

- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS
- LEGEND**
- PROPOSED CHANNEL
  - PROPOSED SEWER LINE
  - PROPOSED RISING MAIN
  - ROAD EDGE
  - UNDERGROUND LINES
  - CULVERT/BRIDGE
  - HANDPUMP
  - ELECTRIC POLE
  - ELECTRIC LINE
  - TELEPHONE POLE
  - TELEPHONE LINE
  - TRANSFORMER
  - OFC PILLAR
  - KILOMETER POST
  - TREE
  - HECTOMETER POST
  - LAMP POST
  - RAILWAY LINE
  - NALA
  - WATER MAIN
  - EXISTING SEWER
  - TRENCHLESS TECHNOLOGY
  - NALA CROSSING
  - RAILWAY LINE CROSSING

- REFERENCE DRAWING:**
- NUMAYA DAHI STP LAYOUT PLAN & SECTION REFER DRG NO. ALD-TP-B-ND-2(152)
  - GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

CHECKED BY:	APPROVED BY:	
R.Mittal	CHECK	D.Sarkar
DRAWN	M.Pahuja	APPROVE
DESIGNED	Anjesh	H=1:1000 V=1:100
SURVEYED	S.Sharma	DATE 3-1-2005

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

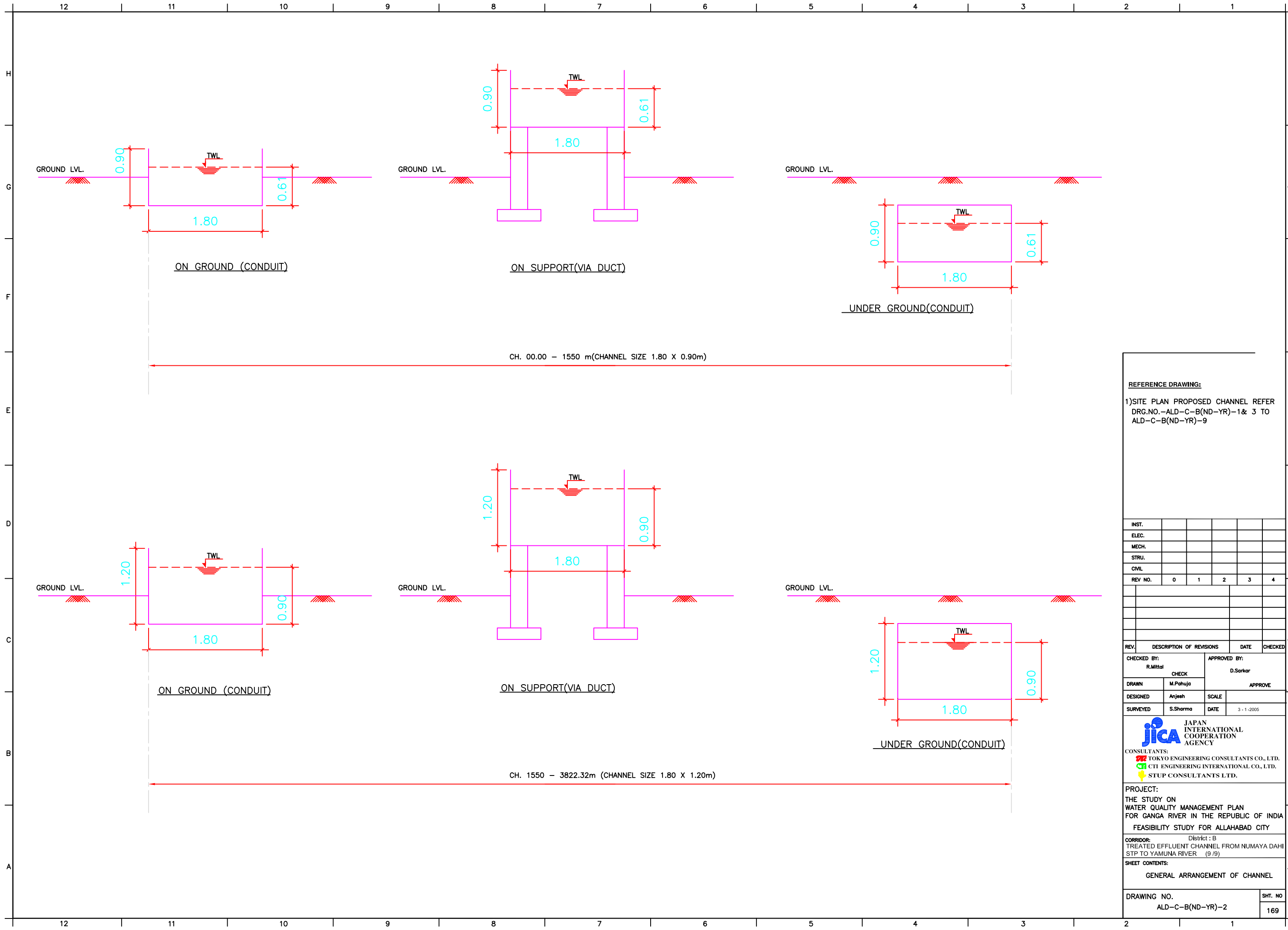
CONSULTANTS:

- TOKYO ENGINEERING CONSULTANTS CO., LTD.
- CTI ENGINEERING INTERNATIONAL CO., LTD.
- STUP CONSULTANTS LTD.

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (1/9)

**SHEET CONTENTS:**  
 SITE PLAN  
 PROPOSED CHANNEL



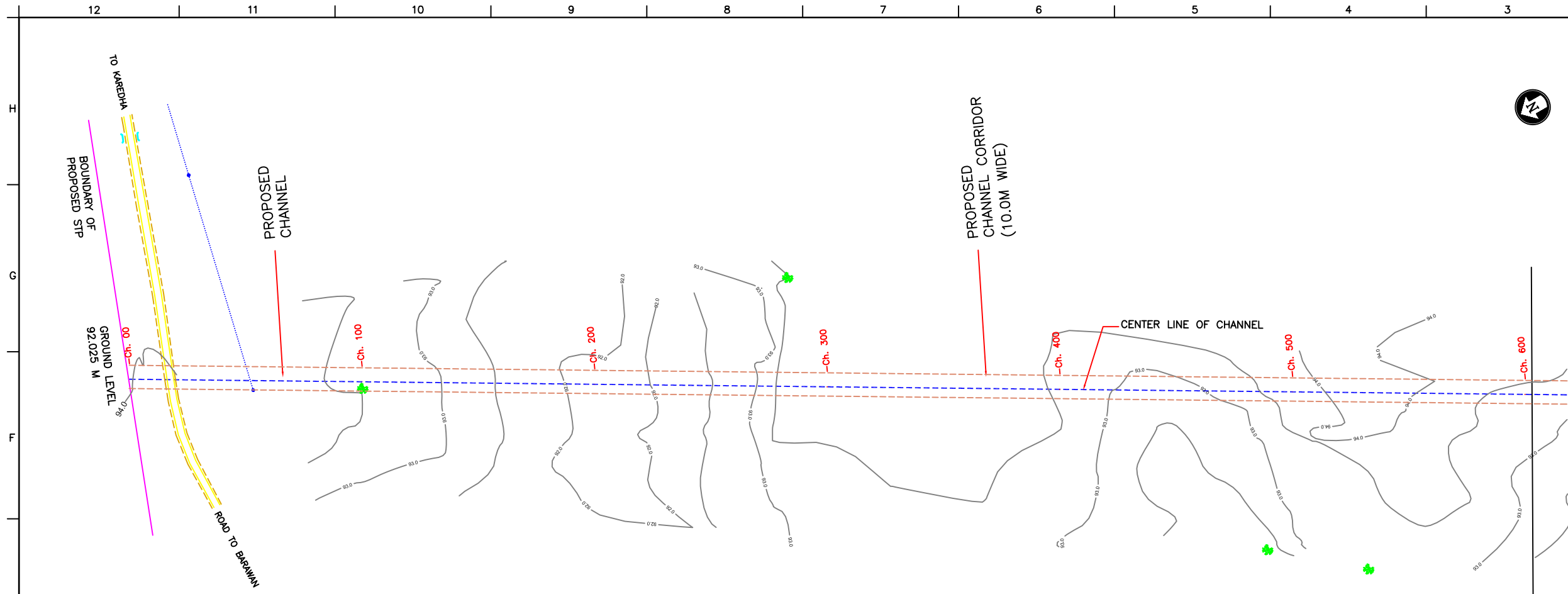
**REFERENCE DRAWING:**  
 1) SITE PLAN PROPOSED CHANNEL REFER DRG.NO.-ALD-C-B(ND-YR)-1& 3 TO ALD-C-B(ND-YR)-9

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV. NO.	0	1	2	3	4
REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED		
CHECKED BY:	R.Mittal	CHECK	APPROVED BY:	D.Sarkar	
DRAWN	M.Pahuja	APPROVE			
DESIGNED	Anjesh	SCALE			
SURVEYED	S.Sharma	DATE	3-1-2005		

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 CONSULTANTS:  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 CTI ENGINEERING INTERNATIONAL CO., LTD.  
 STUP CONSULTANTS LTD.

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY  
**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (9/9)

**SHEET CONTENTS:**  
 GENERAL ARRANGEMENT OF CHANNEL  
**DRAWING NO.** ALD-C-B(ND-YR)-2 **SHT. NO.** 169



- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS
- LEGEND**
- PROPOSED CHANNEL
  - PROPOSED SEWER LINE
  - PROPOSED RISING MAIN
  - ROAD EDGE
  - UNDERGROUND LINES
  - CULVERT/BRIDGE
  - HANDPUMP
  - ELECTRIC POLE
  - ELECTRIC LINE
  - TELEPHONE POLE
  - TELEPHONE LINE
  - TRANSFORMER
  - OFC PILLAR
  - KILOMETER POST
  - TREE
  - HECTOMETER POST
  - LAMP POST
  - RAILWAY LINE
  - NALA
  - WATER MAIN
  - EXISTING SEWER
  - TRENCHLESS TECHNOLOGY
  - NALA CROSSING
  - RAILWAY LINE CROSSING

- REFERENCE DRAWING:**
- NUMAYA DAHI STP LAYOUT PLAN & SECTION REFER DRG NO. ALD-TP-B-ND-2(152)
  - GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

CHECKED BY: R.Mittal		APPROVED BY: D.Sarkar	
DESIGNED Anjesh	SCALE H=1:1000 V=1:100	APPROVE	
SURVEYED S.Sharma	DATE	3-1-2005	

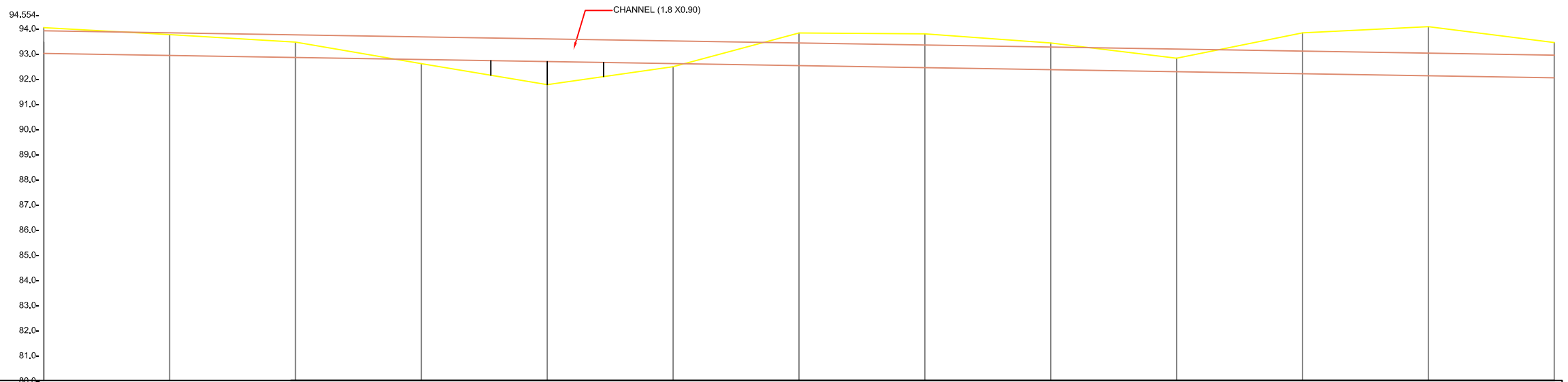
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS:

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

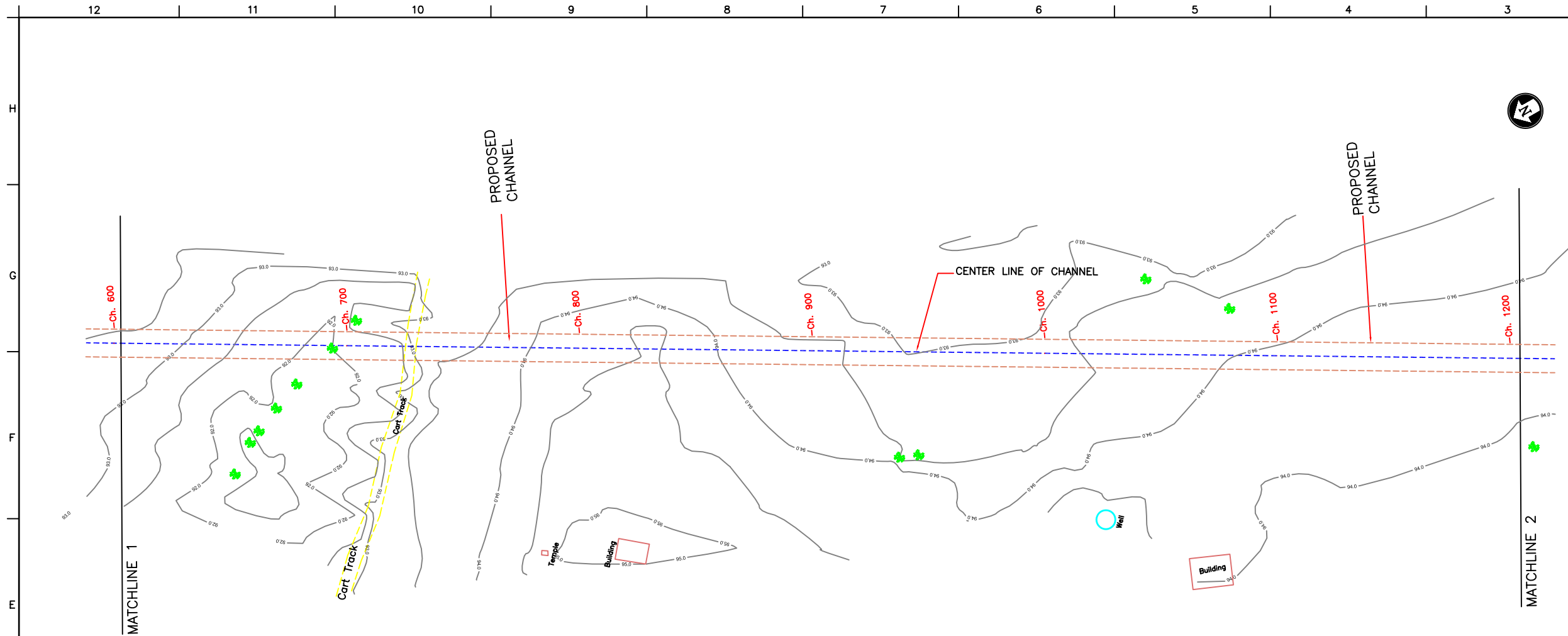
**CORRIDOR:**  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (2/9)

**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel) (CH. 00 - 600)



Ground Level	94.025	93.75	93.451	92.595	91.758	92.474	93.812	93.778	93.415	92.808	93.82	94.063	93.431
INVERT LEVEL	93.010	92.953	92.895	92.837	92.780	92.722	92.664	92.607	92.549	92.491	92.434	92.376	92.318
Chainage	00.00	50.00	100.00	150.00	200.00	250.00	300.00	350.00	400.00	450.00	500.00	550.00	600.00
SECTION													
SUPPORT SYSTEM	ON GROUND				ON SUPPORT			UNDER GROUND					

DRAWING NO. ALD-C-B (ND-YR)-3	SHT. NO. 170
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- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS

**LEGEND**

PROPOSED CHANNEL	---
PROPOSED SEWER LINE	---
PROPOSED RISING MAIN	---
ROAD EDGE	---
UNDERGROUND LINES	---
CULVERT/BRIDGE	---
HANDPUMP	---
ELECTRIC POLE	---
ELECTRIC LINE	---
TELEPHONE POLE	---
TELEPHONE LINE	---
TRANSFORMER	---
OFC PILLAR	---
KILOMETER POST	---
TREE	---
HECTOMETER POST	---
LAMP POST	---
RAILWAY LINE	---
NALA	---
WATER MAIN	---
EXISTING SEWER	---
TRENCHLESS TECHNOLOGY	---
NALA CROSSING	---
RAILWAY LINE CROSSING	---

**REFERENCE DRAWING:**  
 1) GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

CHECKED BY: R.Mittal		APPROVED BY: D.Sarkar	
DESIGNED Anjesh	SCALE H=1:1000 V=1:100	APPROVE	
SURVEYED S.Sharma	DATE 3-1-2005		

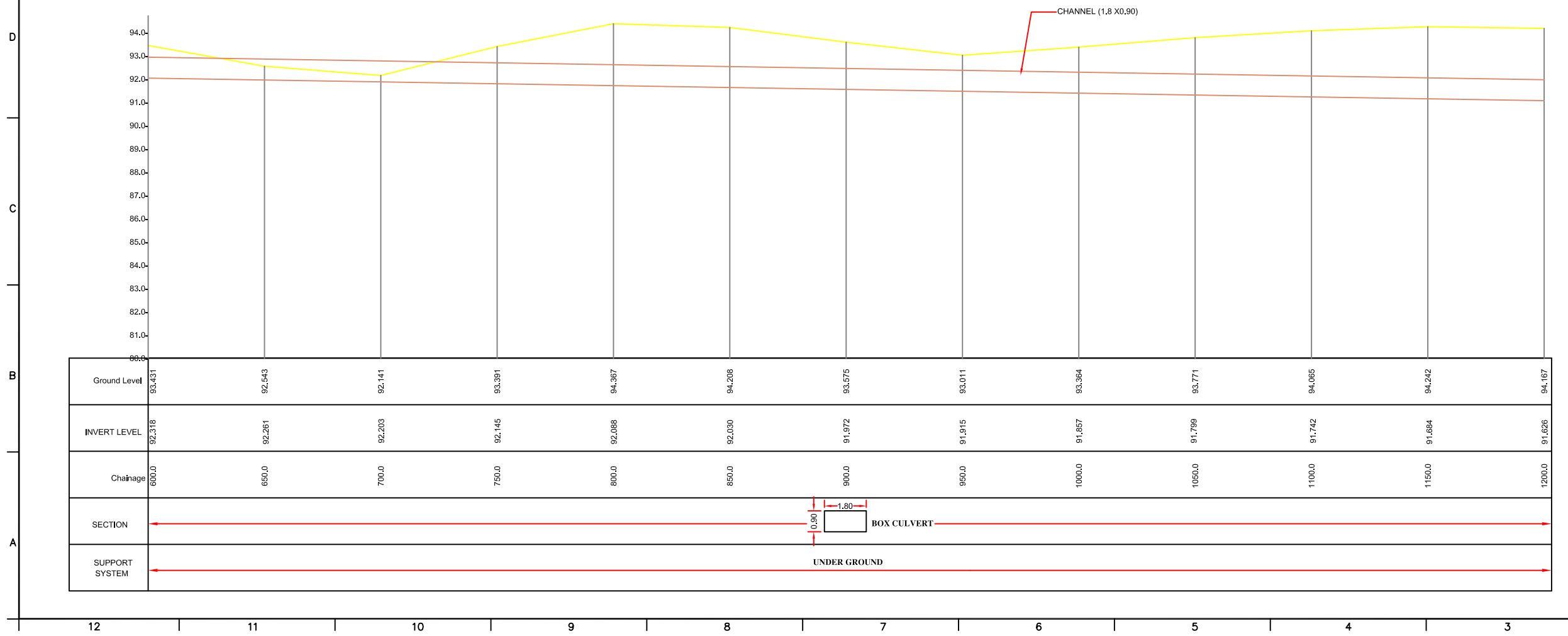
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 CONSULTANTS:  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 CTI ENGINEERING INTERNATIONAL CO., LTD.  
 STUP CONSULTANTS LTD.

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

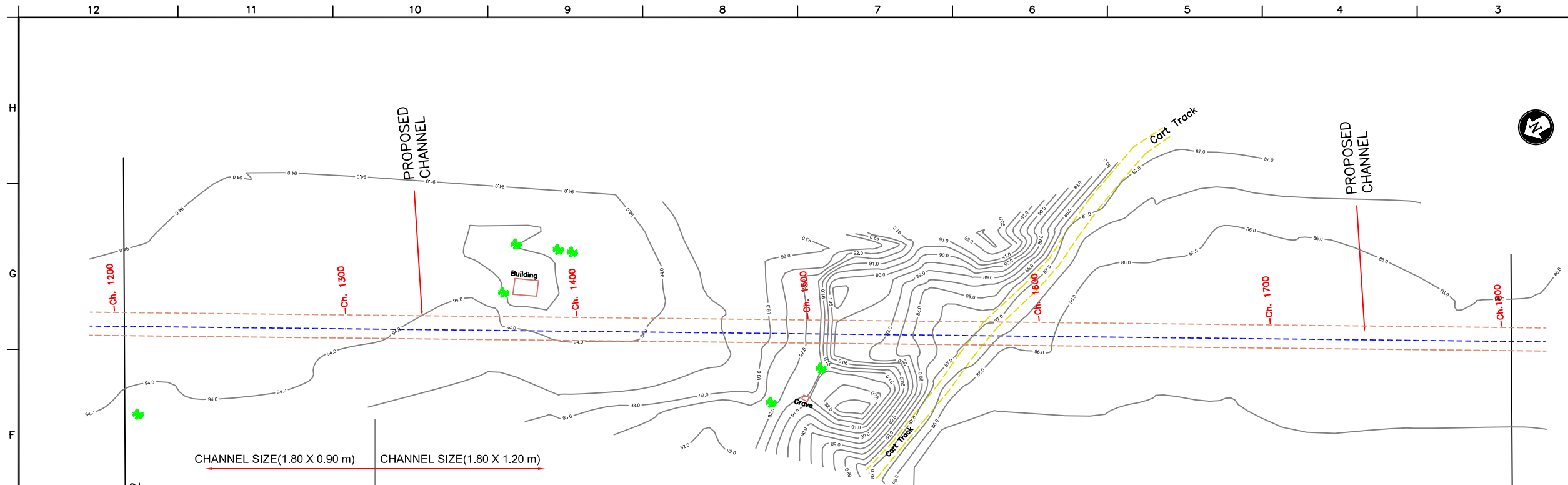
**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (3/9)

**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel) (CH. 600 - 1200)

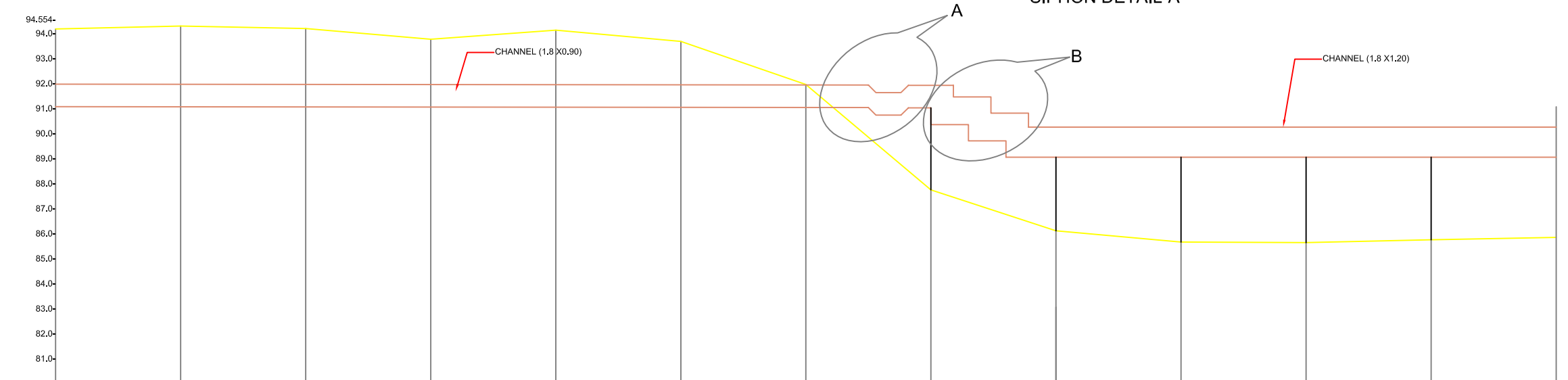
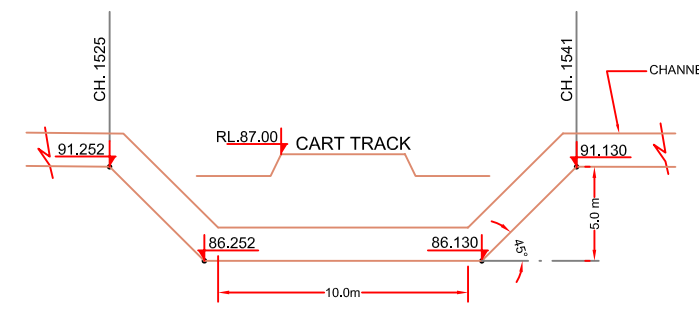
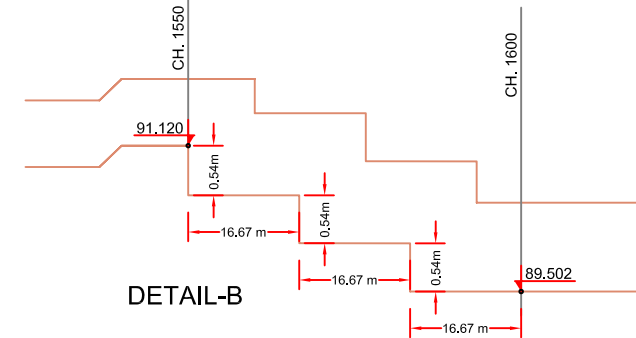
DRAWING NO. ALD-C-B (ND-YR)-4	SHT. NO. 171
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Ground Level	93.431	92.543	92.141	93.391	94.367	94.208	93.575	93.011	93.364	93.771	94.065	94.242	94.167	
INVERT LEVEL	92.318	92.261	92.203	92.145	92.088	92.030	91.972	91.915	91.857	91.799	91.742	91.684	91.626	
Chainage	600.0	650.0	700.0	750.0	800.0	850.0	900.0	950.0	1000.0	1050.0	1100.0	1150.0	1200.0	
SECTION	←-----												←-----	←-----
SUPPORT SYSTEM	←-----												←-----	←-----



CHANNEL SIZE(1.80 X 0.90 m) CHANNEL SIZE(1.80 X 1.20 m)



Ground Level	94.167	94.285	94.185	93.754	94.121	93.671	91.949	87.737	86.100	85.651	85.627	85.742	85.835
INVERT LEVEL	91.525	91.569	91.511	91.454	91.396	91.338	91.281	91.120	89.502	89.482	89.462	89.442	89.422
Challage	1200.0	1250.0	1300.0	1350.0	1400.0	1450.0	1500.0	1550.0	1600.0	1650.0	1700.0	1750.0	1800.0
SECTION													
SUPPORT SYSTEM	UNDER GROUND							ON SUPPORT					

- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS

**LEGEND**

PROPOSED CHANNEL	
PROPOSED SEWER LINE	
PROPOSED RISING MAIN	
ROAD EDGE	
UNDERGROUND LINES	
CULVERT/BRIDGE	
HANDPUMP	
ELECTRIC POLE	
ELECTRIC LINE	
TELEPHONE POLE	
TELEPHONE LINE	
TRANSFORMER	
OFC PILLAR	
KILOMETER POST	
TREE	
HECTOMETER POST	
LAMP POST	
RAILWAY LINE	
NALA	
WATER MAIN	
EXISTING SEWER	
TRENCHLESS TECHNOLOGY	
NALA CROSSING	
RAILWAY LINE CROSSING	

**REFERENCE DRAWING:**

- GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED
CHECKED BY:	R.Mittal	APPROVED BY:	D.Sarkar
DRAWN	M.Pahuja	SCALE	H=1:1000 V=1:100
DESIGNED	Anjesh	DATE	3-1-2005
SURVEYED	S.Sharma		

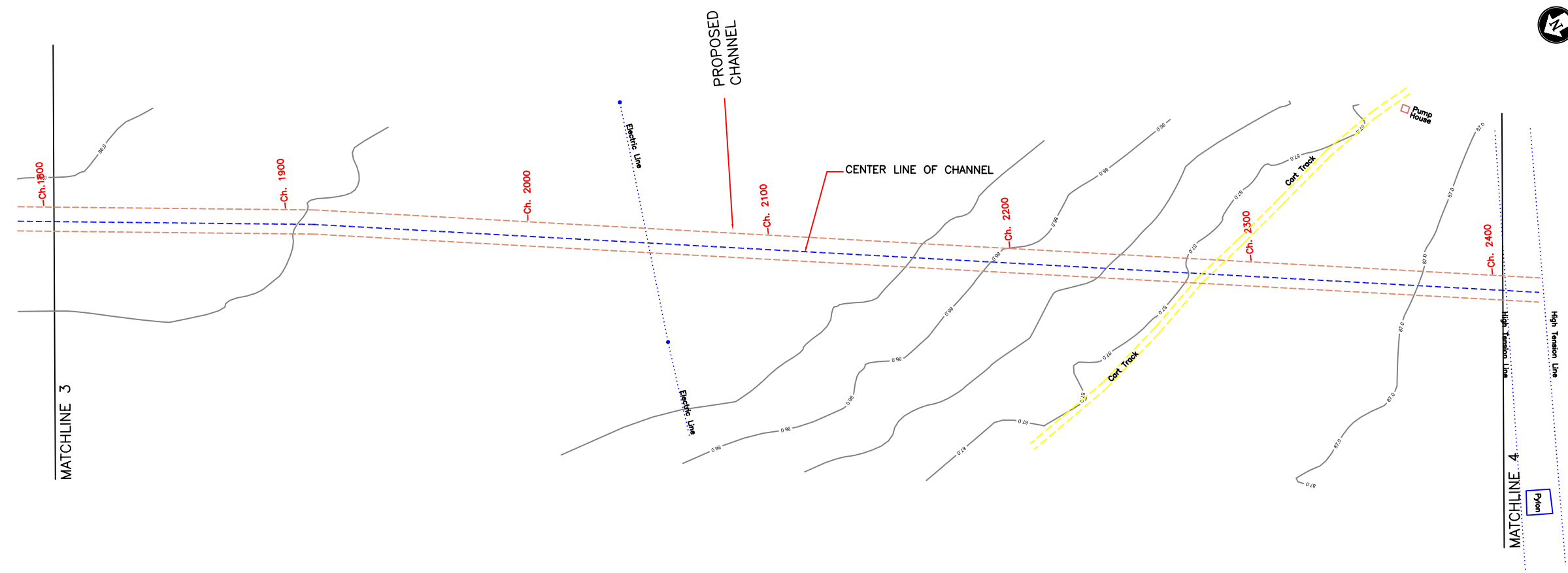
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 CONSULTANTS:  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 CTI ENGINEERING INTERNATIONAL CO., LTD.  
 STUP CONSULTANTS LTD.

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (4/9)

**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel) (CH.1200 - 1800)

**DRAWING NO.** ALD-C-B (ND-YR)-5 **SHT. NO** 172

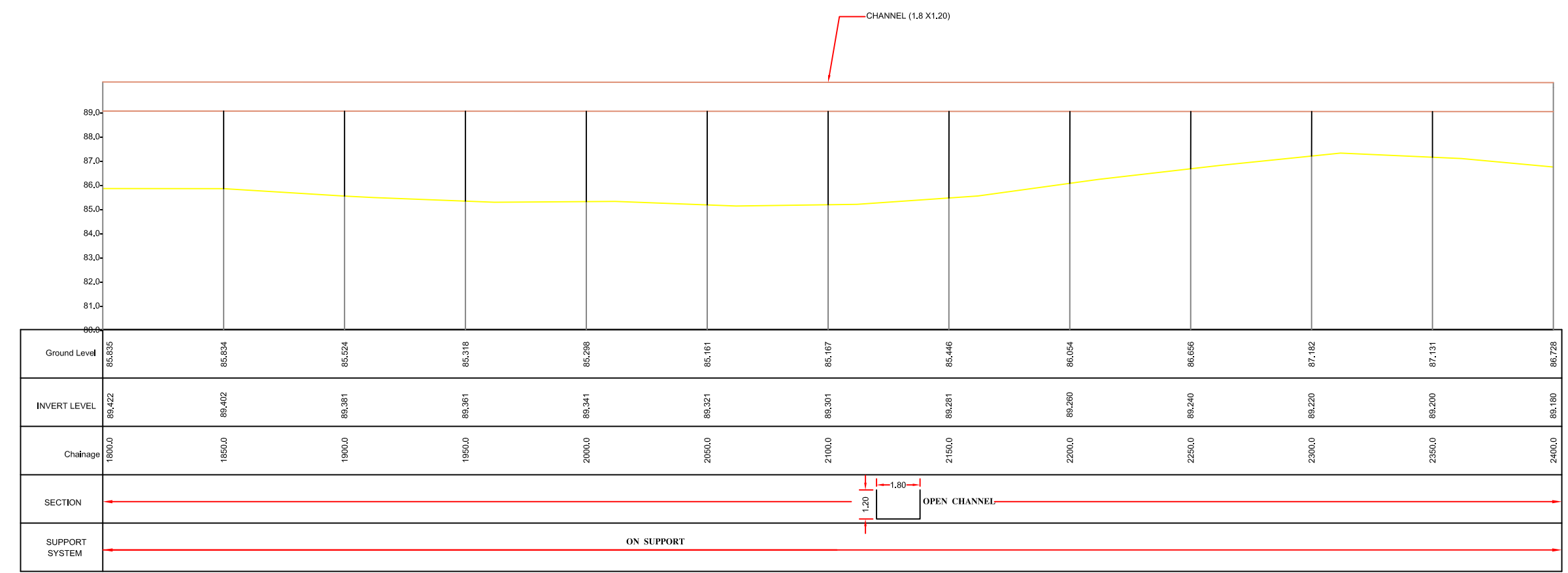


**NOTES:**  
 1) GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)  
 2) ALL LEVELS ARE IN METERS

**LEGEND**

PROPOSED CHANNEL	---
PROPOSED SEWER LINE	---
PROPOSED RISING MAIN	---
ROAD EDGE	---
UNDERGROUND LINES	---
CULVERT/BRIDGE	---
HANDPUMP	---
ELECTRIC POLE	---
ELECTRIC LINE	---
TELEPHONE POLE	---
TELEPHONE LINE	---
TRANSFORMER	---
OFC PILLAR	---
KILOMETER POST	---
TREE	---
HECTOMETER POST	---
LAMP POST	---
RAILWAY LINE	---
NALA	---
WATER MAIN	---
EXISTING SEWER	---
TRENCHLESS TECHNOLOGY	---
NALA CROSSING	---
RAILWAY LINE CROSSING	---

**REFERENCE DRAWING:**  
 1) GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2



INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

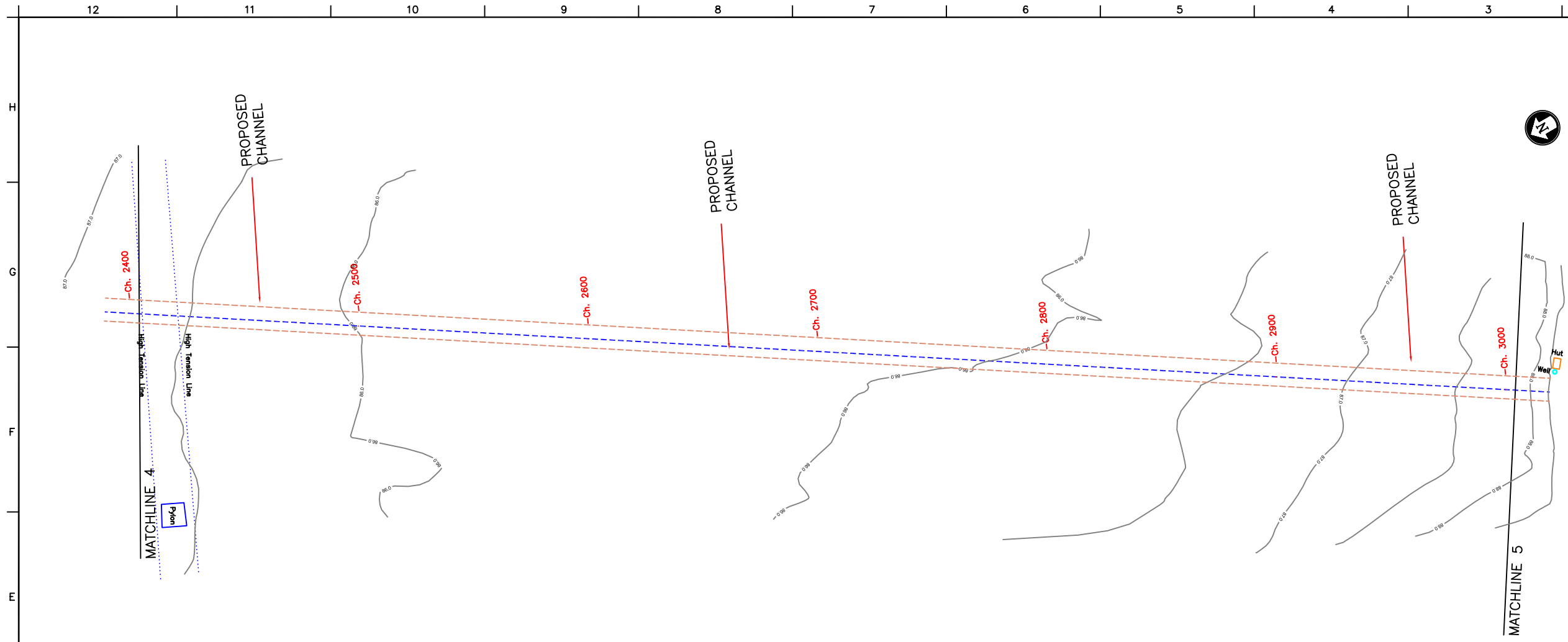
REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

CHECKED BY:	R.Mittal	APPROVED BY:	D.Sarkar
DRAWN:	M.Pahuja	SCALE:	H=1:1000 V=1:100
DESIGNED:	Anjesh	DATE:	3-1-2005
SURVEYED:	S.Sharma		

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 CONSULTANTS:  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 CTI ENGINEERING INTERNATIONAL CO., LTD.  
 STUP CONSULTANTS LTD.

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY  
**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (5/9)  
**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel) (CH.1800 - 2400)

**DRAWING NO.** ALD-C-B (ND-YR)-6 **SHT. NO.** 173



- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS

**LEGEND**

PROPOSED CHANNEL	---
PROPOSED SEWER LINE	---
PROPOSED RISING MAIN	---
ROAD EDGE	---
UNDERGROUND LINES	---
CULVERT/BRIDGE	---
HANDPUMP	---
ELECTRIC POLE	---
ELECTRIC LINE	---
TELEPHONE POLE	---
TELEPHONE LINE	---
TRANSFORMER	---
OFC PILLAR	---
KILOMETER POST	---
TREE	---
HECTOMETER POST	---
LAMP POST	---
RAILWAY LINE	---
NALA	---
WATER MAIN	---
EXISTING SEWER	---
TRENCHLESS TECHNOLOGY	---
NALA CROSSING	---
RAILWAY LINE CROSSING	---

**REFERENCE DRAWING:**

- GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B(ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

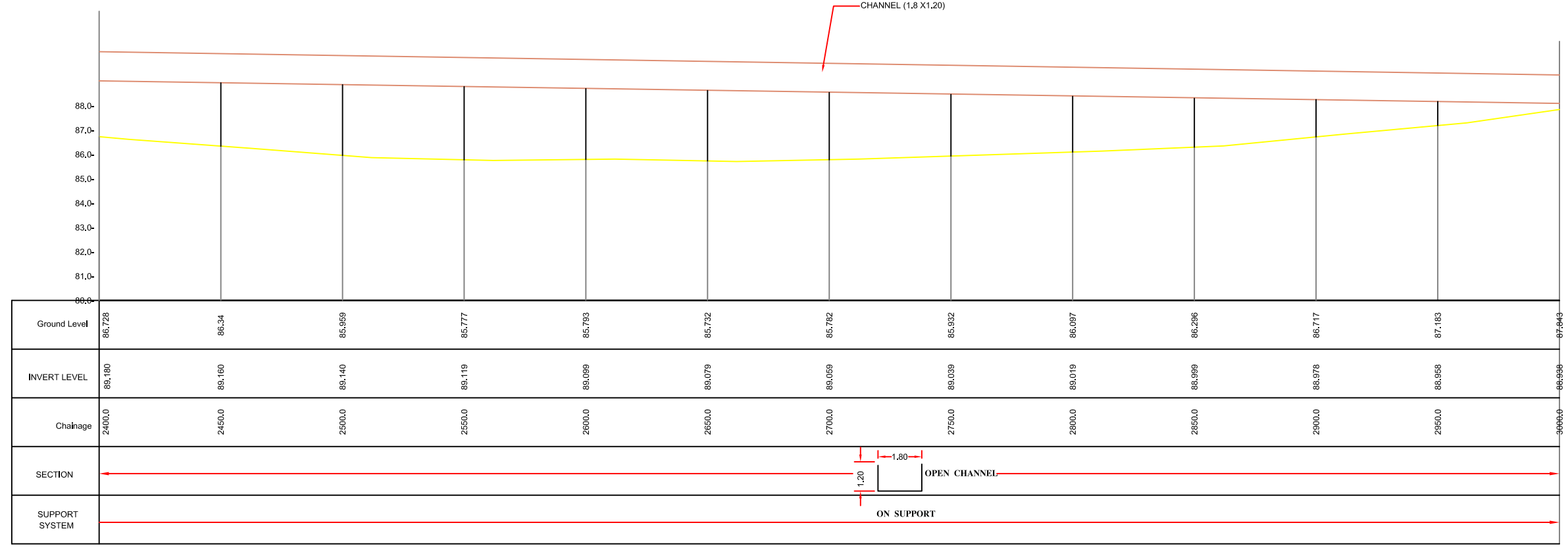
CONSULTANTS:  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 CTI ENGINEERING INTERNATIONAL CO., LTD.  
 STUP CONSULTANTS LTD.

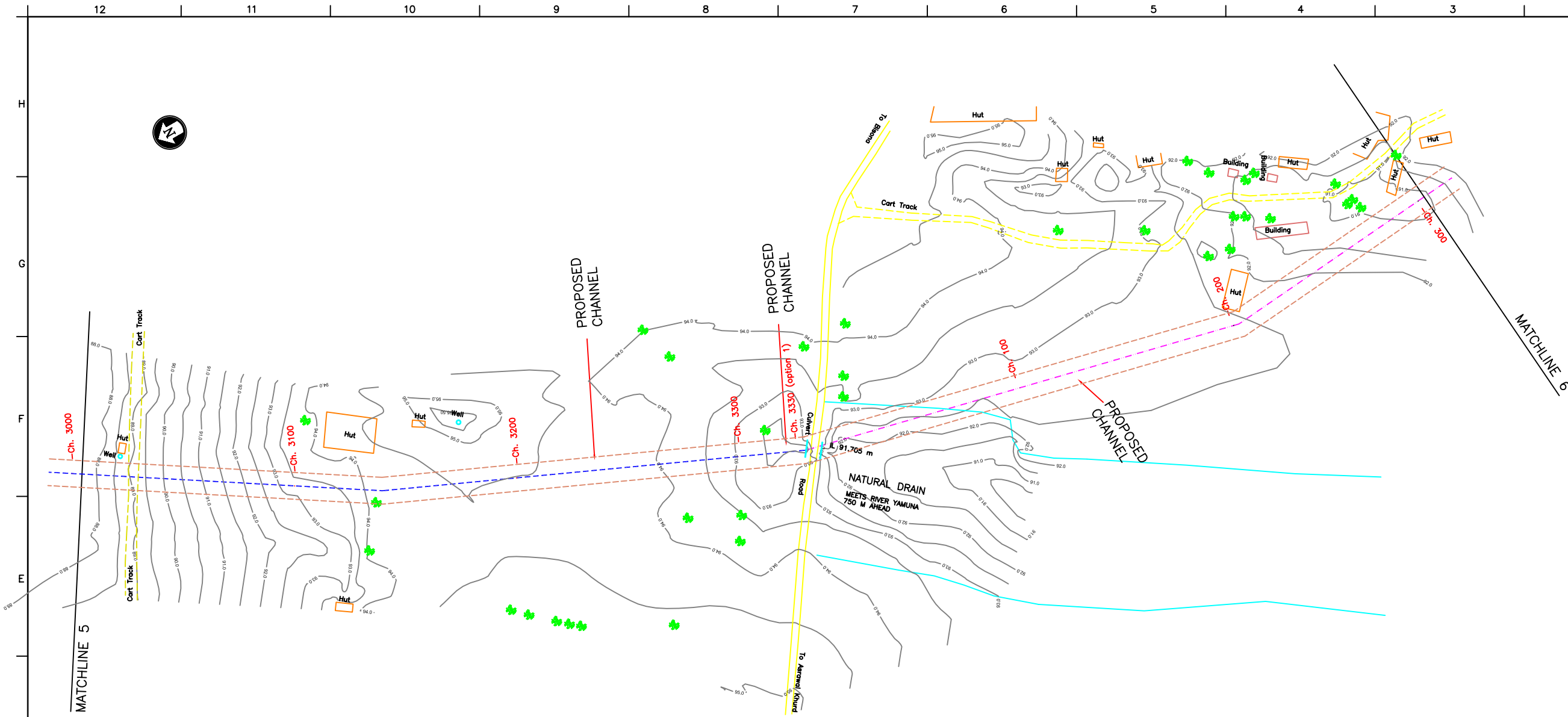
**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (6/9)

**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel) (CH. 2400 - 3000)

**DRAWING NO.** ALD-C-B (ND-YR)-7 **SHT. NO.** 174





- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS

PROPOSED CHANNEL	---
PROPOSED SEWER LINE	---
PROPOSED RISING MAIN	---
ROAD EDGE	---
UNDERGROUND LINES	---
CULVERT/BRIDGE	---
HANDPUMP	---
ELECTRIC POLE	---
ELECTRIC LINE	---
TELEPHONE POLE	---
TELEPHONE LINE	---
TRANSFORMER	---
OFC PILLAR	---
KILOMETER POST	---
TREE	---
HECTOMETER POST	---
LAMP POST	---
RAILWAY LINE	---
NALA	---
WATER MAIN	---
EXISTING SEWER	---
TRENCHLESS TECHNOLOGY	---
NALA CROSSING	---
RAILWAY LINE CROSSING	---

**REFERENCE DRAWING:**

1) GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B (ND-YR)-2

INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED

CHECKED BY: A.Bhatnagar CHECK		APPROVED BY: D.Sarkar APPROVE	
DRAWN	M.Pahuja	SCALE H=1:1000 V=1:100	
DESIGNED	Anjesh	DATE 3-1-2005	
SURVEYED	S.Sharma		

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

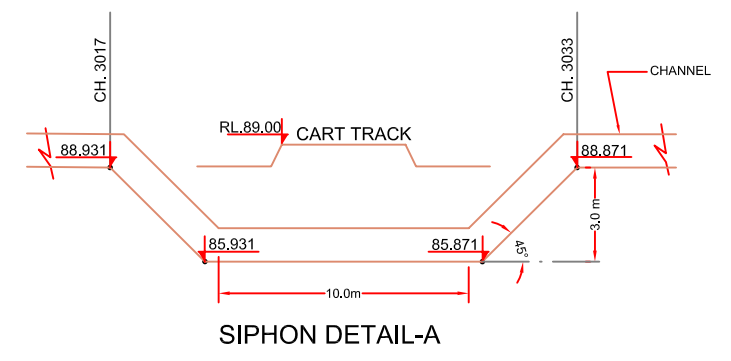
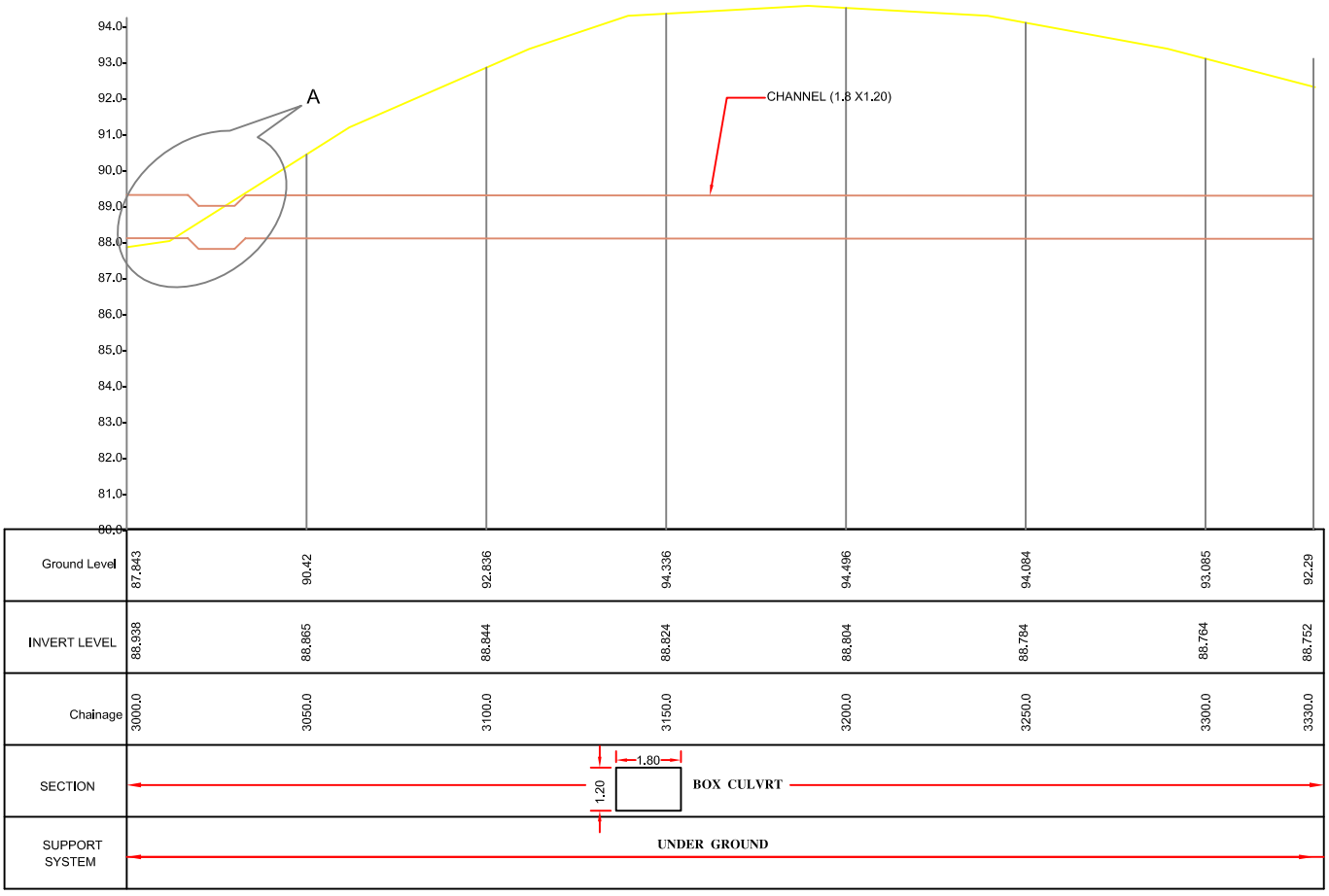
CONSULTANTS:

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

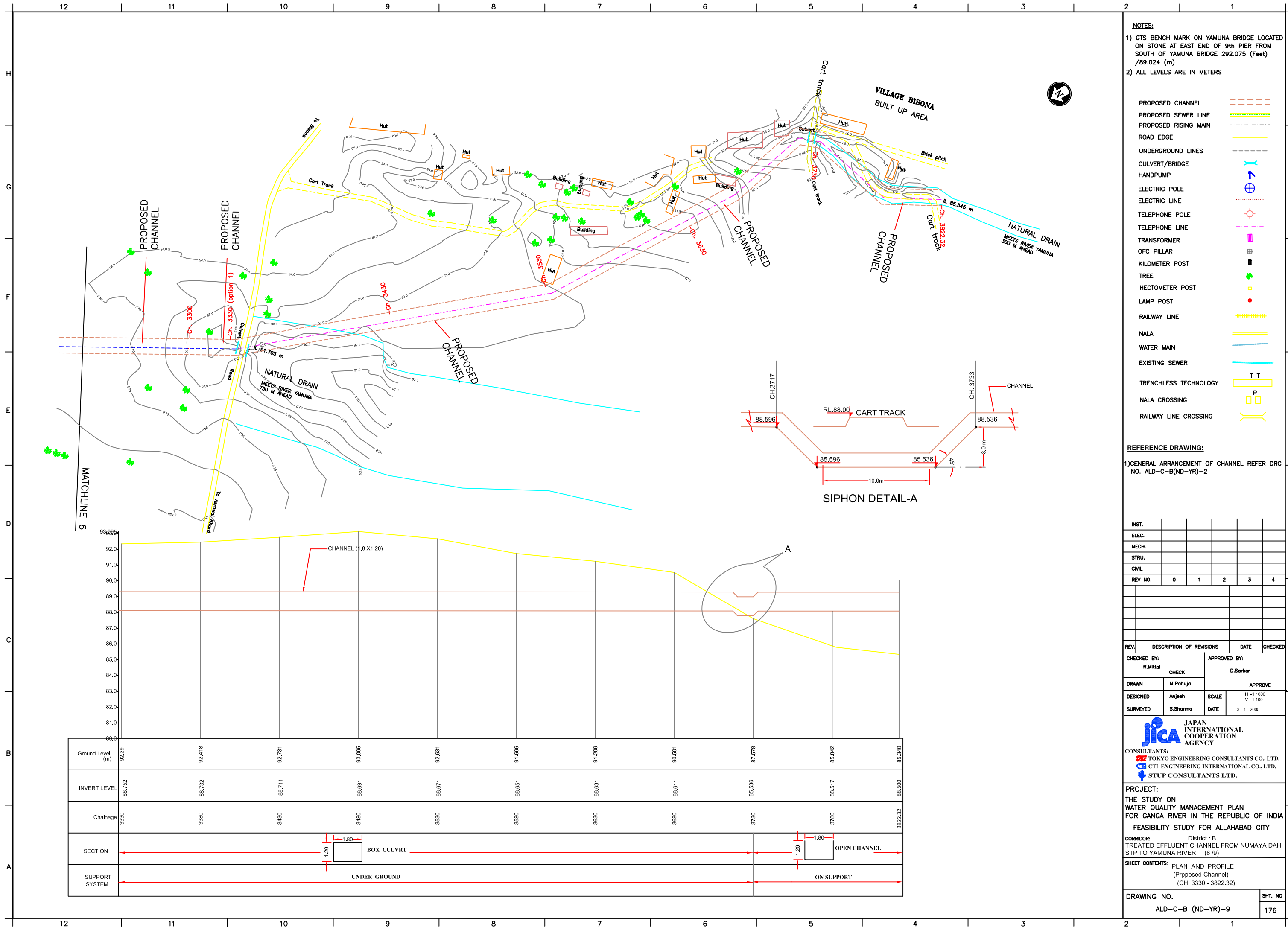
**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (7/9)

**SHEET CONTENTS:**  
 PLAN AND PROFILE  
 (Proposed Channel)  
 (CH. 3000 - 3330)

DRAWING NO. ALD-C-B (ND-YR)-8	SHT. NO. 175
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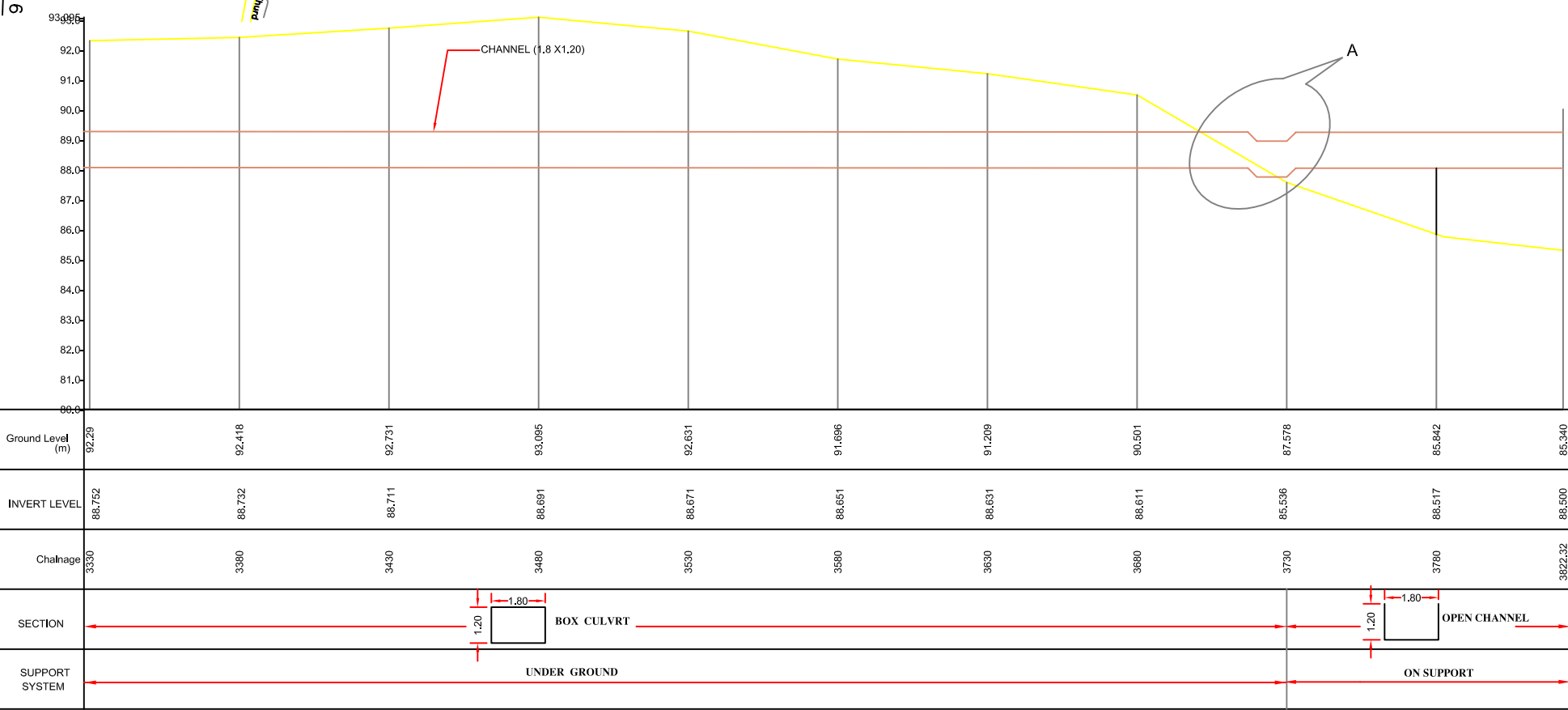
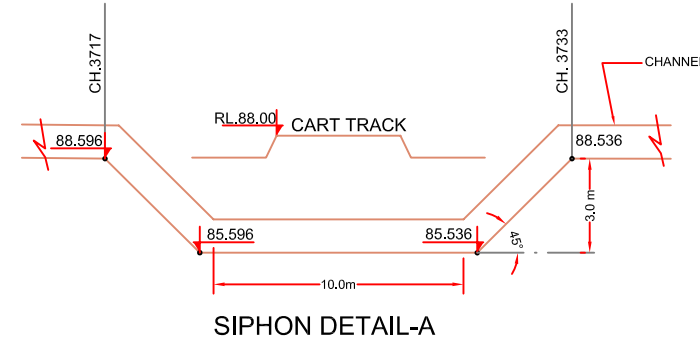


- NOTES:**
- GTS BENCH MARK ON YAMUNA BRIDGE LOCATED ON STONE AT EAST END OF 9th PIER FROM SOUTH OF YAMUNA BRIDGE 292.075 (Feet) /89.024 (m)
  - ALL LEVELS ARE IN METERS

PROPOSED CHANNEL	
PROPOSED SEWER LINE	
PROPOSED RISING MAIN	
ROAD EDGE	
UNDERGROUND LINES	
CULVERT/BRIDGE	
HANDPUMP	
ELECTRIC POLE	
ELECTRIC LINE	
TELEPHONE POLE	
TELEPHONE LINE	
TRANSFORMER	
OFC PILLAR	
KILOMETER POST	
TREE	
HECTOMETER POST	
LAMP POST	
RAILWAY LINE	
NALA	
WATER MAIN	
EXISTING SEWER	
TRENCHLESS TECHNOLOGY	
NALA CROSSING	
RAILWAY LINE CROSSING	

**REFERENCE DRAWING:**

1) GENERAL ARRANGEMENT OF CHANNEL REFER DRG NO. ALD-C-B (ND-YR)-2



INST.					
ELEC.					
MECH.					
STRU.					
CIVIL					
REV NO.	0	1	2	3	4

REV.	DESCRIPTION OF REVISIONS	DATE	CHECKED
CHECKED BY: R.Mittal			
CHECK		APPROVED BY: D.Sarkar	
DRAWN: M.Pahuja			
DESIGNED: Anjesh		SCALE: H=1:1000, V=1:100	
SURVEYED: S.Sharma		DATE: 3-1-2005	

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS:

**PROJECT:**  
 THE STUDY ON WATER QUALITY MANAGEMENT PLAN FOR GANGA RIVER IN THE REPUBLIC OF INDIA  
 FEASIBILITY STUDY FOR ALLAHABAD CITY

**CORRIDOR:** District : B  
 TREATED EFFLUENT CHANNEL FROM NUMAYA DAHI STP TO YAMUNA RIVER (8/9)

**SHEET CONTENTS:** PLAN AND PROFILE (Proposed Channel)  
 (CH. 3330 - 3822.32)

**DRAWING NO.** ALD-C-B (ND-YR)-9 **SHT. NO.** 176