.10 | | |

| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION (5/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-8 |

SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION



EXISTING
 - - - BANK LEVEL (Right)
 - - - BANK LEVEL (Left)
 - - - GRAND LEVEL (Right)
 - - - GRAND LEVEL (Left)
 ——— BED LEVEL
PROPOSED
 - - - CREST LEVEL
 ▽ DESIGN WATER LEVEL
 ——— BED LEVEL
SCALE
 V=1/200
 H=1/10,000

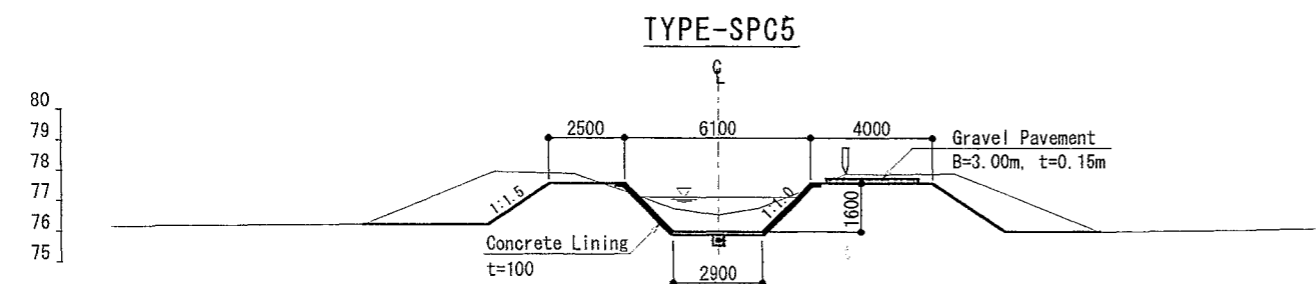
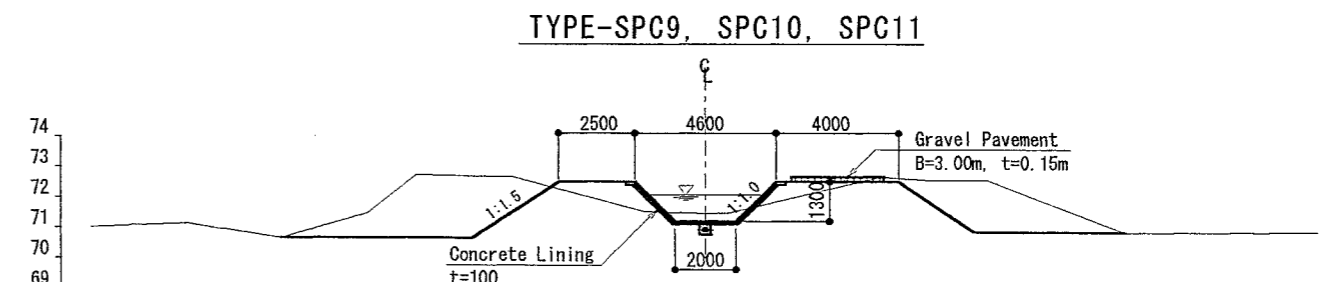
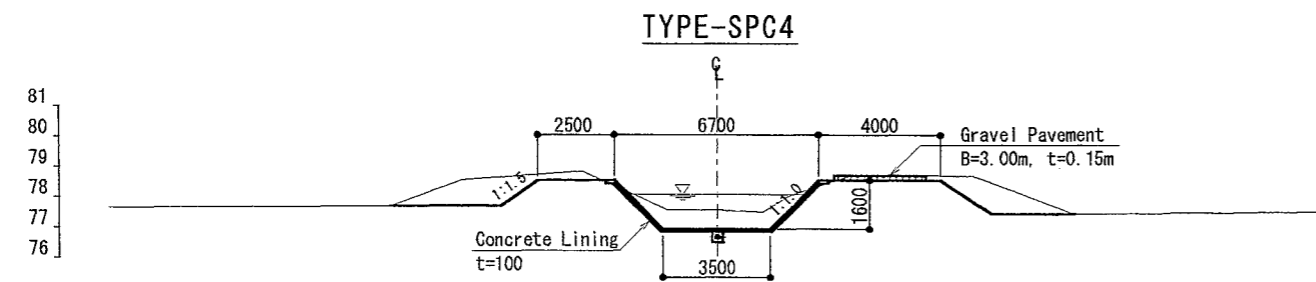
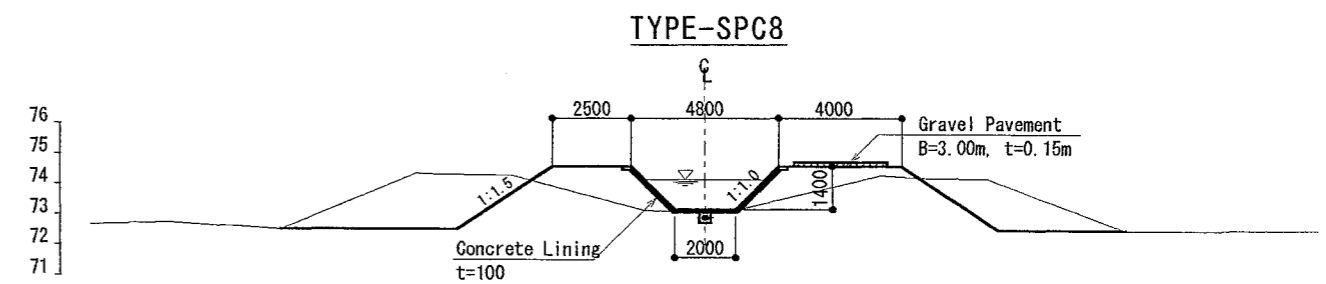
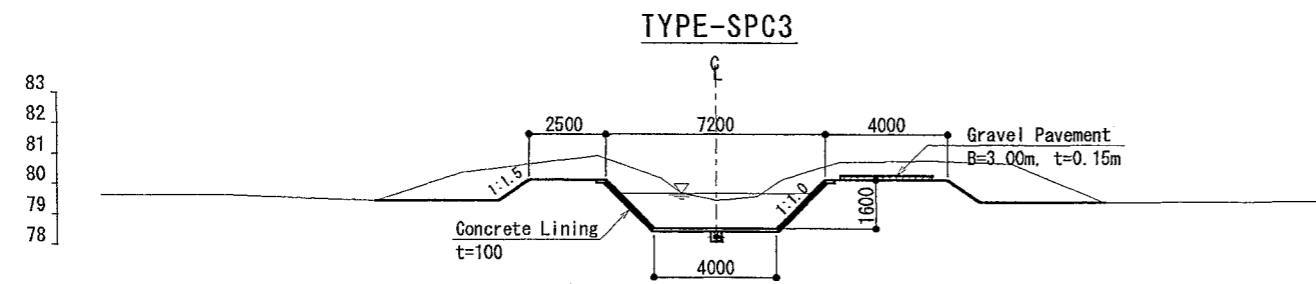
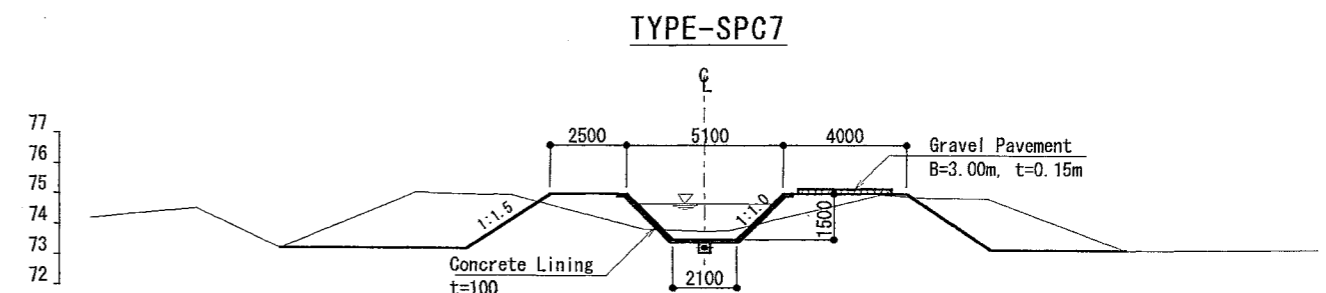
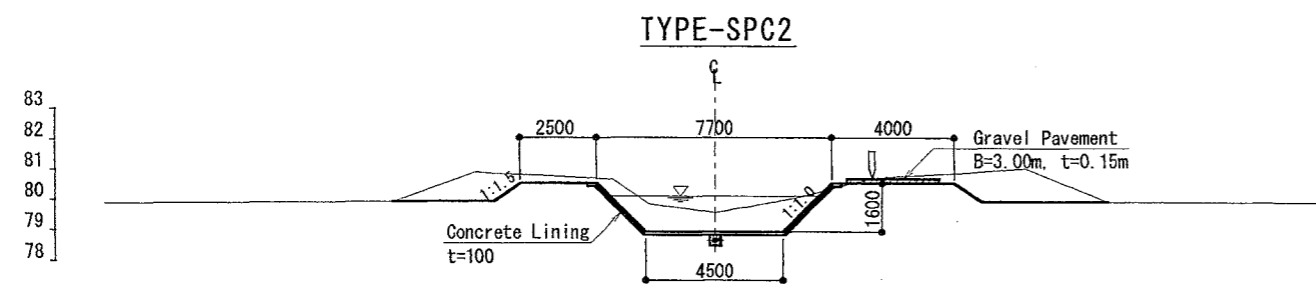
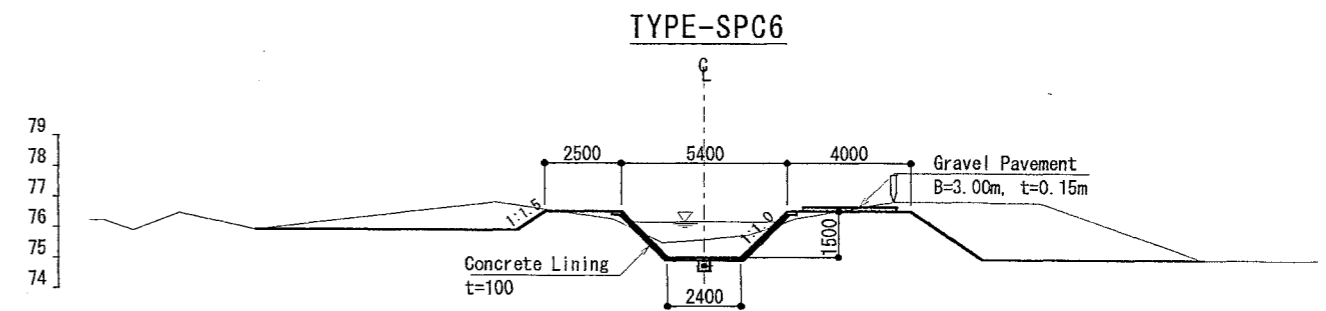
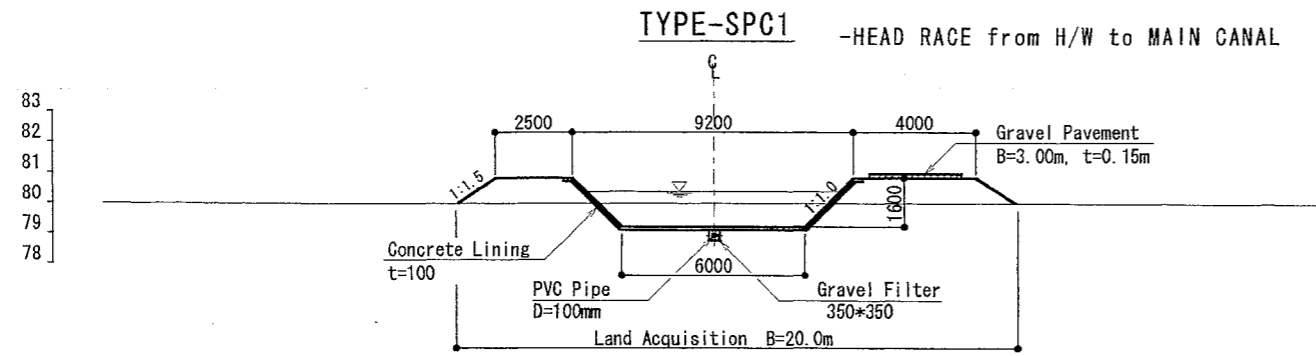
| PROPOSED | CREST LEVEL (EL. m) | 72.26 | 71.93 | 71.44 | 71.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--|-------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | DESIGN WATER LEVEL (VL. m) | 71.75 | 71.70 | 70.69 | 70.26 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BED LEVEL (EL. m) | 70.96 | 70.93 | 70.14 | 69.71 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANAL DETAIL | CANAL TYPE-SSC12 B=2.00 m d=0.79 m V=0.68 m/s Q=1.42 m ³ /s I=1/4000 L=1450 m | | Q=0.73 m ³ /s I=1/4000 L=1900 m | CANAL TYPE-SSC13 B=2.00 m d=0.55 m V=0.57 m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXISTING CONDITION | CHAINAGE (m) | 15000 | 15100 | 15200 | 15300 | 15400 | 15500 | 15600 | 15700 | 15800 | 15900 | 16000 | 16100 | 16200 | 16300 | 16400 | 16500 | 16600 | 16700 | 16800 | 16900 | 17000 | 17100 | 17200 | 17300 | 17400 | 17500 | 17600 | 17700 | 17800 | 17900 | 18000 |
| | LEFT BANK LEVEL (EL. m) | 71.90 | | 72.00 | | 72.10 | | 70.70 | | 69.56 | | 70.70 | | 70.40 | | 70.39 | | 70.20 | | 70.00 | | 69.77 | | 69.71 | | 69.27 | | 69.53 | | 69.17 | | 69.00 |
| | BED LEVEL (EL. m) | 70.58 | 70.61 | 70.65 | 70.96 | 71.30 | 71.45 | 69.87 | 69.71 | 69.56 | 69.84 | 70.11 | 70.64 | 70.40 | 70.46 | 70.40 | 69.90 | 70.20 | 70.10 | 70.00 | 69.99 | 69.77 | 69.64 | 69.71 | 69.48 | 69.27 | 69.39 | 69.53 | 69.32 | 69.17 | 68.98 | 69.00 |
| | RIGHT BANK LEVEL (EL. m) | 72.10 | 71.69 | 72.00 | 71.57 | 71.70 | 71.34 | 71.22 | 70.89 | 70.58 | 70.94 | 71.28 | 70.64 | 70.44 | 70.46 | 70.39 | 69.94 | 70.22 | 70.11 | 70.00 | 69.99 | 69.77 | 69.64 | 69.71 | 69.48 | 69.27 | 69.39 | 69.53 | 69.32 | 69.17 | 68.98 | 69.00 |

| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION (6/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-9 |

TYPICAL SECTION OF SHANKARPUR MAIN CANAL

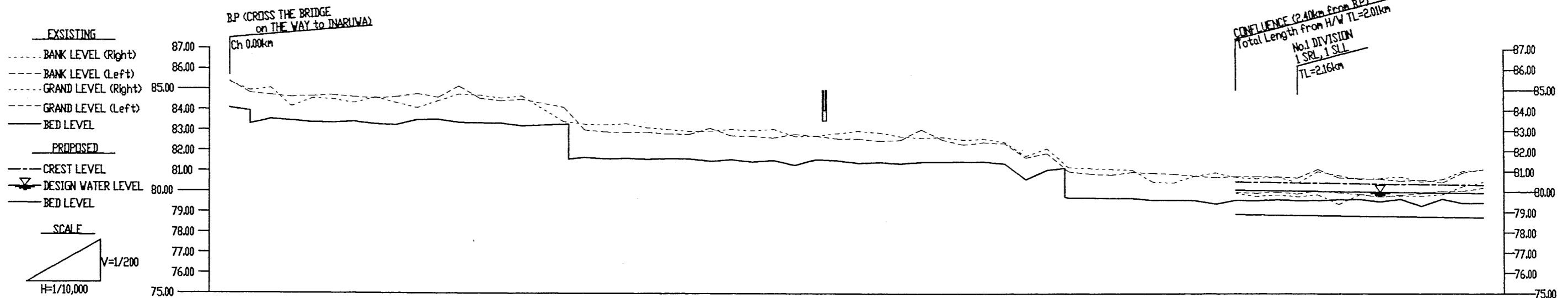
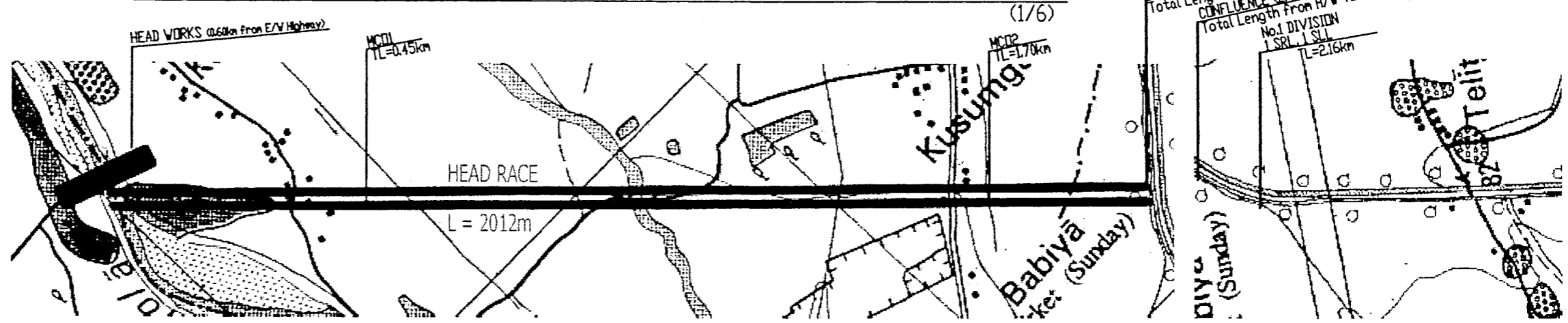
S=1:250

CONCRETE LINING CANAL



| | | |
|---|------------------------|--|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | TYPICAL SECTION OF SHANKARPUR MAIN CANAL |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-10 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION



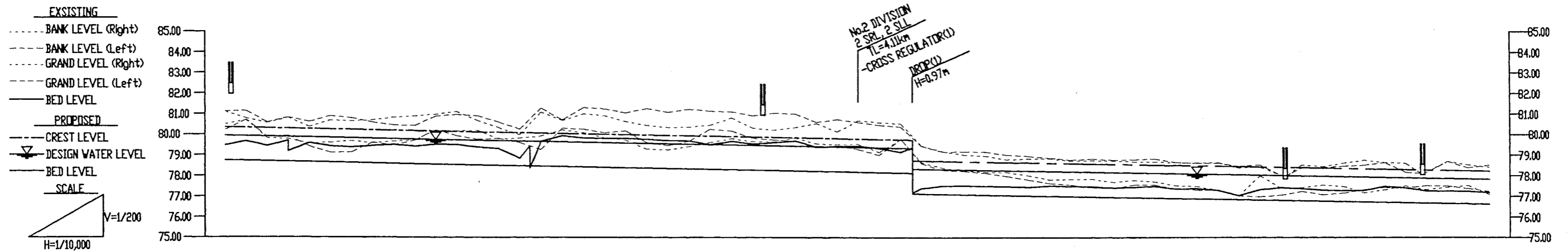
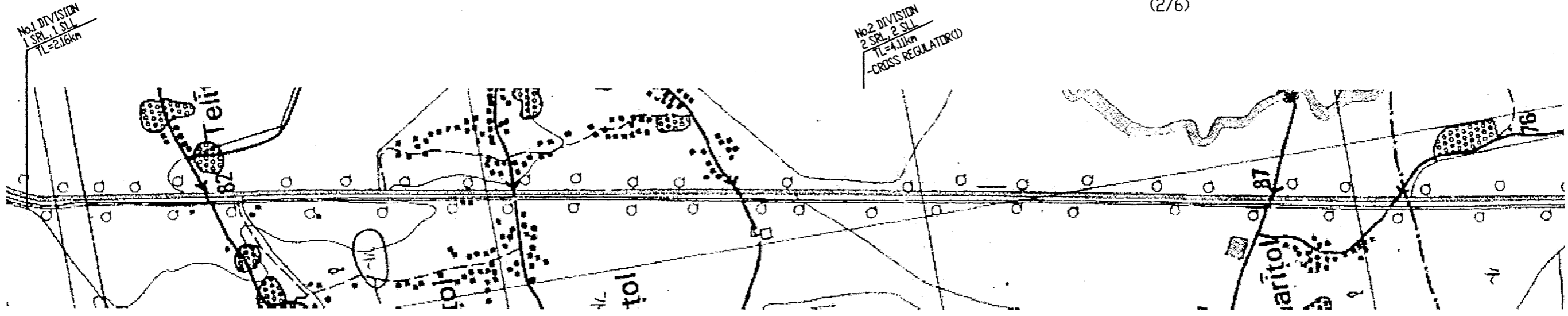
| PROPOSED | CREST LEVEL (EL. m) | 80.50 | 80.46 |
|-------------------|--|-------|-------|
| | DESIGN WATER LEVEL (WL. m) | 80.10 | 80.05 |
| BED LEVEL (EL. m) | 78.90 | 78.86 | |
| CANAL DETAIL | HEADWORKS HEAD RACE TO SHANKARPUR MAIN CANAL $Q=7.71 - 7.64 \text{ m}^3/\text{s}$ $B=6.00 \text{ m}$ $I=1/5000$ $L=2012 \text{ m}$ $V=0.89 \text{ m/s}$ | | |
| | CANAL TYPE-SPC2 $B=4.50 \text{ m}$ $q=1.19 \text{ m}$ $V=1.14 \text{ m/s}$ | | |
| | HEAD RACE FROM HEADWORKS $Q=7.64 \text{ m}^3/\text{s}$ $I=1/2800$ $L=150 \text{ m}$ | | |
| | CANAL TYPE-SPC3 $Q=6.89 \text{ m}^3/\text{s}$ $I=1/2800$ $L=1950 \text{ m}$ $B=4.00 \text{ m}$ $q=1.19 \text{ m}$ $V=1.12 \text{ m/s}$ | | |

| EXISTING CONDITION | CHAINAGE (m) | 0 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 800.82 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 1990.78 | 2000 | 2050 | 2100 | 2150 | 2200 | 2250 | 2300 | 2350 | 2400 | 2450 | 2500 | 2550 | 2600 | 2650 | 2700 | 2750 | 2800 | 2850 | 2900 | 2950 | 3000 | |
|--------------------|--------------------------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | LEFT BANK LEVEL (EL. m) | 85.393 | 84.806 | 84.71 | 84.62 | 84.656 | 84.706 | 84.61 | 84.558 | 84.621 | 84.778 | 84.598 | 85.155 | 84.557 | 84.437 | 84.508 | 84.123 | 83.02 | 82.913 | 82.897 | 82.902 | 82.818 | 82.889 | 83.104 | 82.737 | 82.711 | 82.632 | 82.814 | 82.729 | 82.598 | 82.591 | 82.497 | 82.537 | 83.069 | 82.567 | 82.316 | 82.423 | 82.374 | 81.67 | 81.889 | 81.37 | 80.994 | 80.873 | 80.828 | 80.959 | 80.911 | 80.867 | 80.78 | 80.709 | 80.762 | 80.755 | 80.754 | 80.708 | 81.116 | 80.707 | 80.671 | 80.647 | 80.547 | 80.611 | 80.461 | 80.954 | 81.11 | |
| | BED LEVEL (EL. m) | 84.083 | 83.830 | 83.290 | 83.53 | 83.45 | 83.366 | 83.356 | 83.4 | 83.288 | 83.241 | 83.498 | 83.518 | 83.375 | 83.347 | 83.337 | 83.208 | 83.29 | 81.66 | 81.603 | 81.627 | 81.572 | 81.608 | 81.594 | 81.494 | 81.557 | 81.451 | 81.528 | 81.572 | 81.55 | 81.521 | 81.407 | 81.439 | 81.378 | 81.46 | 81.468 | 81.471 | 81.478 | 81.381 | 80.615 | 81.069 | 81.37 | 79.701 | 79.704 | 79.676 | 79.68 | 79.595 | 79.597 | 79.589 | 79.415 | 79.597 | 79.579 | 79.628 | 79.585 | 79.597 | 79.63 | 79.638 | 79.54 | 79.653 | 79.316 | 79.653 | 79.443 | 79.464 |
| | RIGHT BANK LEVEL (EL. m) | 85.353 | 84.932 | 85.056 | 84.15 | 84.546 | 84.496 | 84.32 | 84.598 | 84.331 | 84.088 | 84.428 | 84.761 | 84.708 | 84.573 | 84.67 | 83.421 | 83.292 | 83.265 | 83.321 | 83.118 | 83.044 | 82.955 | 82.963 | 83.054 | 82.985 | 83.065 | 82.706 | 82.738 | 82.86 | 82.977 | 82.893 | 82.715 | 82.65 | 82.685 | 82.555 | 82.599 | 82.439 | 81.755 | 82.124 | 81.2 | 81.153 | 81.105 | 81.075 | 80.485 | 80.444 | 80.771 | 80.935 | 80.719 | 80.659 | 80.767 | 80.45 | 81.015 | 80.818 | 80.631 | 80.682 | 80.757 | 80.511 | 80.617 | 81.023 | 81.093 | | |

| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (1/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-11 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION

(2/6)



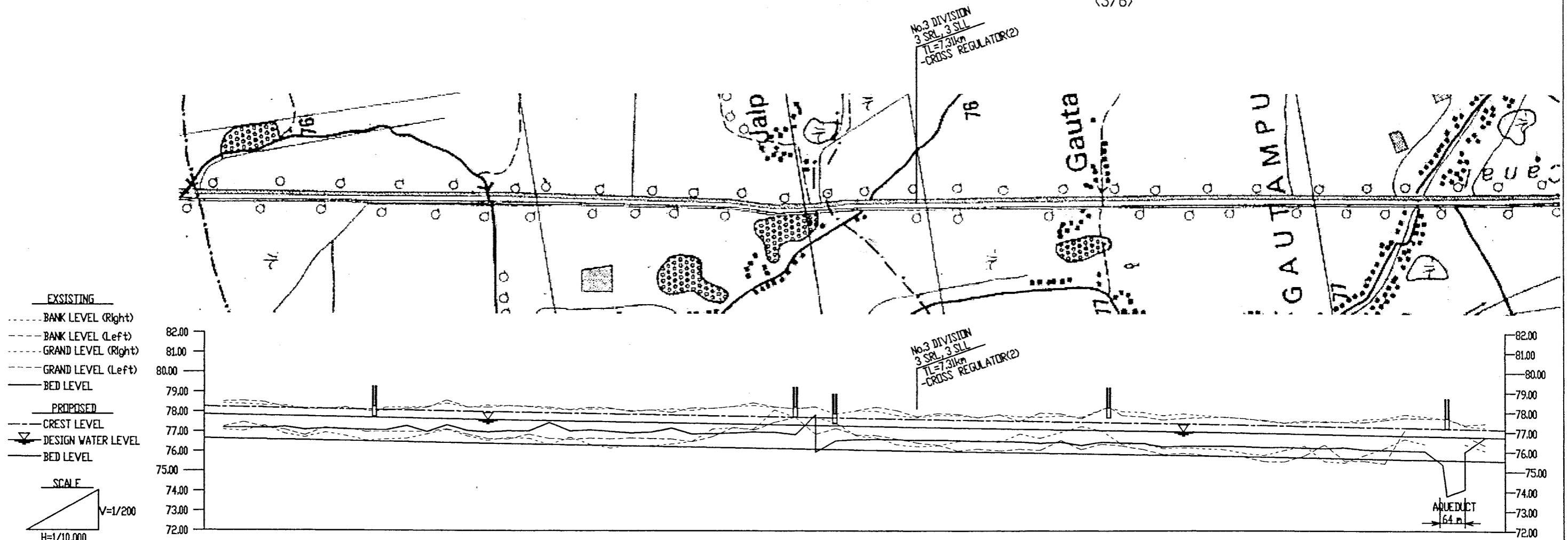
| PROPOSED | CREST LEVEL (EL. m) | | DESIGN WATER LEVEL (WL. m) | | BED LEVEL (EL. m) | |
|--------------|---|-------|----------------------------|---|-------------------|-------|
| | Left | Right | Left | Right | Left | Right |
| | | | | | | |
| CANAL DETAIL | Q=6.89 m ³ /s I=1/2800 L=1950 m CANAL TYPE-SPC3 B=4.00 m Q=1.19 m V=1.12 m/s | | | Q=6.14 m ³ /s I=1/2800 L=3200 m CANAL TYPE-SPC4 B=3.50 m Q=1.20 m V=1.10 m/s | | |

| EXISTING CONDITION | CHAINAGE (m) | LEFT BANK LEVEL (EL. m) | | BED LEVEL (EL. m) | RIGHT BANK LEVEL (EL. m) | |
|--------------------|--------------|-------------------------|--------|-------------------|--------------------------|--------|
| | | Left | Right | | Left | Right |
| | 3000 | 81.11 | 81.37 | 79.464 | 81.093 | 81.774 |
| | 3050 | 80.577 | 80.821 | 79.564 | 80.542 | 80.809 |
| 3100 | 80.61 | 80.889 | 79.427 | 80.36 | 80.675 | |
| 3150 | 80.787 | 80.964 | 79.69 | 80.639 | 80.688 | |
| 3200 | 80.45 | 80.906 | 79.17 | 80.822 | 80.699 | |
| 3250 | 80.426 | 80.7 | 79.58 | 80.885 | 80.688 | |
| 3300 | 80.883 | 80.59 | 79.419 | 80.971 | 80.688 | |
| 3350 | 80.964 | 80.254 | 79.377 | 81.13 | 80.688 | |
| 3400 | 80.906 | 81.275 | 79.44 | 80.822 | 80.688 | |
| 3450 | 80.7 | 81.299 | 79.5 | 80.885 | 80.688 | |
| 3500 | 80.883 | 81.243 | 79.426 | 80.885 | 80.688 | |
| 3550 | 80.964 | 81.077 | 79.523 | 80.971 | 80.688 | |
| 3600 | 80.906 | 81.047 | 79.504 | 81.13 | 80.688 | |
| 3650 | 80.7 | 81.257 | 79.386 | 80.862 | 80.688 | |
| 3700 | 80.59 | 81.077 | 79.31 | 80.67 | 80.688 | |
| 3750 | 80.254 | 81.223 | 78.84 | 80.324 | 80.688 | |
| 3800 | 81.275 | 81.132 | 79.43 | 80.987 | 80.688 | |
| 3850 | 81.299 | 81.102 | 78.37 | 80.998 | 80.688 | |
| 3900 | 81.243 | 81.006 | 78.664 | 80.908 | 80.688 | |
| 3950 | 81.047 | 81.004 | 79.935 | 80.627 | 80.688 | |
| 4000 | 81.257 | 81.077 | 79.829 | 80.437 | 80.688 | |
| 4050 | 81.077 | 81.132 | 79.813 | 80.337 | 80.688 | |
| 4100 | 81.223 | 81.102 | 79.697 | 80.353 | 80.688 | |
| 4150 | 81.132 | 81.006 | 79.693 | 80.452 | 80.688 | |
| 4200 | 81.102 | 81.006 | 79.512 | 80.802 | 80.688 | |
| 4250 | 80.906 | 81.04 | 79.662 | 80.306 | 80.688 | |
| 4300 | 81.04 | 80.996 | 79.546 | 80.21 | 80.688 | |
| 4350 | 80.996 | 80.996 | 79.93 | 80.336 | 80.688 | |
| 4400 | 80.598 | 80.996 | 79.6 | 80.538 | 80.688 | |
| 4450 | 80.732 | 80.596 | 79.338 | 80.132 | 80.688 | |
| 4500 | 80.596 | 80.458 | 79.446 | 80.684 | 80.688 | |
| 4550 | 80.458 | 80.376 | 79.338 | 80.586 | 80.688 | |
| 4600 | 80.376 | 79.443 | 78.756 | 80.534 | 80.688 | |
| 4650 | 79.443 | 79.164 | 77.37 | 79.462 | 80.688 | |
| 4700 | 79.164 | 79.178 | 77.773 | 79.178 | 80.688 | |
| 4750 | 79.178 | 79.163 | 77.514 | 79.019 | 80.688 | |
| 4800 | 79.163 | 79.013 | 77.528 | 78.961 | 80.688 | |
| 4850 | 79.013 | 78.952 | 77.503 | 78.786 | 80.688 | |
| 4900 | 78.952 | 78.868 | 77.493 | 78.83 | 80.688 | |
| 4950 | 78.868 | 78.766 | 77.452 | 78.835 | 80.688 | |
| 5000 | 78.766 | 78.823 | 77.508 | 78.721 | 80.688 | |
| 5050 | 78.823 | 78.766 | 77.486 | 78.742 | 80.688 | |
| 5100 | 78.766 | 78.783 | 77.473 | 78.728 | 80.688 | |
| 5150 | 78.783 | 78.824 | 77.416 | 78.68 | 80.688 | |
| 5200 | 78.824 | 78.647 | 77.453 | 78.678 | 80.688 | |
| 5250 | 78.647 | 78.607 | 77.484 | 78.635 | 80.688 | |
| 5300 | 78.607 | 78.461 | 77.367 | 78.624 | 80.688 | |
| 5350 | 78.461 | 78.532 | 77.377 | 78.641 | 80.688 | |
| 5400 | 78.532 | 78.407 | 77.288 | 78.37 | 80.688 | |
| 5450 | 78.407 | 78.396 | 77.031 | 78.422 | 80.688 | |
| 5500 | 78.396 | 78.46 | 77.332 | 78.628 | 80.688 | |
| 5550 | 78.46 | 78.407 | 77.43 | 78.523 | 80.688 | |
| 5600 | 78.407 | 78.52 | 77.376 | 78.441 | 80.688 | |
| 5650 | 78.52 | 78.46 | 77.307 | 78.616 | 80.688 | |
| 5700 | 78.46 | 78.643 | 77.28 | 78.643 | 80.688 | |
| 5750 | 78.643 | 78.176 | 77.29 | 78.703 | 80.688 | |
| 5800 | 78.176 | 78.696 | 77.483 | 78.525 | 80.688 | |
| 5850 | 78.696 | 78.511 | 77.415 | 78.414 | | |
| 5900 | 78.511 | | 77.45 | | | |
| 5950 | 78.696 | | 77.262 | | | |
| 6000 | 78.511 | | 77.256 | | | |
| | | | 77.246 | | | |
| | | | 77.181 | | | |

| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (2/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-12 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION

(3/6)

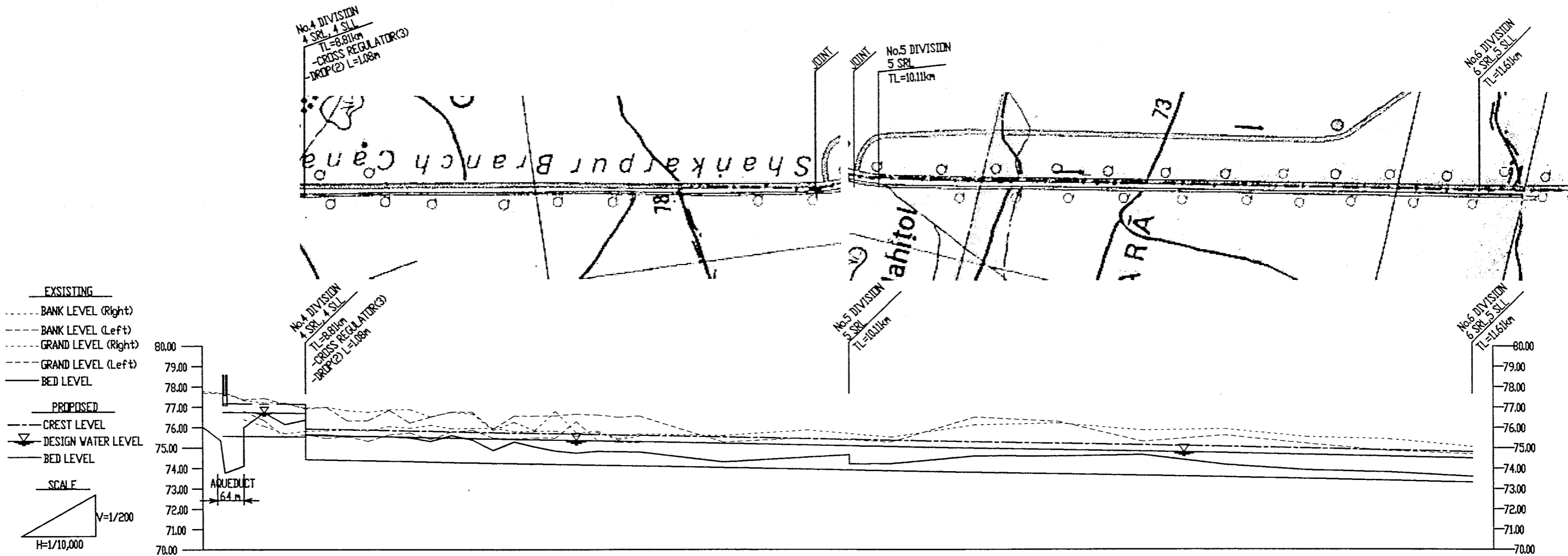


| | PROPOSED | | | CANAL DETAIL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--------------------------|----------------------------|-------------------|---|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|------|------|
| | CREST LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) | BED LEVEL (EL. m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 77.64 | 77.21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 77.24 | 76.81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 76.04 | 75.61 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Q=6.14 m ³ /s I=1/2800 L=3200 m CANAL TYPE-SPC4 B=3.50 m D=1.20 m V=1.10 m/s | Q=5.20 m ³ /s I=1/2800 L=1436 m CANAL TYPE-SPC5 B=2.90 m D=1.20 m V=1.07 m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXISTING CONDITION | CHAINAGE (m) | 6000 | 6050 | 6100 | 6150 | 6200 | 6250 | 6300 | 6350 | 6400 | 6450 | 6500 | 6550 | 6600 | 6650 | 6700 | 6750 | 6800 | 6850 | 6900 | 6950 | 7000 | 7050 | 7100 | 7150 | 7200 | 7250 | 7300 | 7350 | 7400 | 7450 | 7500 | 7550 | 7600 | 7650 | 7700 | 7750 | 7800 | 7850 | 7900 | 7950 | 8000 | 8050 | 8100 | 8150 | 8200 | 8250 | 8300 | 8350 | 8450 | 8500 | 8550 | 8600 | 8650 | 8700 | 8750 | 8800 | 8850 | 8900 | 9004.37 | 9050 | 9100 |
| | LEFT BANK LEVEL (EL. m) | 78.511 | 78.532 | 78.467 | 78.233 | 78.111 | 78.132 | 78.211 | 78.12 | 78.046 | 78.154 | 78.201 | 78.582 | 78.239 | 78.228 | 78.308 | 78.278 | 78.23 | 78.118 | 78.221 | 78.202 | 78.015 | 78.093 | 77.972 | 78.208 | 78.177 | 78.274 | 78.066 | 78.085 | 78.252 | 78.08 | 77.781 | 77.93 | 77.899 | 77.727 | 77.877 | 77.545 | 77.954 | 77.924 | 77.673 | 78.12 | 76.43 | 76.435 | 77.825 | 77.767 | 77.611 | 77.685 | 77.757 | 77.669 | 77.602 | 77.463 | 77.574 | 77.502 | 77.516 | 77.496 | 77.611 | 77.715 | 77.362 | 77.432 | | | |
| | BED LEVEL (EL. m) | 77.181 | 77.182 | 77.167 | 77.233 | 77.08 | 77.152 | 77.11 | 77.08 | 77.076 | 77.284 | 76.991 | 77.322 | 77.049 | 76.978 | 77.038 | 77.038 | 77.145 | 77.038 | 77.081 | 77.012 | 76.935 | 76.973 | 77.182 | 76.878 | 76.897 | 77.388 | 76.546 | 76.615 | 76.622 | 76.61 | 76.581 | 76.58 | 76.569 | 76.527 | 76.527 | 76.495 | 76.424 | 76.484 | 76.323 | 76.43 | 76.435 | 76.435 | 76.427 | 76.241 | 76.285 | 76.287 | 76.269 | 76.222 | 76.233 | 76.194 | 76.172 | 76.226 | 76.116 | 76.081 | 76.065 | 77.376 | 74.11 | 76.002 | 76.072 | | |
| | RIGHT BANK LEVEL (EL. m) | 78.414 | 78.373 | 78.318 | 78.312 | 78.133 | 78.157 | 78.222 | 78.225 | 78.212 | 78.216 | 78.258 | 78.426 | 78.225 | 78.332 | 78.311 | 78.252 | 78.152 | 78.097 | 78.131 | 78.157 | 78.066 | 78.082 | 78.149 | 78.069 | 78.194 | 78.268 | 78.319 | 78.245 | 78.167 | 78.248 | 78.056 | 78.045 | 77.839 | 77.727 | 77.843 | 77.841 | 77.713 | 77.869 | 77.781 | 77.747 | 77.816 | 77.741 | 78.116 | 78.03 | 77.985 | 77.827 | 77.908 | 77.737 | 77.69 | 77.556 | 77.454 | 77.498 | 77.551 | 77.512 | 77.649 | 77.683 | 77.892 | 77.316 | 77.223 | | |

| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (3/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-13 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION

(4/6)



EXISTING
 - - - - - BANK LEVEL (Right)
 - - - - - BANK LEVEL (Left)
 - - - - - GRAND LEVEL (Right)
 - - - - - GRAND LEVEL (Left)
 - - - - - BED LEVEL

PROPOSED
 - - - - - CREST LEVEL
 - - - - - DESIGN WATER LEVEL
 - - - - - BED LEVEL

SCALE
 H=1/10,000
 V=1/200

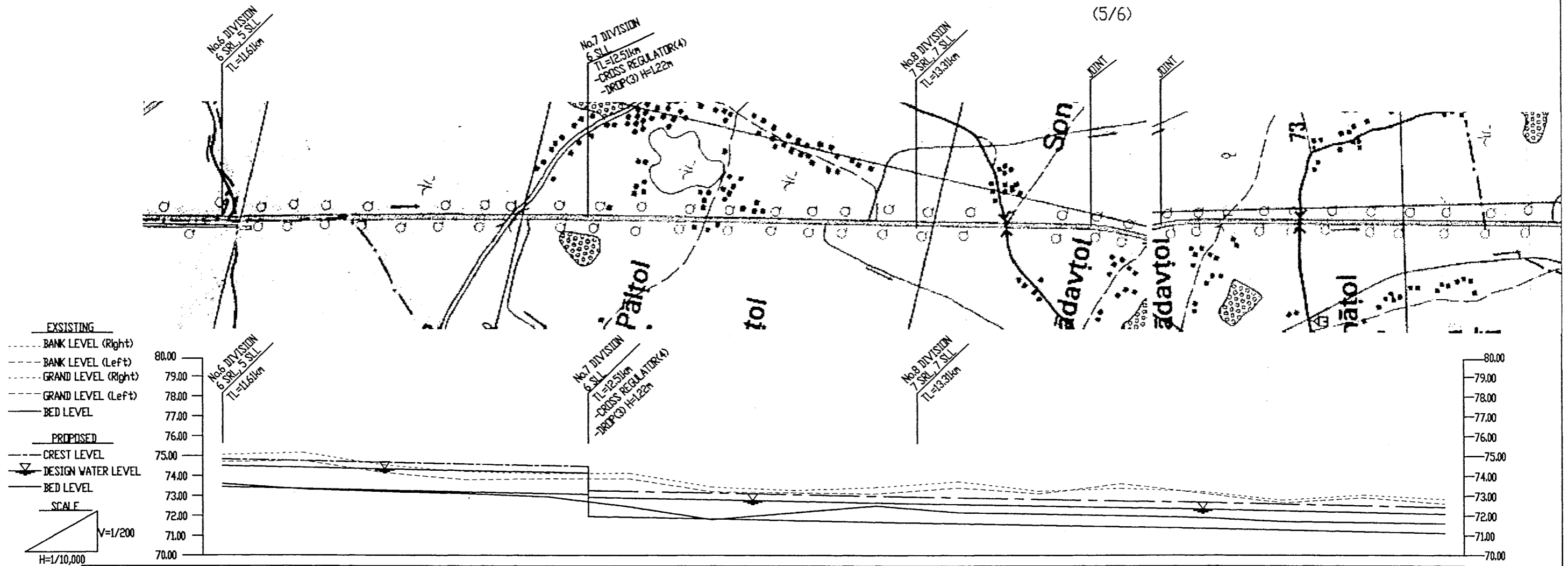
| | PROPOSED | | EXISTING CONDITION | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------|----------------------------|--------------------|-------------------------|-------------------|--------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | CREST LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) | CHAINAGE (m) | LEFT BANK LEVEL (EL. m) | BED LEVEL (EL. m) | RIGHT BANK LEVEL (EL. m) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 77.10 | 76.70 | 9004.37 | 77.362 | 74.80 | 77.316 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 75.93 | 75.62 | 9050 | 77.432 | 76.002 | 77.223 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9100 | 77.451 | 76.072 | 77.211 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9150 | 76.955 | 76.151 | 76.906 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9200 | 76.993 | 76.26 | 76.995 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9250 | 76.331 | 75.633 | 76.887 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9300 | 76.329 | 75.531 | 76.742 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9350 | 76.845 | 75.545 | 76.872 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9400 | 76.222 | 75.492 | 76.878 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9450 | 76.51 | 75.31 | 76.53 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9500 | 76.774 | 75.604 | 76.74 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9550 | 76.754 | 75.394 | 76.674 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9600 | 75.921 | 74.881 | 75.861 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9650 | 76.536 | 75.286 | 76.256 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9700 | 76.562 | 75.042 | 75.842 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9750 | 76.574 | 74.844 | 76.794 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9800 | 76.653 | 74.743 | 75.733 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9850 | 76.613 | 74.833 | 75.813 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9900 | 76.5 | 74.8 | 75.44 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 9950 | 76.556 | 74.786 | 75.686 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10100 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10200 | 75.28 | 74.30 | 75.60 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10300 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10400 | 75.48 | 74.20 | 75.87 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10500 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 75.41 | 75.10 | 10600 | 75.28 | 74.22 | 75.52 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10700 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10800 | 76.50 | 74.60 | 76.12 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 10900 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11000 | 76.28 | 74.58 | 76.20 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11100 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11200 | 75.30 | 74.65 | 75.85 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11300 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11400 | 75.60 | 74.15 | 75.91 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11500 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11600 | 75.20 | 73.90 | 75.53 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11700 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11800 | 74.85 | 73.80 | 75.43 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 11900 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 12000 | 74.70 | 73.59 | 75.06 | | | | | | | | | | | | | | | | | | | | | | | | |

| CANAL DETAIL | PROPOSED | |
|---|---------------------|----------------------------|
| | CREST LEVEL (EL. m) | DESIGN WATER LEVEL (WL. m) |
| CANAL TYPE-SPC5 B=2.90 m q=1.20 m V=1.07 m/s | 77.10 | 76.70 |
| | 75.93 | 75.62 |
| CANAL TYPE-SPC6 B=2.40 m q=1.19 m V=1.09 m/s | 75.41 | 75.10 |
| | 73.91 | 73.31 |
| CANAL TYPE-SPC7 B=2.10 m q=1.19 m V=1.07 m/s | 74.81 | 74.50 |
| | 73.31 | 73.31 |

| | | |
|---|------------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (4/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-14 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION

(5/6)

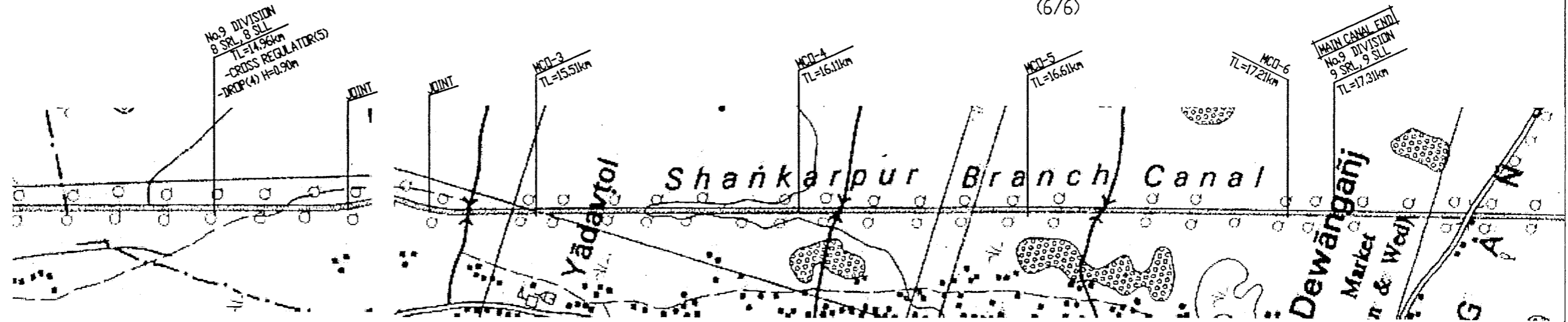


| PROPOSED | CREST LEVEL (EL. m) | 74.81 | | | | | | | | | | | 74.47 | | 73.26 | | 72.94 | | | | | | | | | | | | | | | | | |
|--------------------|----------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|-------|---|-------|---|-------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|-------|-------|-------|-------|
| | DESIGN WATER LEVEL (VL. m) | 74.50 | | | | | | | | | | | 74.14 | | 72.92 | | 72.60 | | | | | | | | | | | | | | | | | |
| BED LEVEL (EL. m) | BED LEVEL (EL. m) | 73.31 | | | | | | | | | | | 73.07 | | 71.96 | | 71.64 | | | | | | | | | | | | | | | | | |
| | CANAL DETAIL | Q=3.26 m ³ /s I=1/2500 L=900 m | | | | | | | | | | | CANAL TYPE-SPC8 B=2.00 m q=1.07 m V=1.00 m/s | | Q=2.66 m ³ /s I=1/2500 L=800 m | | CANAL TYPE-SPC9 B=2.00 m q=0.96 m V=0.95 m/s | | Q=1.75 m ³ /s I=1/2500 L=1650 m | | | | | | | | | | | CANAL TYPE-SPC10 B=2.00 m q=0.77 m V=0.85 m/s | | | | |
| EXISTING CONDITION | CHAINAGE (m) | 12000 | 12100 | 12200 | 12300 | 12400 | 12500 | 12600 | 12700 | 12800 | 12900 | 12950 | 13000 | 13100 | 13200 | 13300 | 13400 | 13500 | 13600 | 13700 | 13800 | 13900 | 14000 | 14100 | 14200 | 14300 | 14400 | 14500 | 14600 | 14700 | 14750 | 14800 | 14900 | 15000 |
| | LEFT BANK LEVEL (EL. m) | 74.70 | | 74.75 | | 74.15 | | 73.80 | | 73.85 | | 73.85 | | 73.20 | | 73.10 | | 73.40 | | 73.10 | | 73.60 | | 73.12 | | 72.65 | | 72.90 | | 72.60 | | | | |
| | BED LEVEL (EL. m) | 73.59 | | 73.33 | | 73.20 | | 73.10 | | 72.95 | | 72.45 | | 71.80 | | 72.50 | | 72.15 | | 72.08 | | 72.00 | | 71.90 | | 71.70 | | 71.65 | | 71.60 | | | | |
| | RIGHT BANK LEVEL (EL. m) | 75.06 | | 75.16 | | 74.53 | | 74.20 | | 74.11 | | 74.13 | | 73.44 | | 73.27 | | 73.42 | | 73.71 | | 73.23 | | 73.37 | | 73.20 | | 72.78 | | 73.04 | | 72.83 | | |

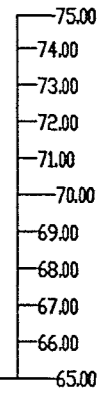
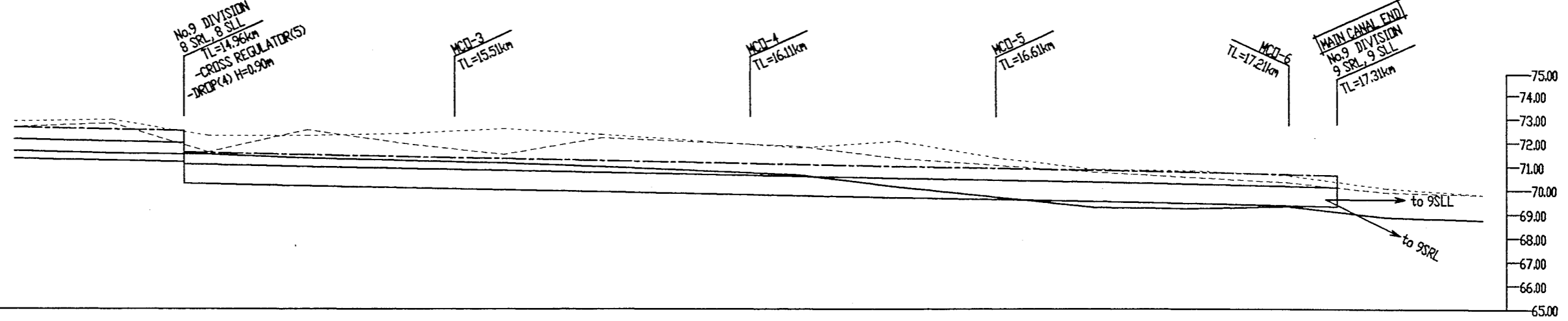
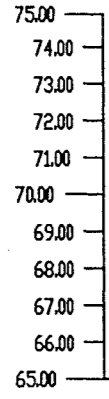
| | | |
|---|------------------|---|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (5/6) |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-15 |

SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION

(6/6)

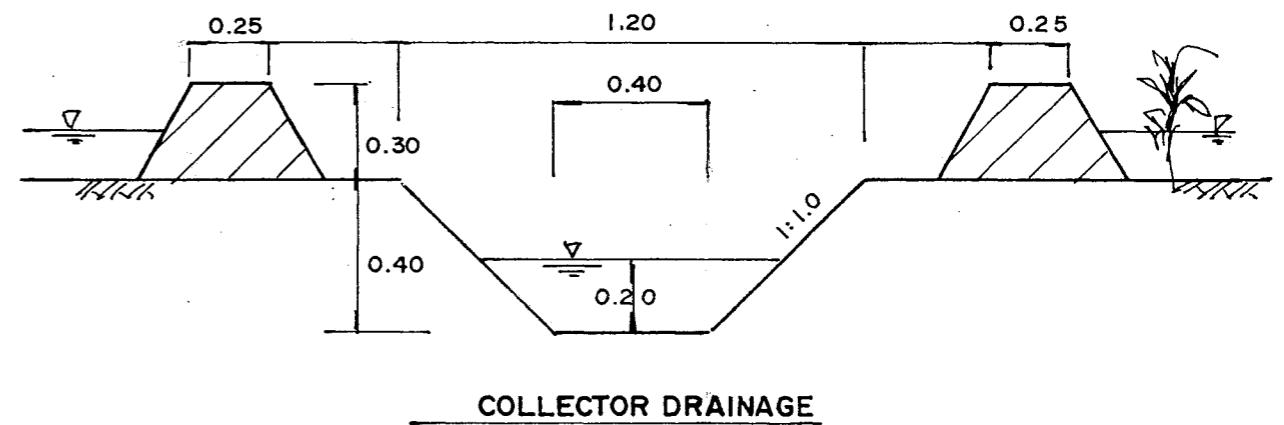
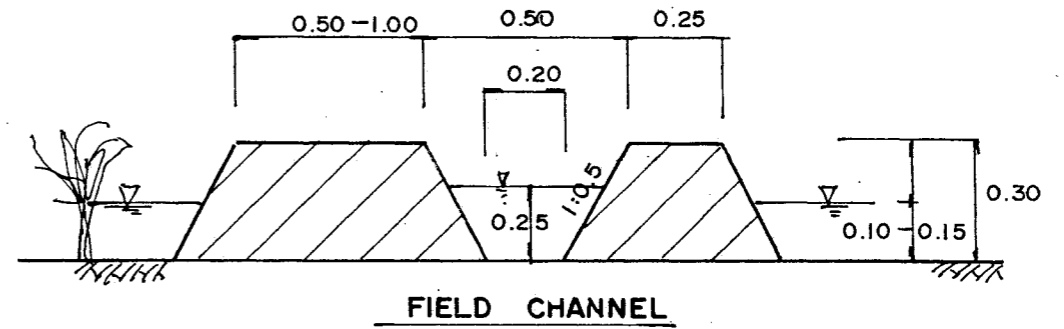
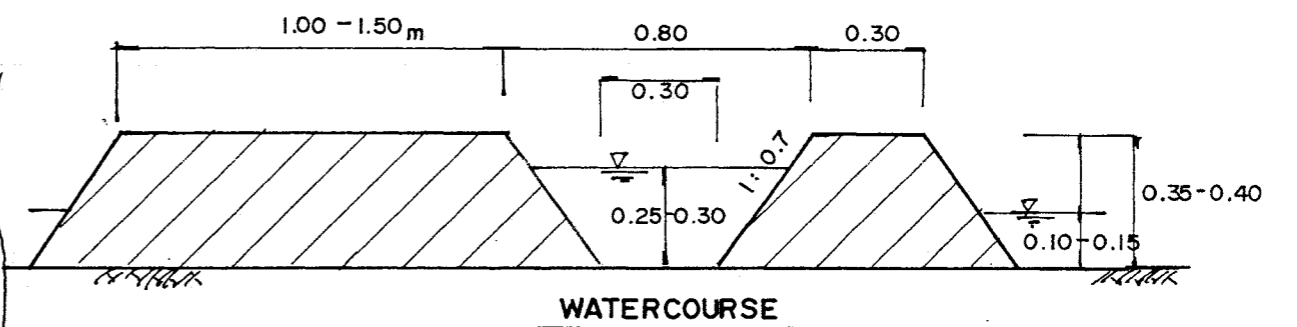
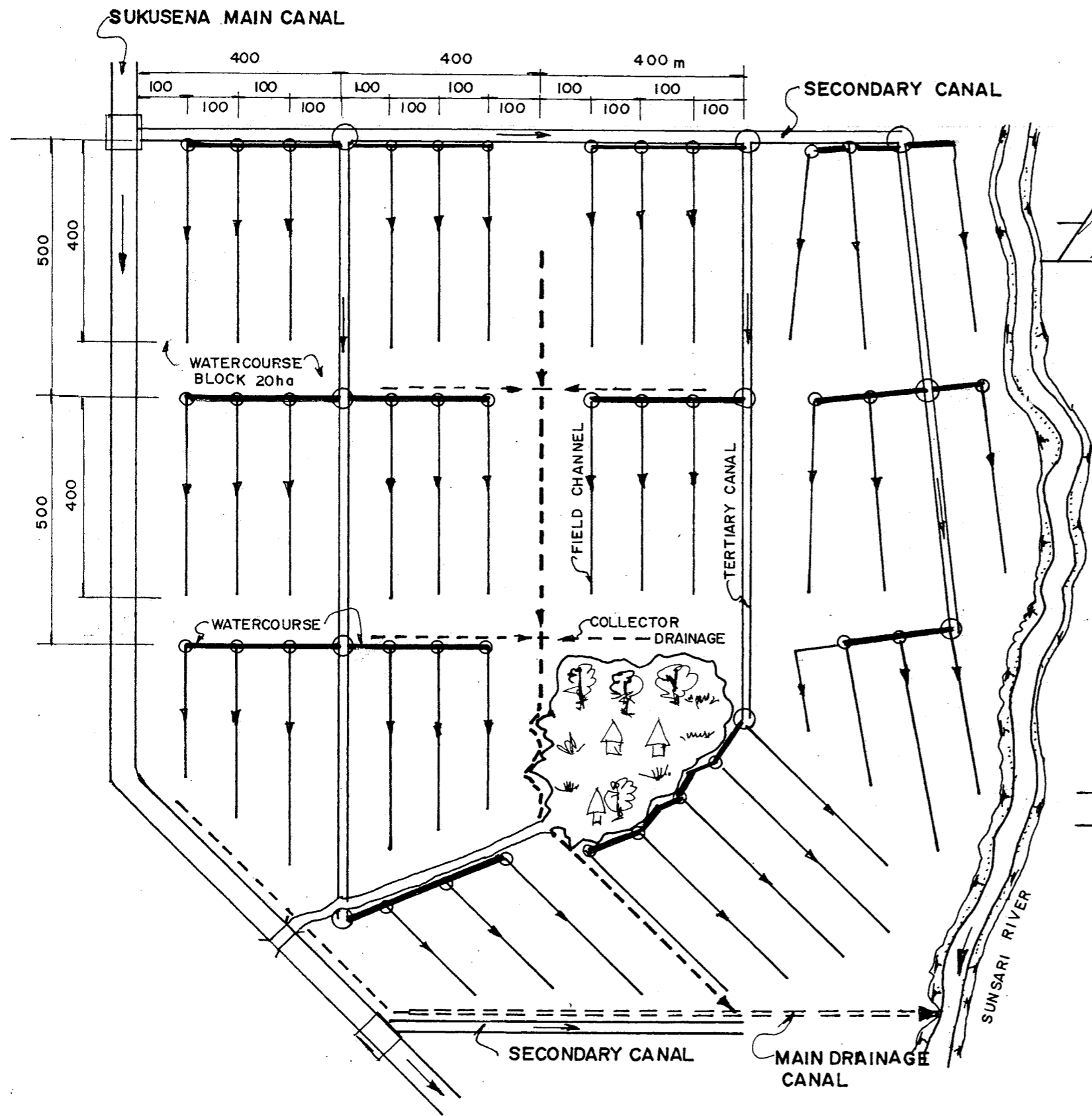


- EXISTING**
- BANK LEVEL (Right)
 - BANK LEVEL (Left)
 - GRAND LEVEL (Right)
 - GRAND LEVEL (Left)
 - BED LEVEL
- PROPOSED**
- CREST LEVEL
 - ▽ DESIGN WATER LEVEL
 - BED LEVEL
- SCALE**
- V=1/200
H=1/10,000



| | | | | |
|-----------------|-------------------------------|---|---|-------|
| PROPOSED | CREST LEVEL (EL. m) | 72.44 | 71.54 | 70.50 |
| | DESIGN WATER LEVEL (VL. m) | 71.94 | 71.04 | 70.10 |
| | BED LEVEL (EL. m) | 71.14 | 70.24 | 69.30 |
| | CANAL DETAIL | Q=1.75 m ³ /s I=1/2500 L=1650 m CANAL TYPE-SPC10 B=2.00 m q=0.77 m(0.80m) V=0.85 m/s | Q=0.91 m ³ /s I=1/2500 L=2350 m CANAL TYPE-SPC11 B=2.00 m q=0.55 m(0.80m) V=0.72 m/s | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| EXISTING CONDITION | CHAINAGE (m) | 15000 | 15100 | 15200 | 15300 | 15350 | 15400 | 15500 | 15600 | 15700 | 15800 | 15900 | 16000 | 16100 | 16200 | 16300 | 16400 | 16500 | 16600 | 16700 | 16800 | 16900 | 17000 | 17100 | 17200 | 17300 | 17400 | 17500 | 17600 | 17700 | 17800 | 17900 | 18000 |
| | LEFT BANK LEVEL (EL. m) | 72.60 | | 72.75 | | 71.55 | | 72.48 | | 71.90 | | 71.45 | | 72.15 | | 71.80 | | 71.30 | | 70.72 | | 70.50 | | 70.30 | | 69.90 | | 69.80 | | | | | |
| | BED LEVEL (EL. m) | 71.60 | | 71.50 | | 71.45 | | 71.30 | | 71.20 | | 71.10 | | 70.95 | | 70.60 | | 70.10 | | 69.25 | | 69.20 | | 69.30 | | 68.85 | | 68.75 | | | | | |
| | RIGHT BANK LEVEL (EL. m) | 72.83 | | 72.90 | | 72.23 | | 72.24 | | 72.33 | | 72.53 | | 72.29 | | 72.02 | | 71.74 | | 72.02 | | 71.32 | | 70.84 | | 70.79 | | 70.59 | | 70.07 | | 69.81 | |



| | | |
|---|------------------------|----------------------------------|
| THE FEASIBILITY STUDY ON THE SUNSARI RIVER IRRIGATION PROJECT IN THE KINGDOM OF NEPAL | TITLE OF DRAWING | WATERCOURSE IRRIGATION SYSTEM |
| JAPAN INTERNATIONAL COOPERATION AGENCY | DRAWING No. | CN-17 |