

I.P. 6.1
203 439.632E
221 980.372N

▼263.500

I.P. 7.1
203 467.068E
222 028.532N

▼248.50

Tunnel Portal
203 281.151E
222 000.010N

Portal Valve

▼271.073

I.P. 6.1
203 439.632E
221 980.372N

▼263.500

PROFILE OF PENSTOCK FOR UNIT NO.4

I.P. 8.1
203 485.543E
222 051.882N
R = 2.85

unit 4 inlet valve
203 493.700E
222 066.200N

▼224.00

NOTE:
Coordinations are tentative value. They shall be finalized at D/D stage.

I.P. 6.2
203 434.682E
221 991.899N

▼263.500

I.P. 7.2
203 458.379E
222 033.482N

▼248.50

Tunnel Portal
203 281.151E
222 000.010N

Portal Valve

▼271.073

I.P. 6.2
203 434.682E
221 991.899N

▼263.500

PROFILE OF PENSTOCK FOR UNIT NO.5

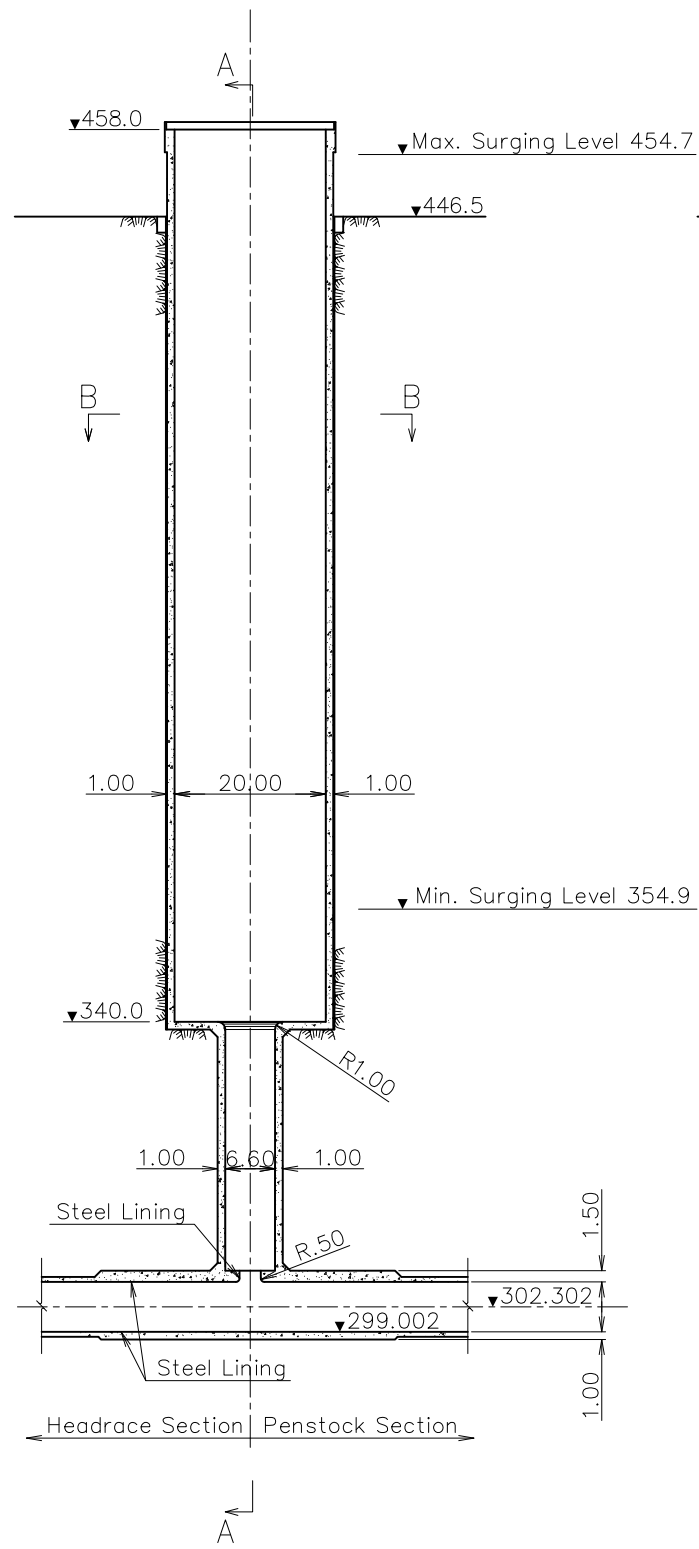
I.P. 8.2
203 469.043E
222 061.282N
R = 2.85

Unit 5 Inlet Valve
203 477.200E
222 075.600N

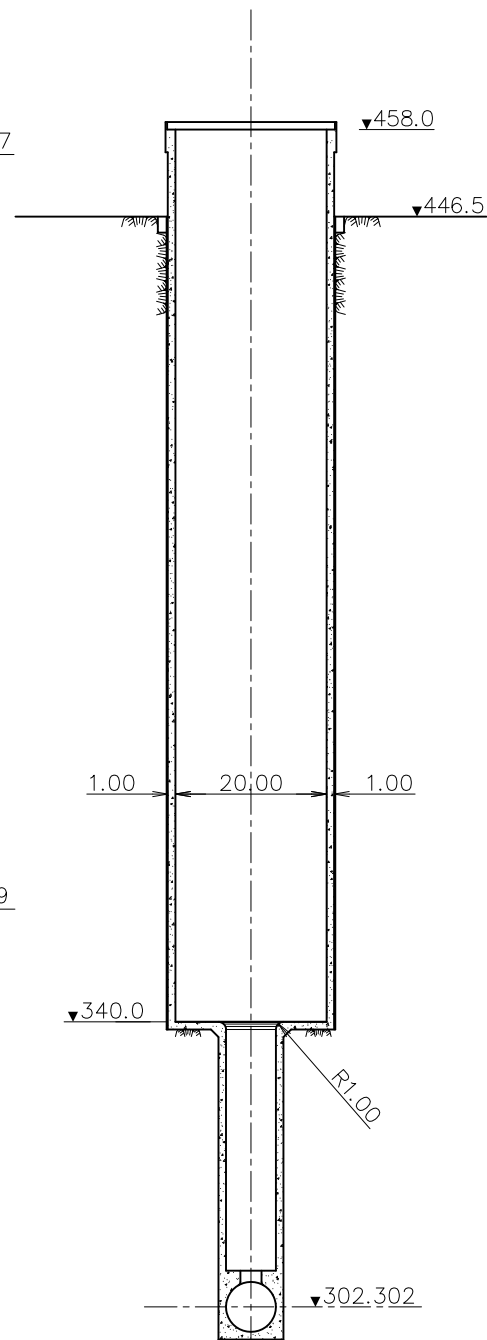
▼224.00



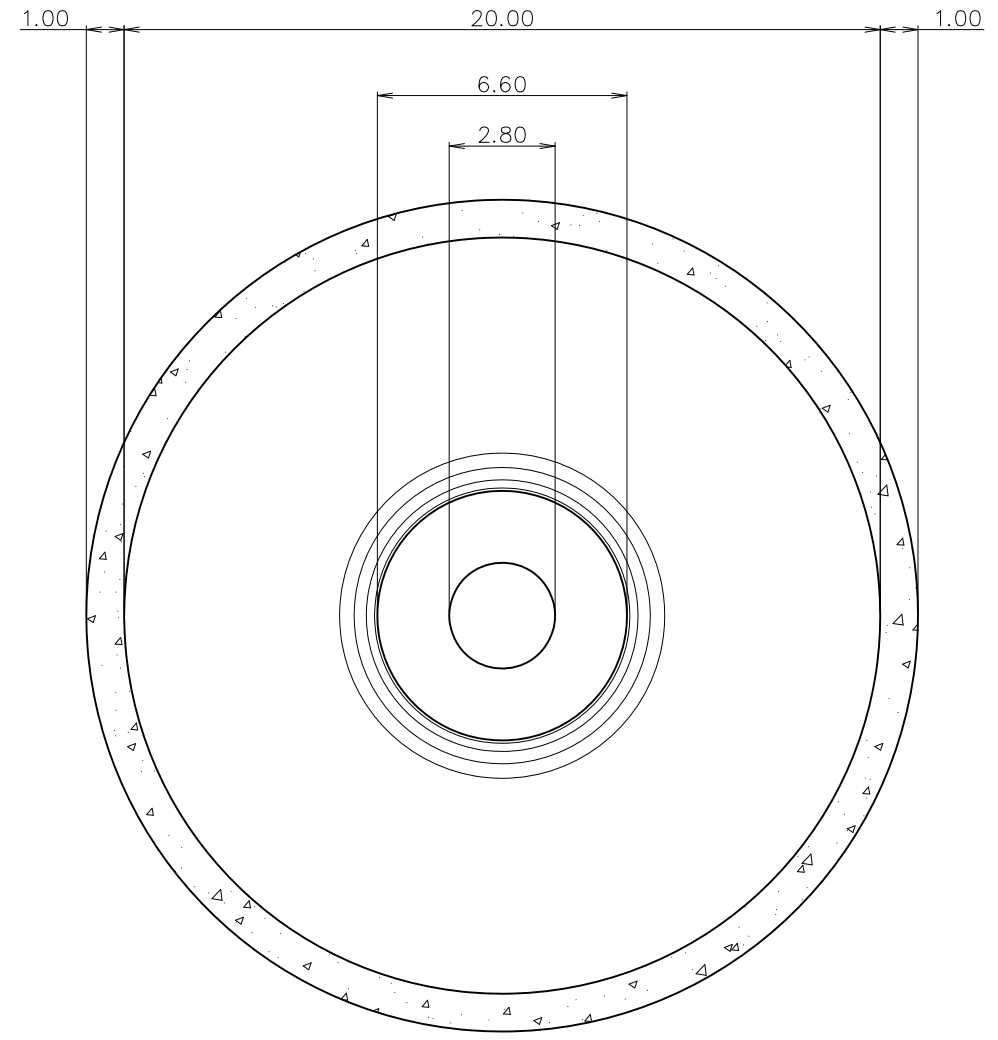
Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
PENSTOCK (OPEN-AIR) PROFILE	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January, 2009	Drawing 011



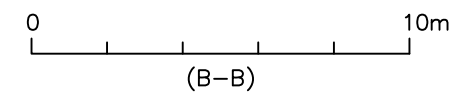
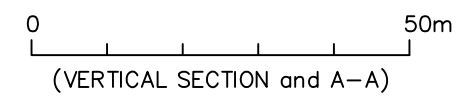
VERTICAL SECTION



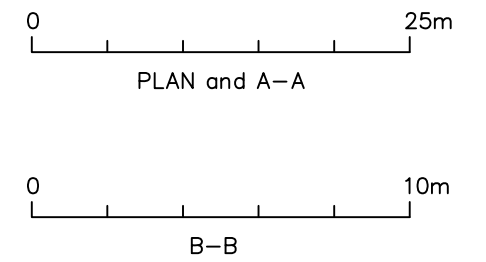
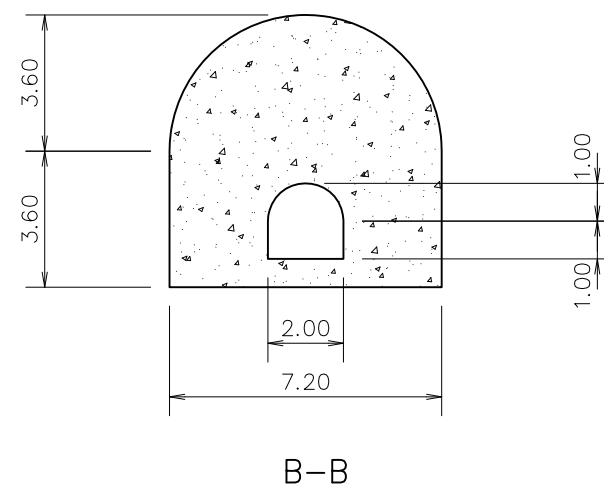
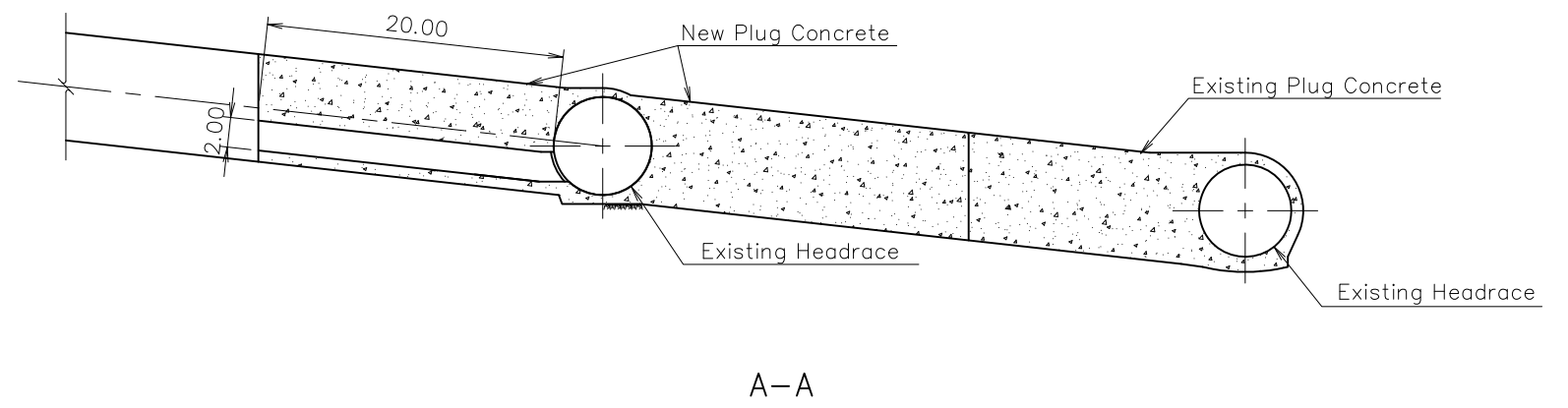
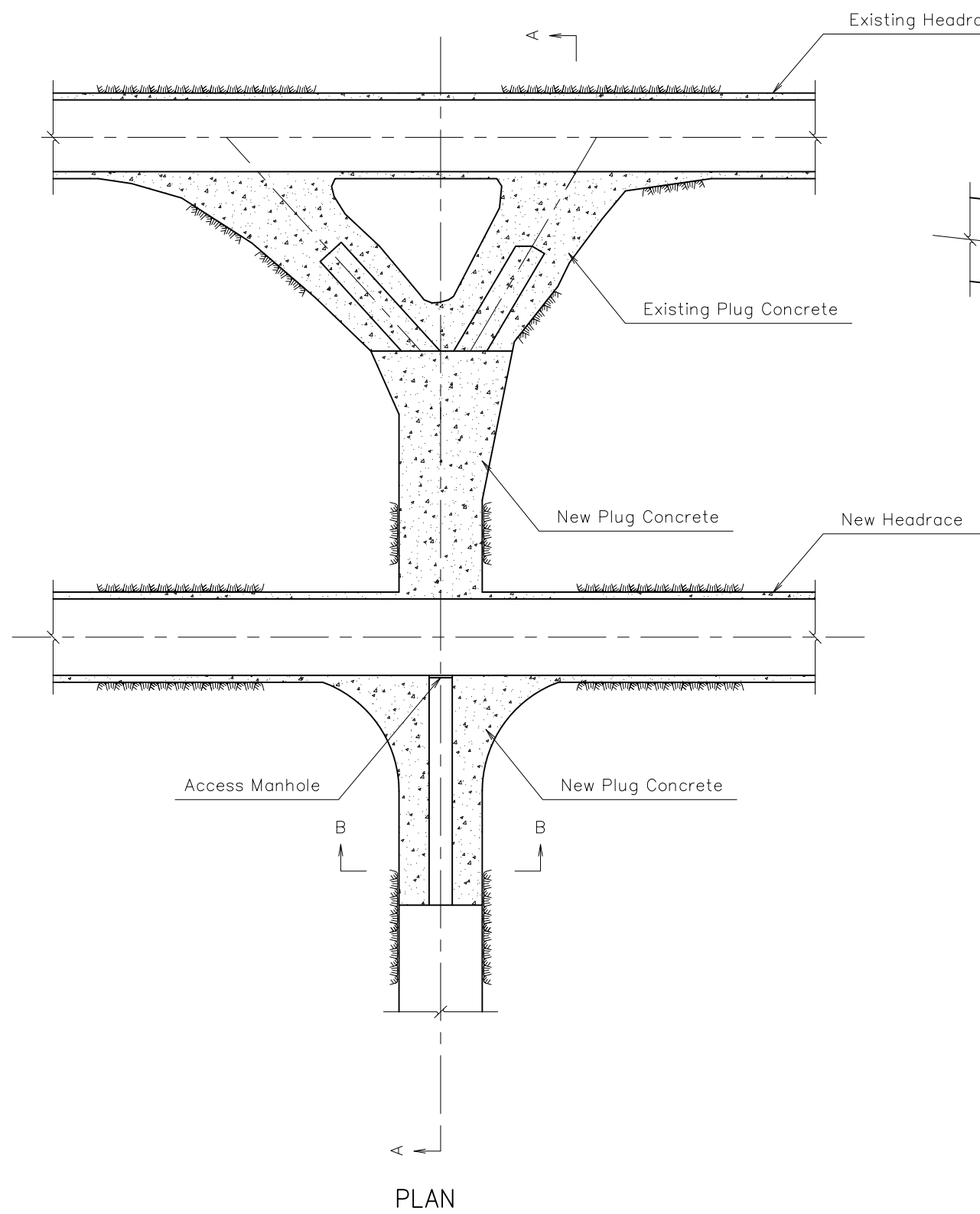
A-A



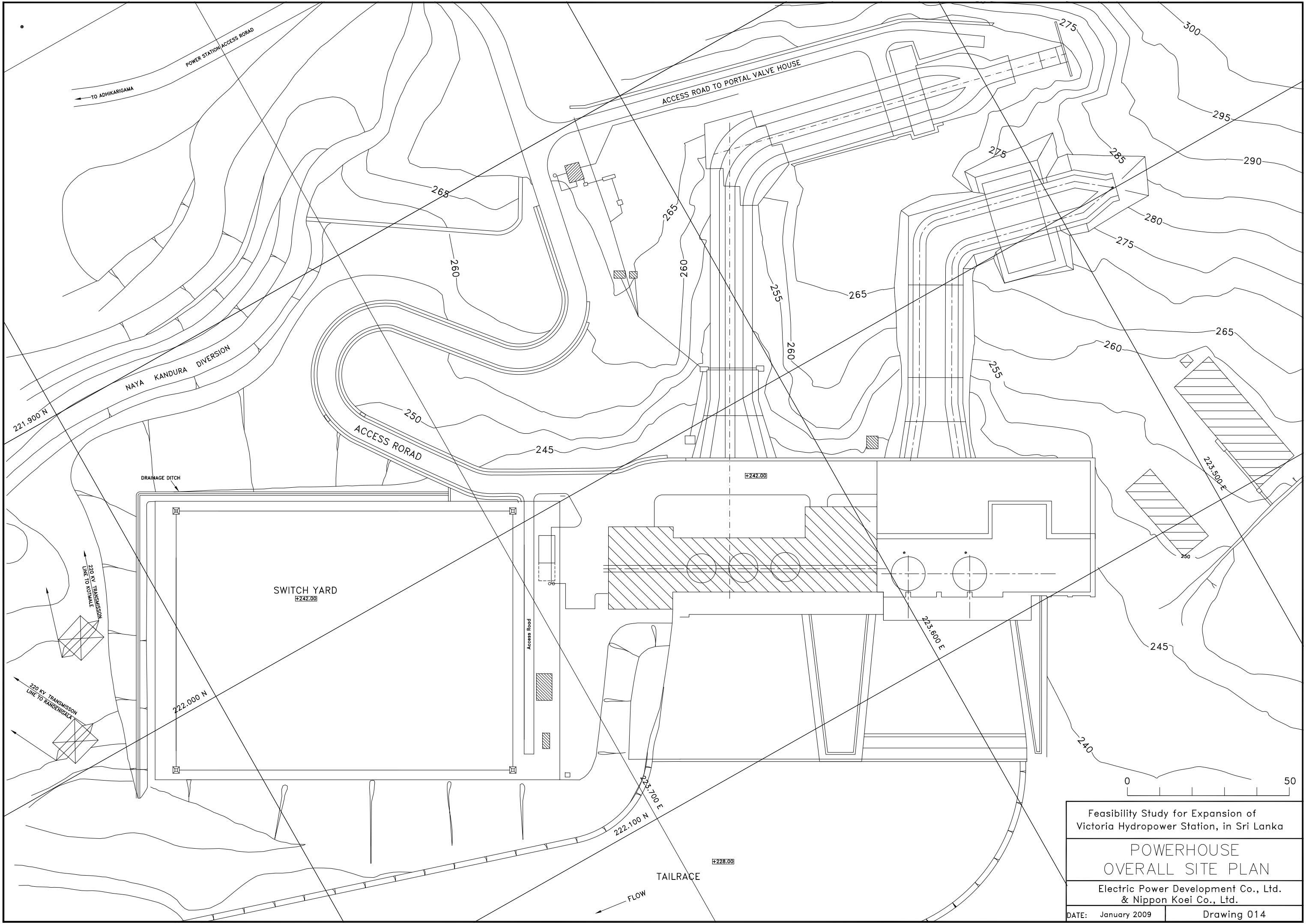
B-B



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
SURGE TANK VERTICAL AND CROSS SECTION	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January, 2009	Drawing 012



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
ACCESS ADIT PLUG CONCRETE PLAN AND SECTION	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January, 2009	Drwing 013



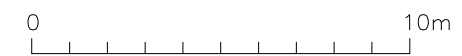
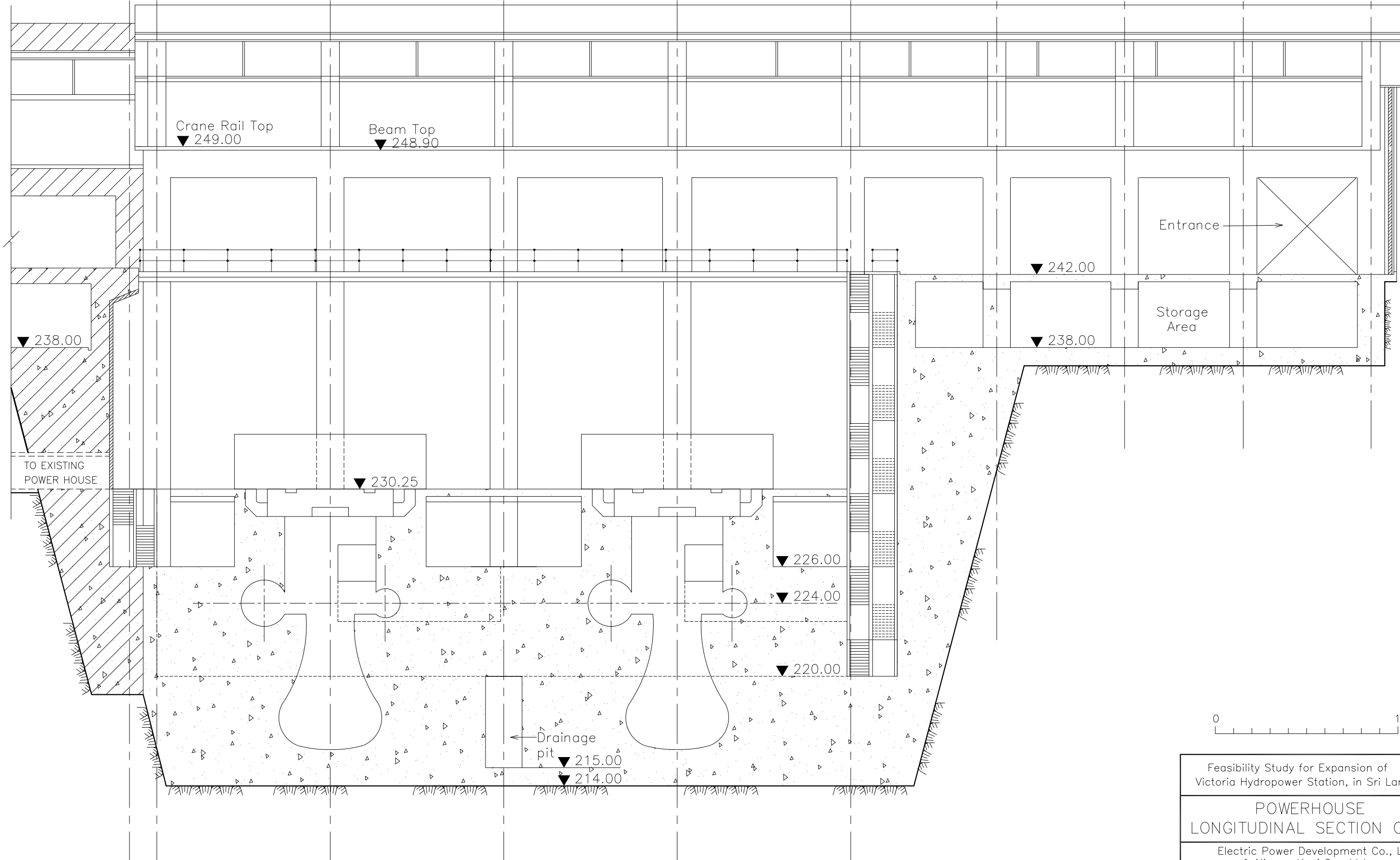
Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE OVERALL SITE PLAN	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 014

⊥ of Column
(Existing power house)

⊥ Set No.4

⊥ Set No.5

LONGITUDINAL SECTION C-C



Feasibility Study for Expansion of
Victoria Hydropower Station, in Sri Lanka

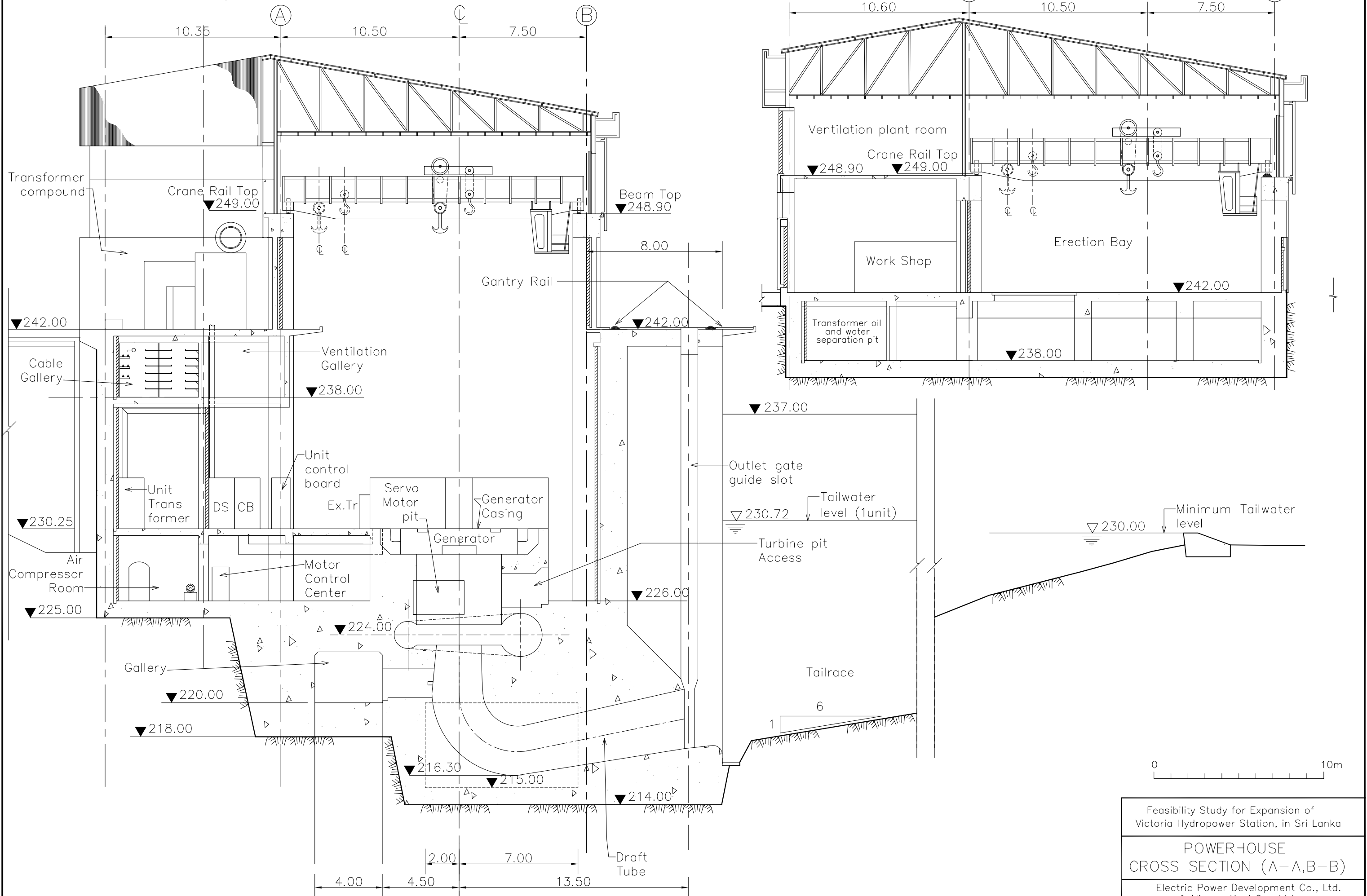
POWERHOUSE
LONGITUDINAL SECTION C-C

Electric Power Development Co., Ltd.
& Nippon Koei Co., Ltd.

DATE: January 2009 Drawing 015

SECTION A-A

SECTION B-B

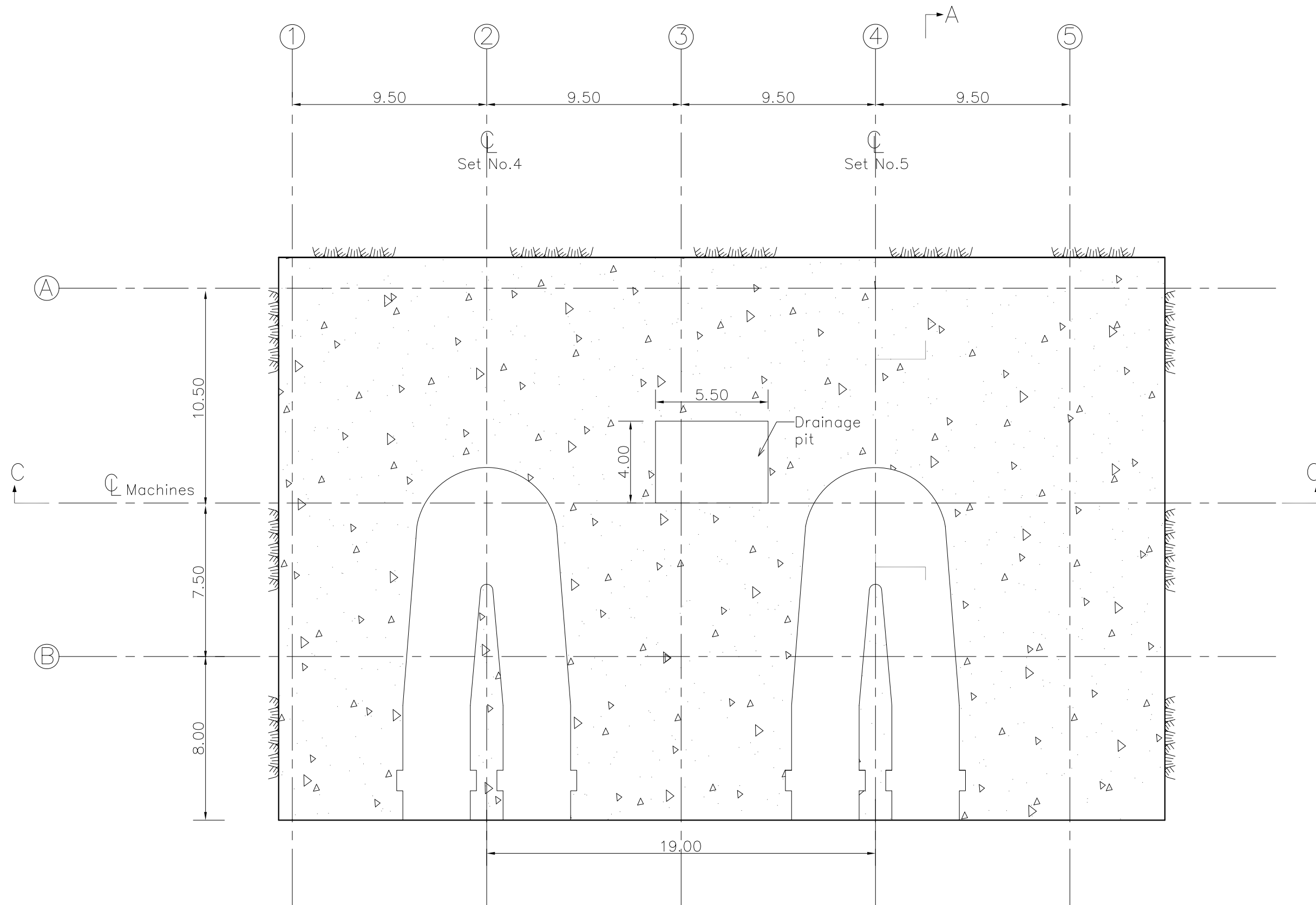


Feasibility Study for Expansion of
Victoria Hydropower Station, in Sri Lanka

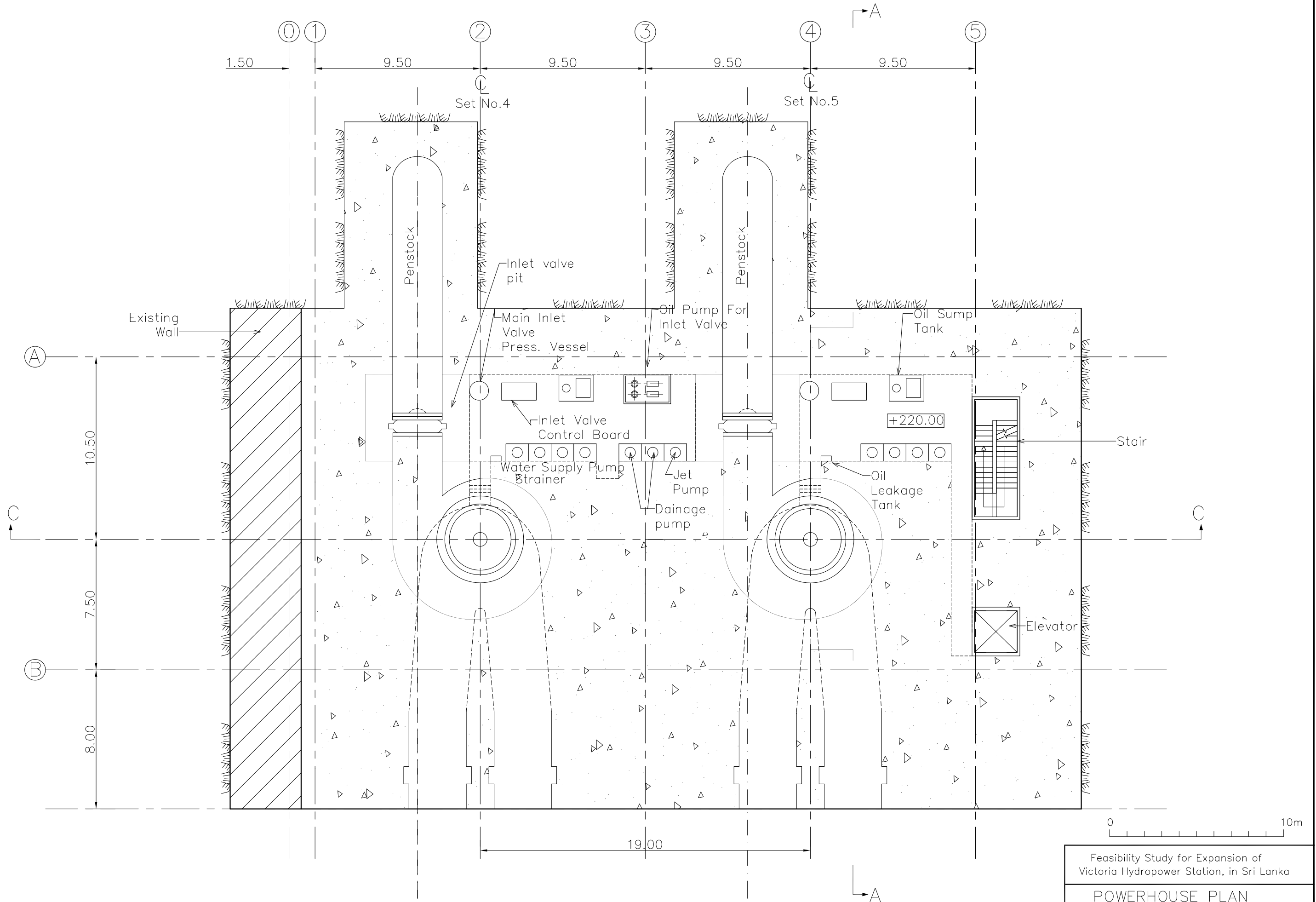
**POWERHOUSE
CROSS SECTION (A-A,B-B)**

Electric Power Development Co., Ltd.
& Nippon Koei Co., Ltd.

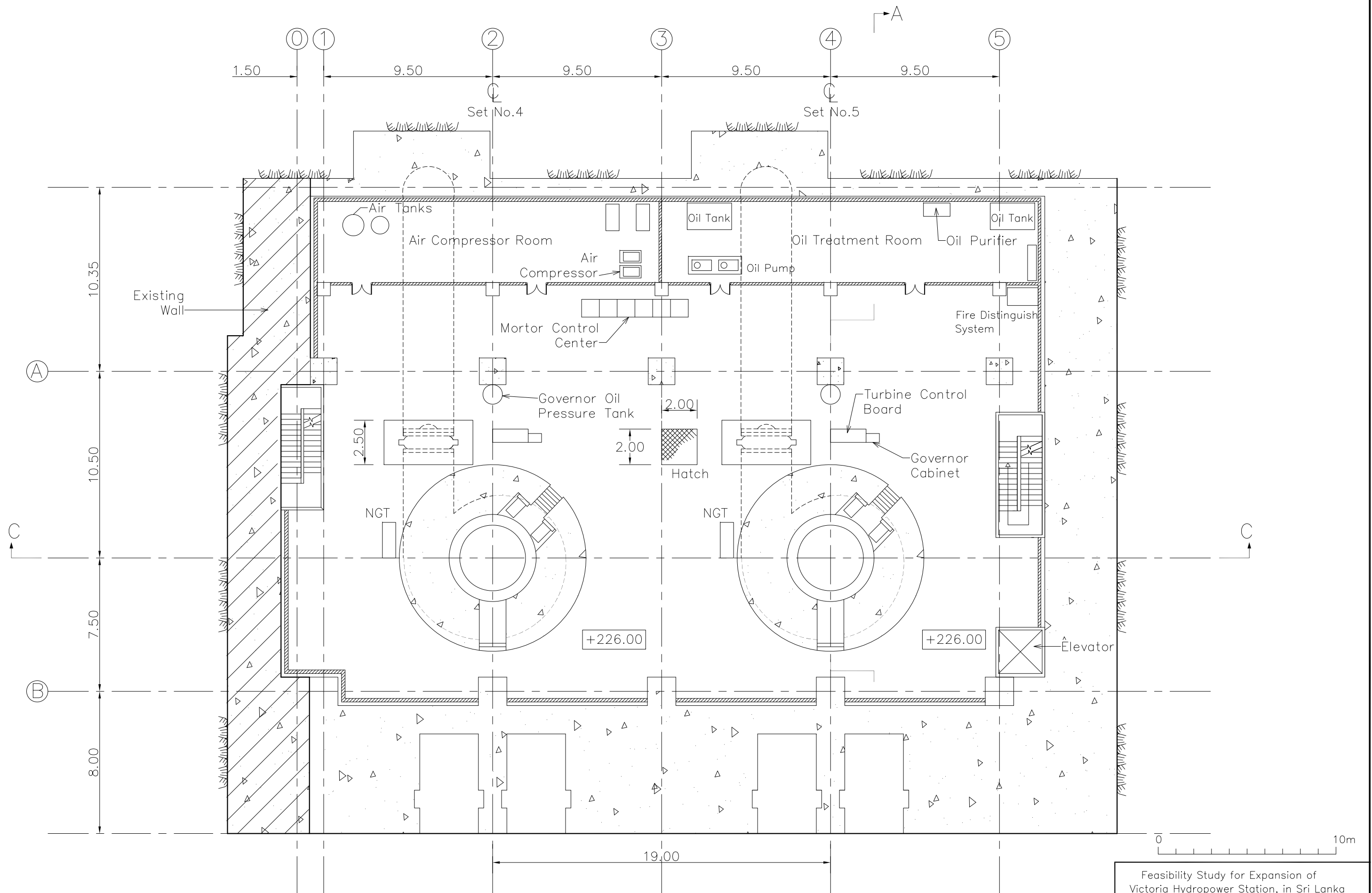
DATE: January 2009 Drawing 016



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE PLAN at ELEVATION 218.00	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 017



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE PLAN at ELEVATION 224.00	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 018

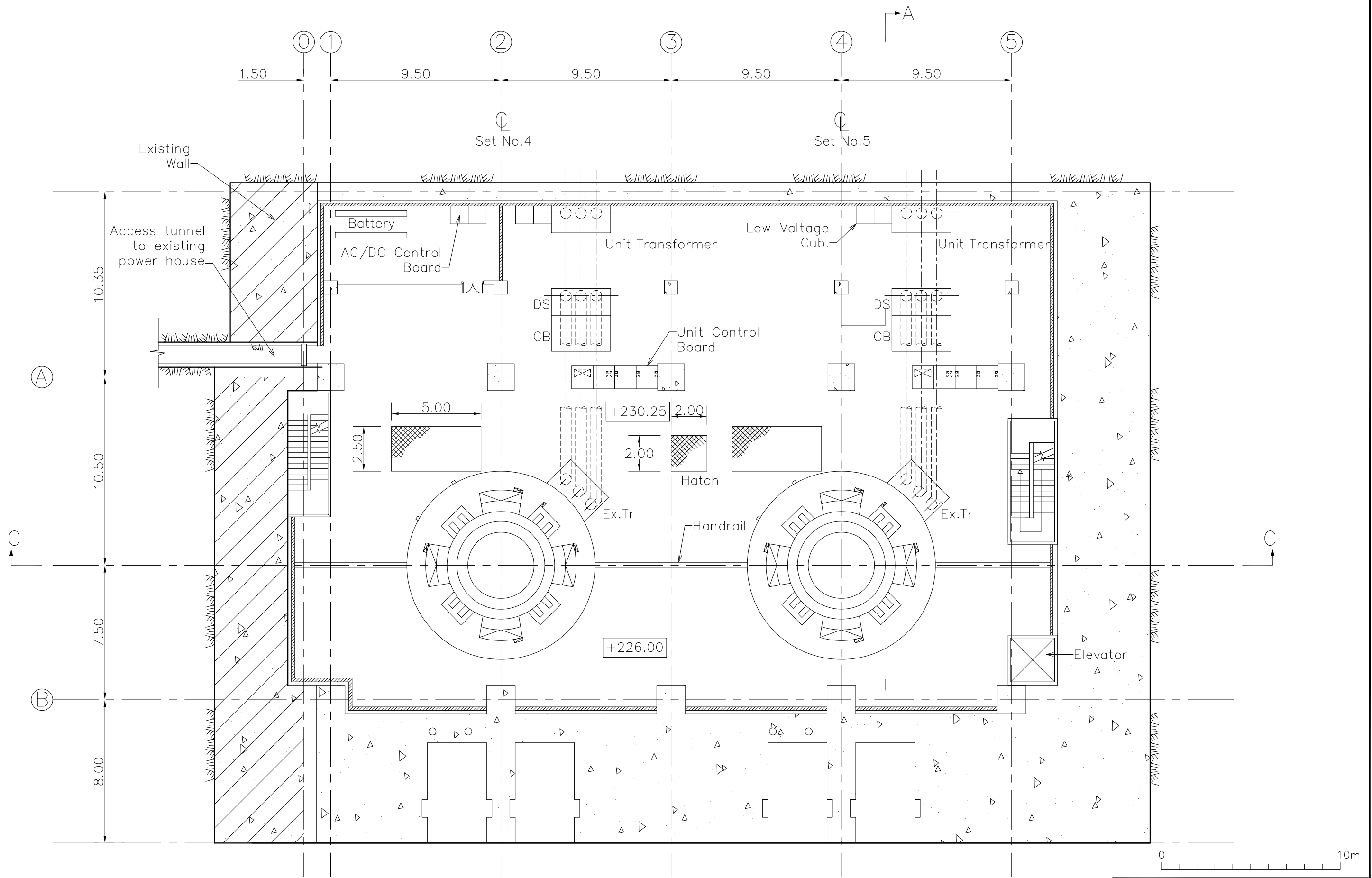


Feasibility Study for Expansion of
Victoria Hydropower Station, in Sri Lanka

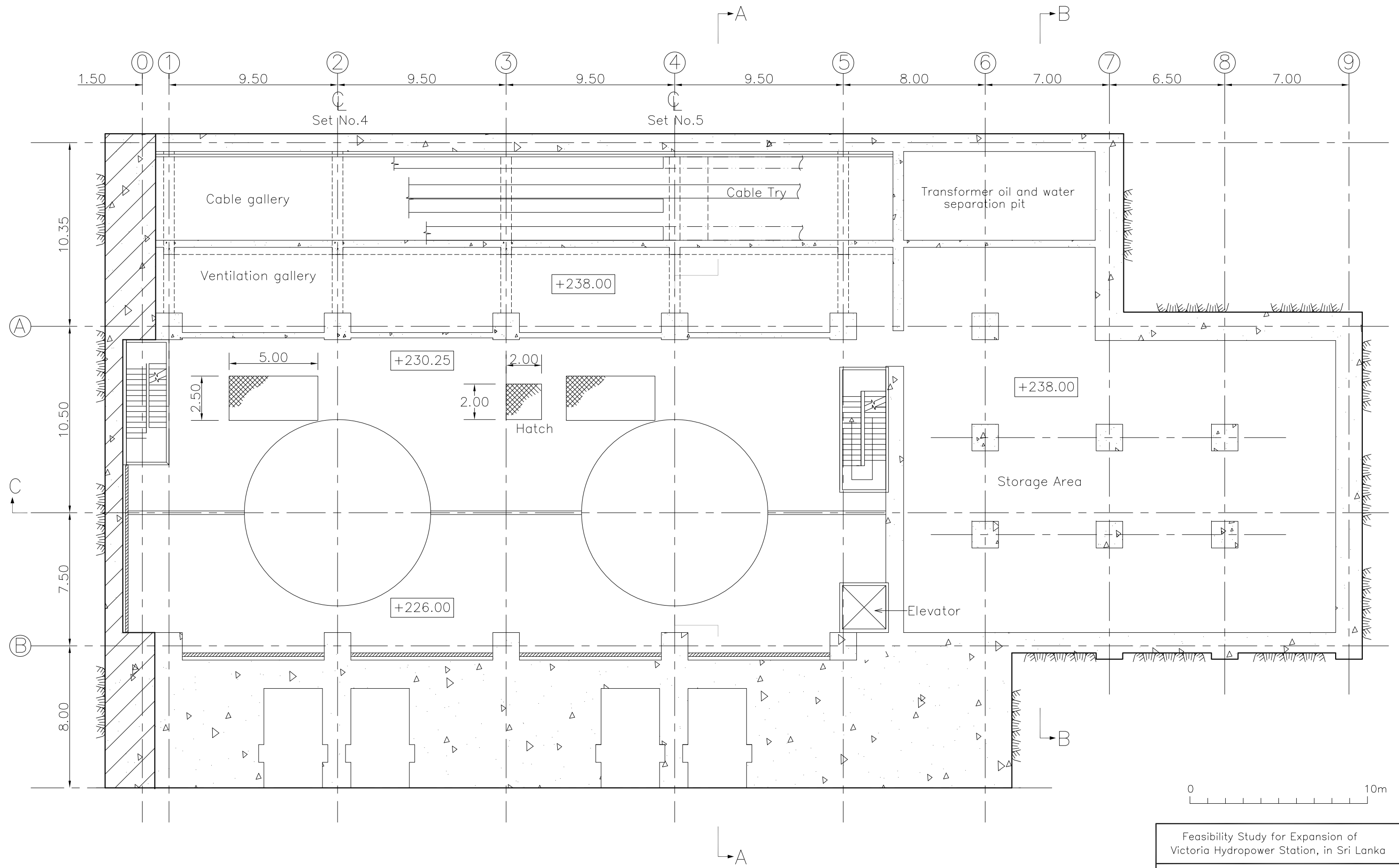
POWERHOUSE PLAN
at ELEVATION 226.00

Electric Power Development Co., Ltd.
& Nippon Koei Co., Ltd.

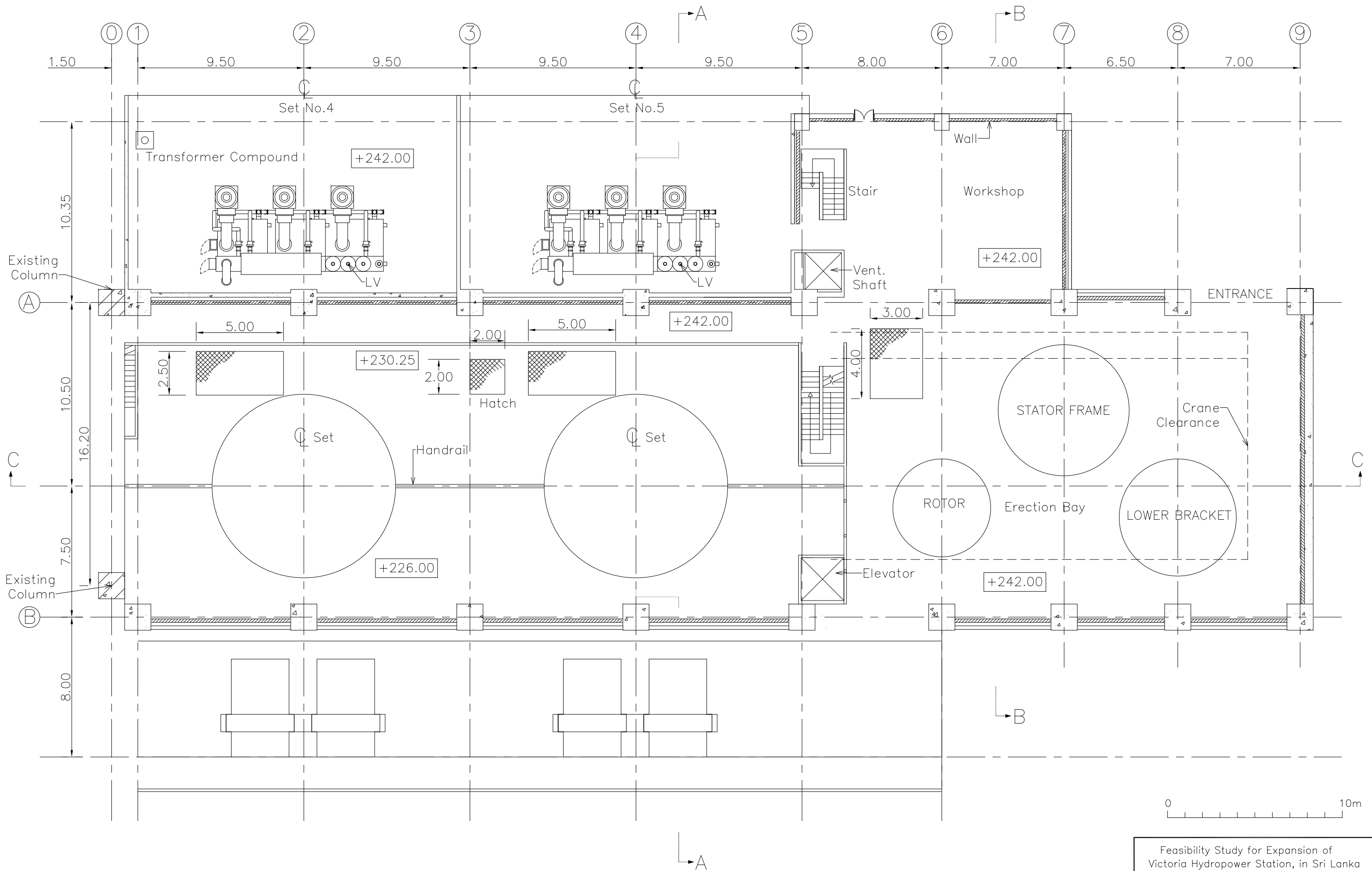
DATE: January 2009 Drawing 019



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE PLAN at ELEVATION 230.25	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 020



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE PLAN at ELEVATION 238.00	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 021

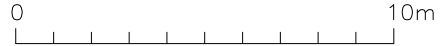
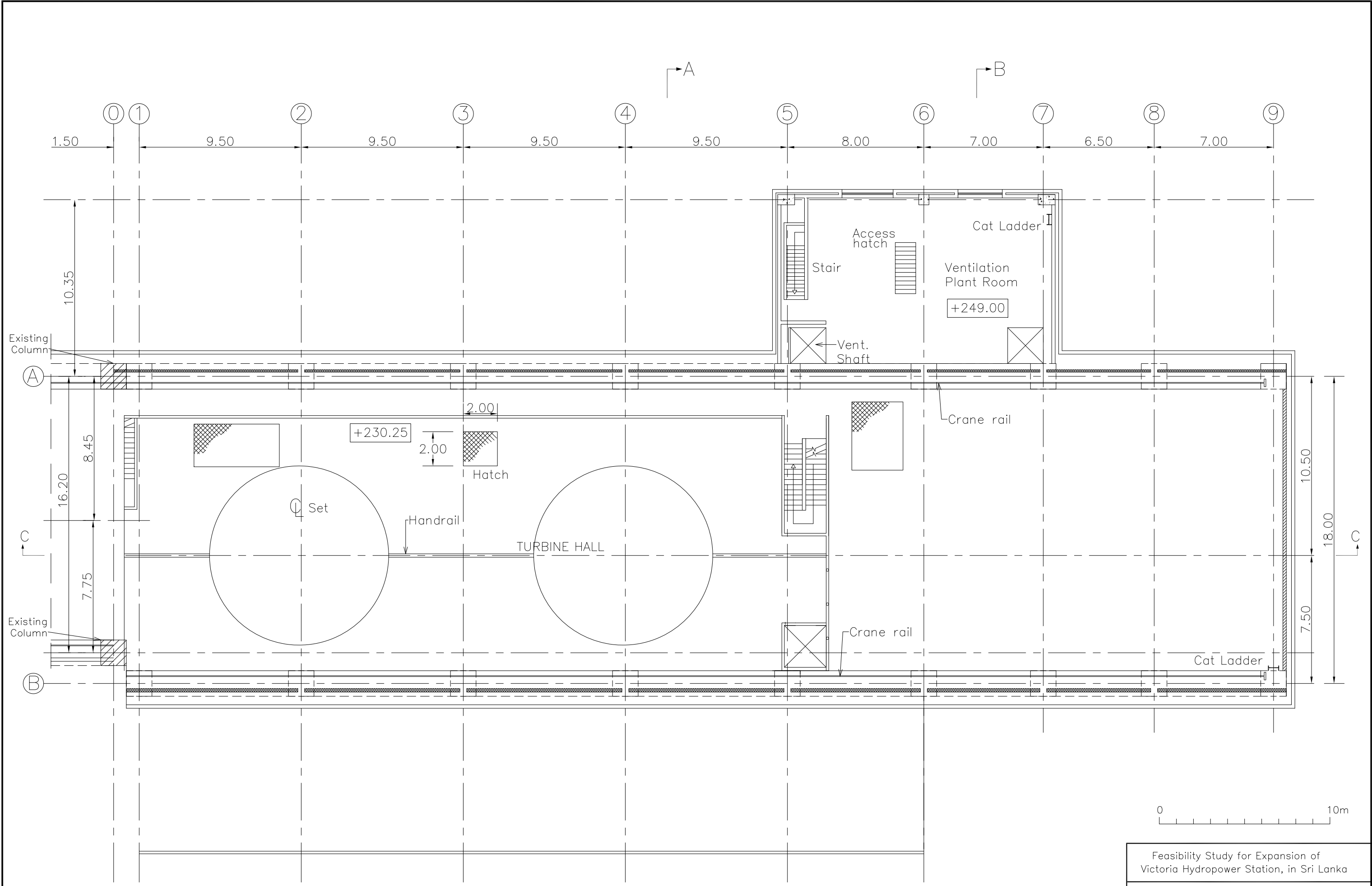


Feasibility Study for Expansion of
Victoria Hydropower Station, in Sri Lanka

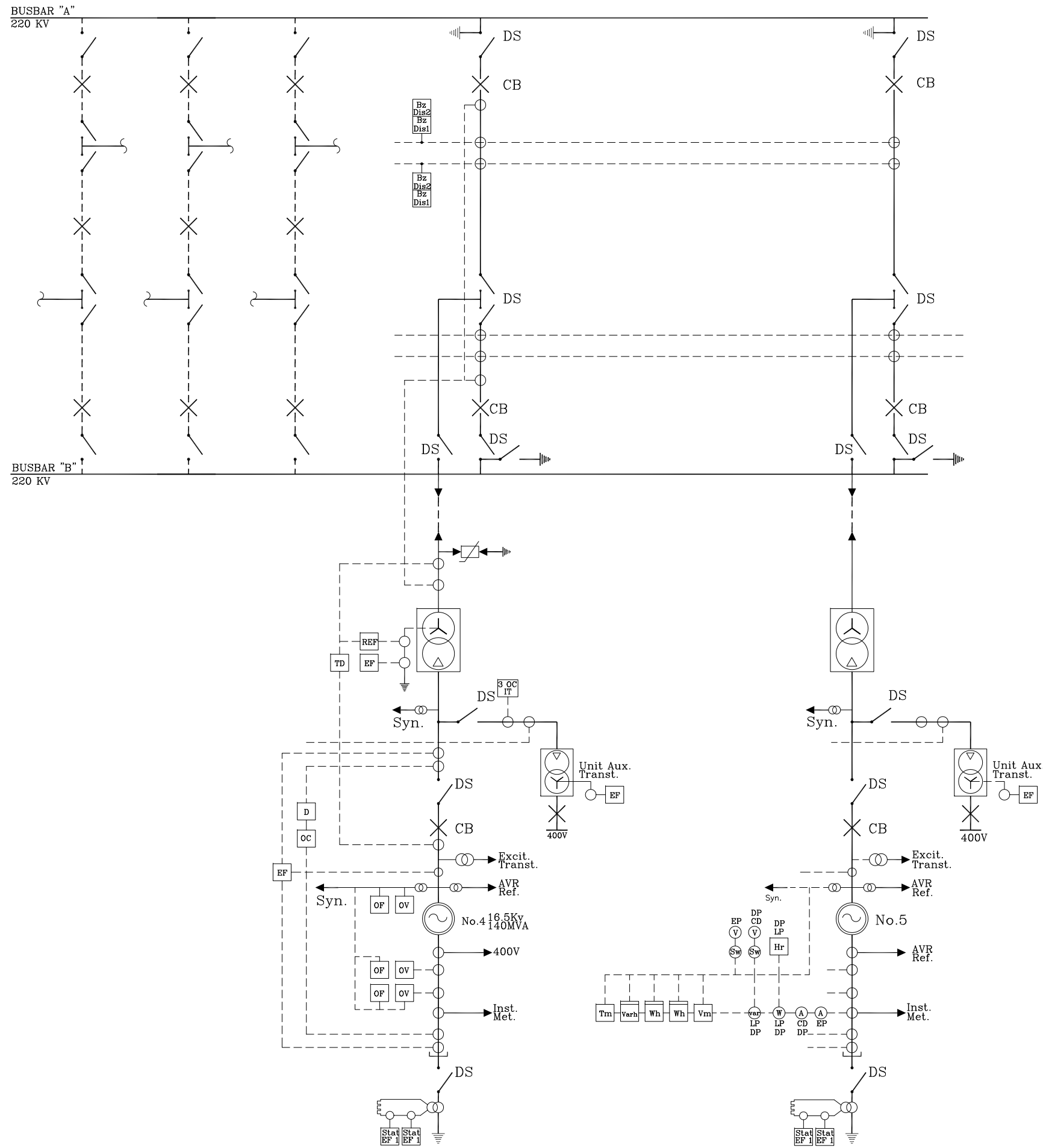
POWERHOUSE PLAN
at ELEVATION 242.00

Electric Power Development Co., Ltd.
& Nippon Koei Co., Ltd.

DATE: January 2009 Drawing 022



Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE PLAN at ELEVATION 249.00	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 023

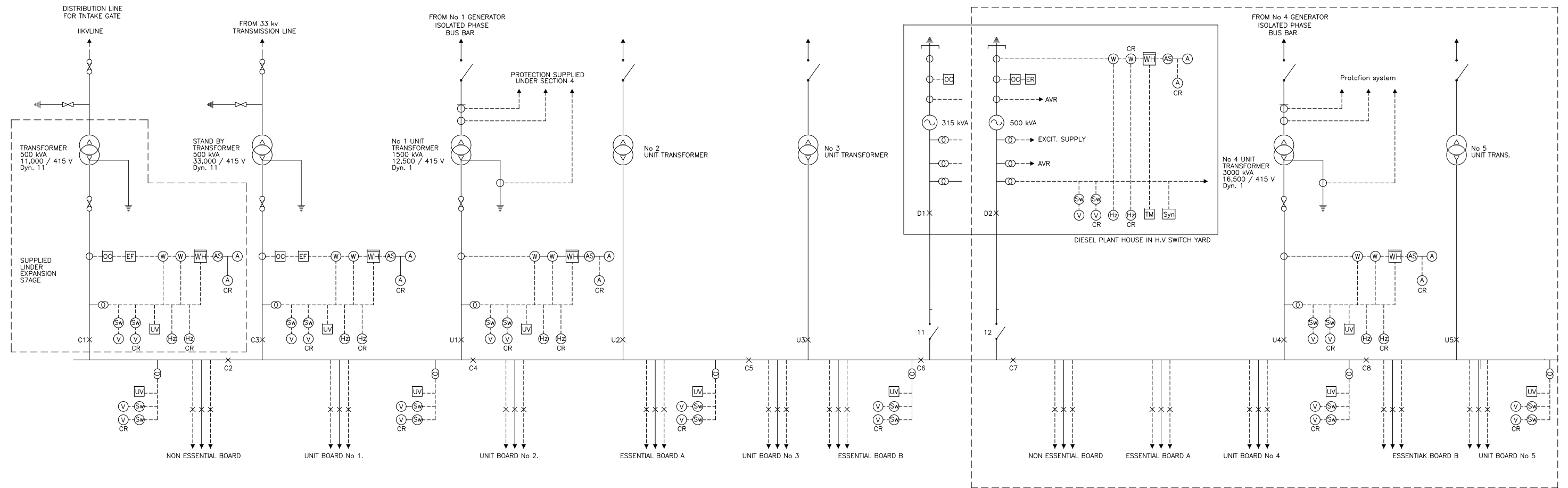


SUBSCRIPTS

- CD : Indicates Control Room
- LP : indicates unit Local Control Panel
- EP : Indicates Excitation Panel
- DP : Display Panel

LEGEND

- Bz Dis 1 : Bus bar protection Discriminating relay No. 1
- Bz Dis 2 : Bus bar protection Discriminating relay No. 2
- Bz Ch 1 : bus bar protection check relay No. 1
- Bz Ch 2 : bus bar protection check relay No. 2
- CC : High impedance circulating current relay
- EF : Inverve time earth fault
- REF : Restricted earth fault Differential protection
- OV : Over voltage relay
- OF : Generator transformer Over Fluxing protection
- NPS : Negative phase sequence
- VROC : Voltage restraint over current
- RP : Reverse power
- FF : Field falure
- Stat. EF : Stator earth fault protection
- Protn. : Protection equipment
- Syn. : Synchronising equipment
- Met. : Metering equipment
- Tm : Telemetering equipment
- Wh : Active energy meter
- Varh : Reactive energy meter
- Vm : Vector meter
- Var : Varmeter
- W : Wattmeter
- A : Ammeter
- V : Voltmeter
- Hr : Hours run meter
- Sw : Selector switch
- GD : Generator high impedance differential
- TD : Transformer differential
- CB : Circuit breaker
- DS : Disconnecting switch



400 V NON ESSENTIAL BOARD FEEDERS
CONTROL BLOCK LIGHTING & SMALL POWER FEESER No 2
POWER HOUSE " " " No 2
WORK SHOP DISTRIBUTION BOARD
STREAM LINE FILTER SOCKETS
UNIT LIGHTING & HEATING DISTRIBUTION No 1
" " " " No 2
" " " " No 3
OVERHEAD CRANE
DRAFT TUBE GATE GANTRY CRANE
SEWAGE TREATMENT EQUIPMENT
WATER TREATMENT EQUIPMENT
OIL PURIFIRE EQUIPMENT
SWITCH YARD LIGHTING & HEATIN DISTRIBUTION BOARD
NON ESSENTIAL & ESSENTIAL BOARDS LIGHTING & HEATING SUPPLIES
PLUS 6 SPARE FEEDERS

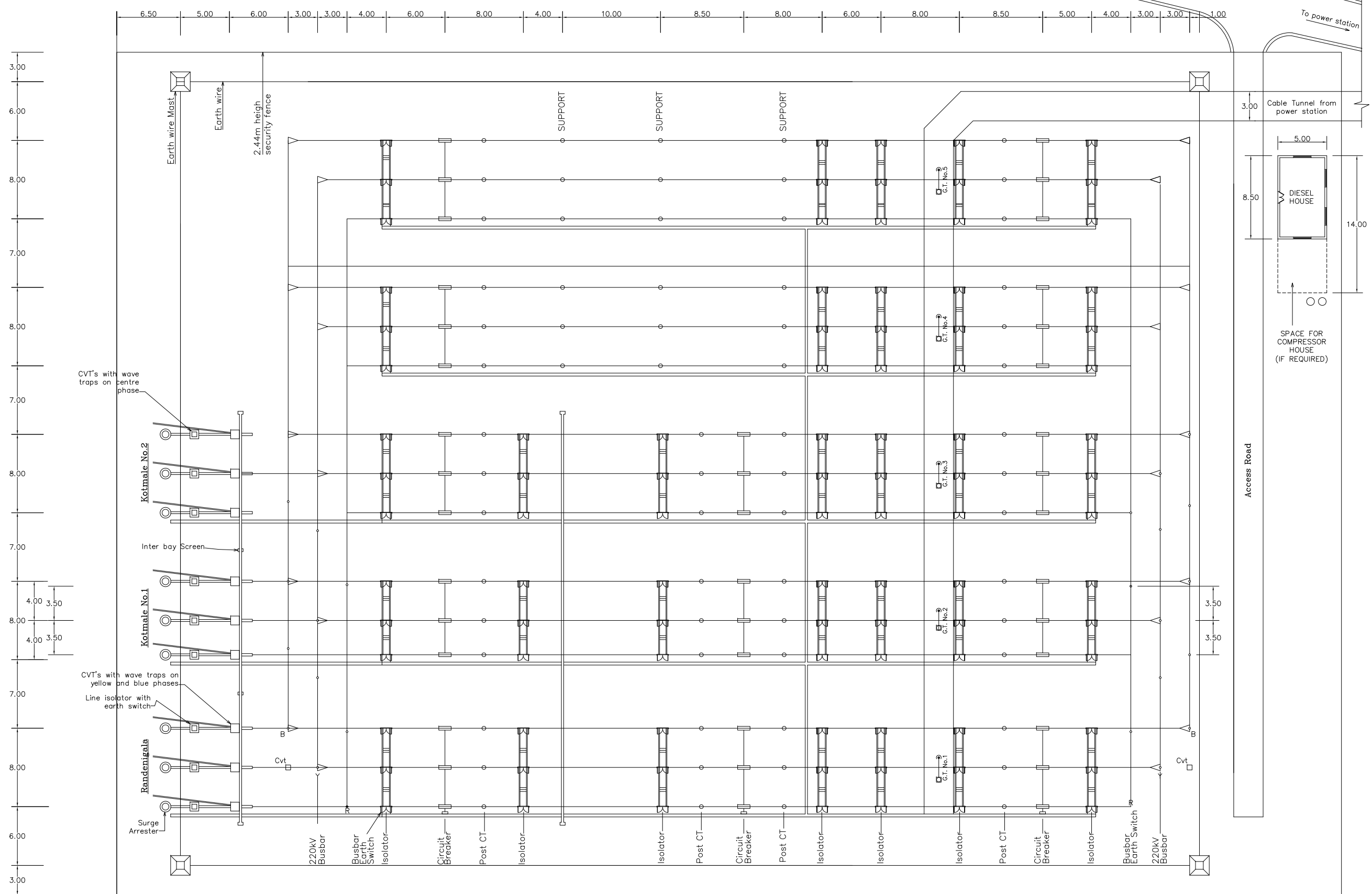
400 V ESSENTIAL BOARD (SECTION A) FEEDERS
230 V BATTERY CHARGER No 1
50 V " " " No 1
DRAINAGE / DEWATERING FEEDER No 1
COMMUNICATION EQUIPMENT
STATION H.P. COMPRESSOR No 1
POWER HOUSE LIGHTING & S.P. FEEDER No 1
CONTROL BLOCK " " " " No 1
POWER HOUSE VENTILATION PLANT ROOM
POWER HOUSE EXTRACT VETILATION FANS
PORTAL VALVE FEEDER No 1
INLET VALVE OIL PUMP FEEDER No 01
PLUS 4 SPARE FEEDERS

400 V ESSENTIAL BOARD (SECTION B) FEEDERS
230 V BATTERY CHARGER No 2
50 V " " " No 2
DRAINAGE / DEWATERING FEEDER No 2
FIRE FIGHTING PUMP & EMERG. WATER SUPPLY
STATION H.P. COMPRESSOR No 1
CONTROL BLOCK AIR CONDITIONING PLANT
TRANSFORMER OIL STORAGE TANK PUMPS
PORTAL VALVES FEEDER No 2
DIESEL PLANT HOUSE BATTERY CHARGER
INLET VALVE OIL PUMP FEEDER No 2
FIRE DETECTION PANEL (CABLE GALLERY)
" " " (CONTROL BLOCK)
" " " (TRANSFORMERS)
" " " (DIESEL PLANT HOUSE)
" " " (MACHINE HALL)
STATION SIREN SUPPLY
PLUS 4 SPARE FEEDERS

UNIT BOARD FEEDERS
EQUIPMENT
GOVERNOR OIL PUMP No 1
" " " " No 2
OIL INJECTION PUMP No 1
" " " " No 2
BRAKES AIR COMPRESSOR
GENERATOR SPACE HEATERS
EXCITATION EQUIPMENT
GREASE PUMP
COOLING WATER EQUIPMENT
ISOLATED PHASE BUSBAR COMP
TRANSFORMER FANS
FLOW METERING EQUIPMENT
UNIT RECORDERS
PLUS 4 SPARE FEEDERS

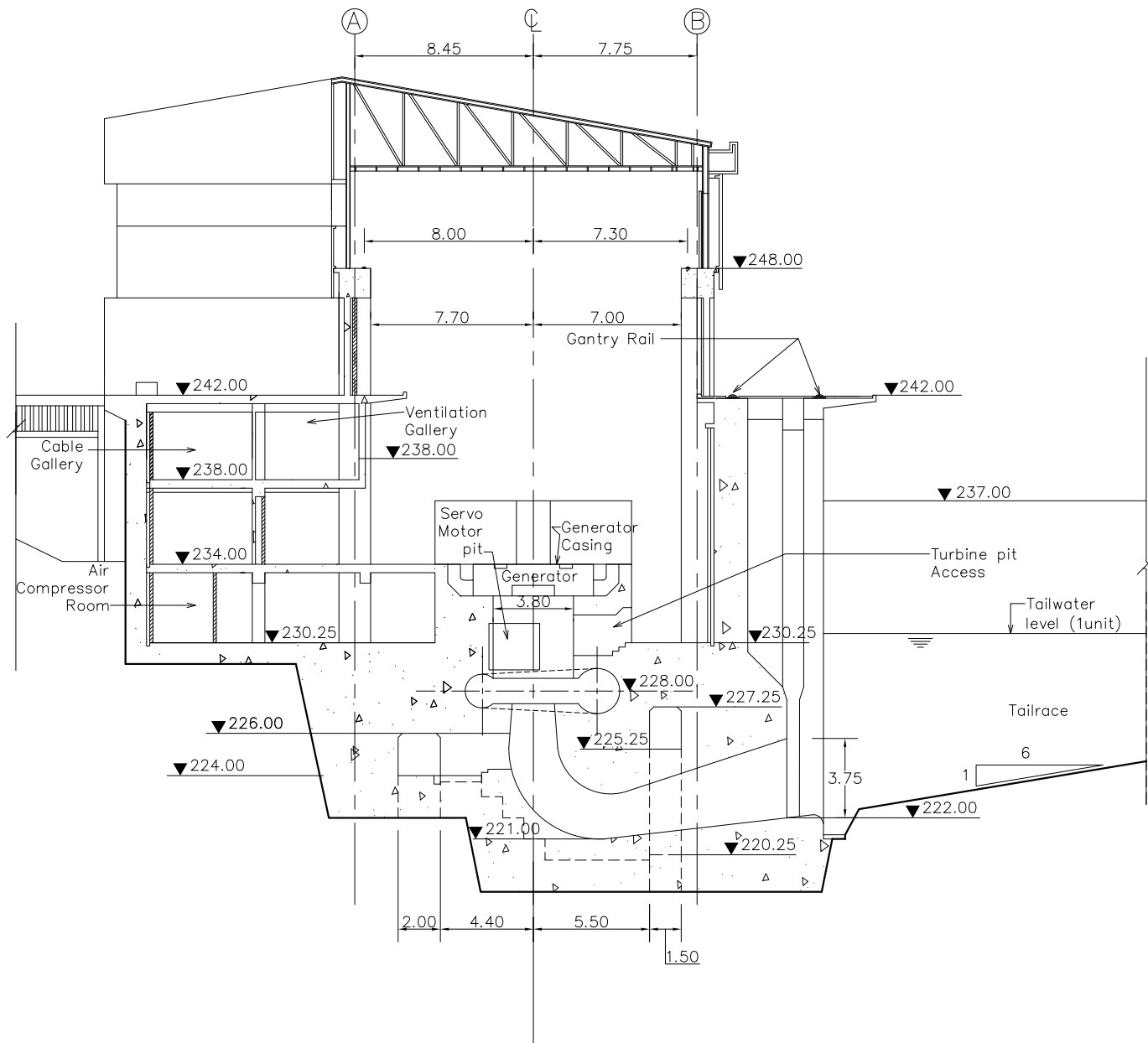
LEGEND
CR: indicates Control room meter (Supplied under Section 4)
UV: Under Voltage relay
V: Voltmeter
Sw: Selection Switch
Hz: Frequency meter
W: Water meter
EF: Earth fault relay
OC: Over current relay (3 pole)
WH: Watthour meter
AS: Ammeter switch
A: Ammeter
Syn: Synchronizing check relay
TM: Time meter

Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
400 VOLT SYSTEM SINGLE LINE DIAGRAM	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 025

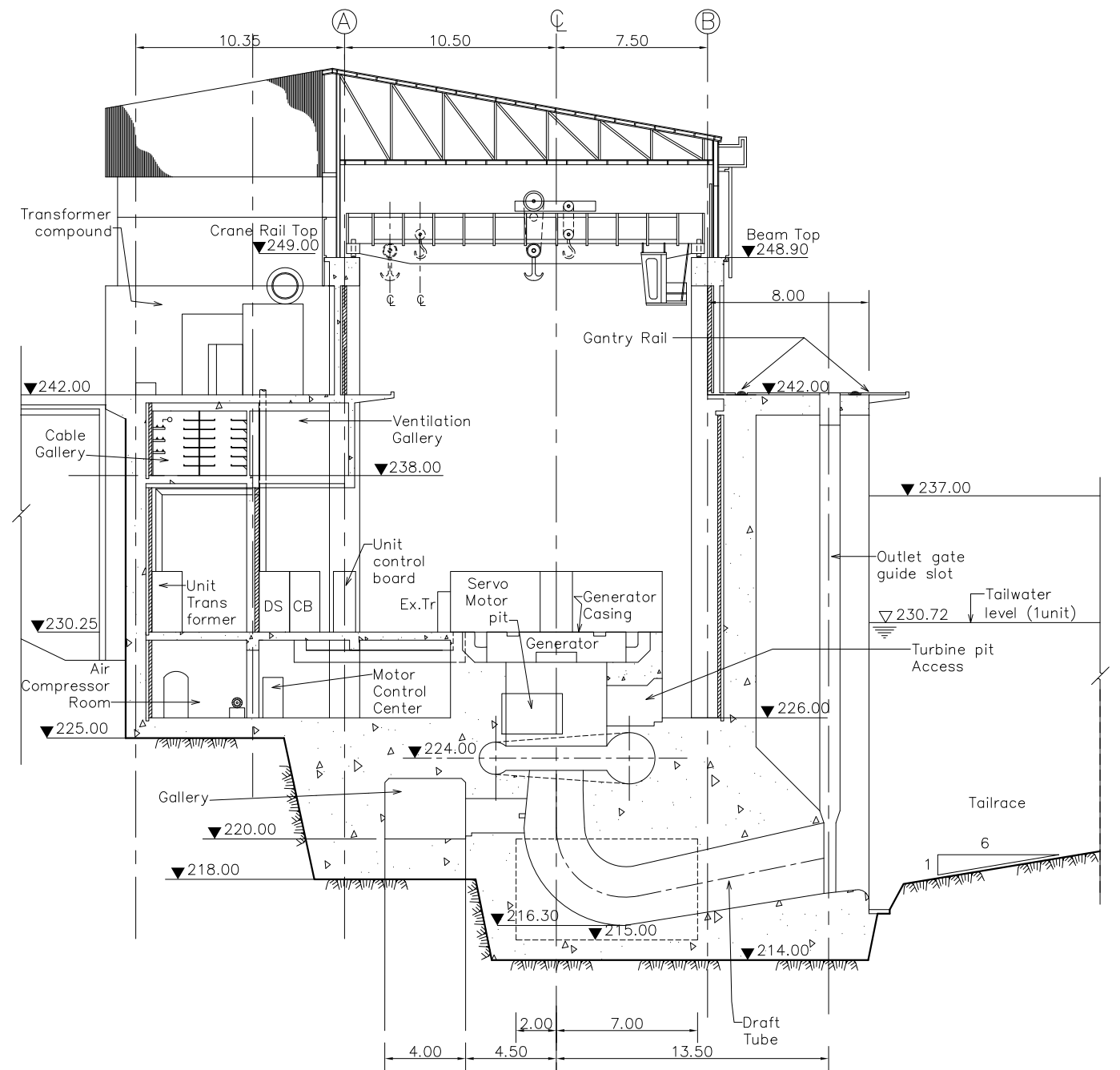


PLAN OF 220kV SWITCHYARD

Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
SWITCHYARD PLAN OF 220kV SWITCHYARD	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 026



EXISTING

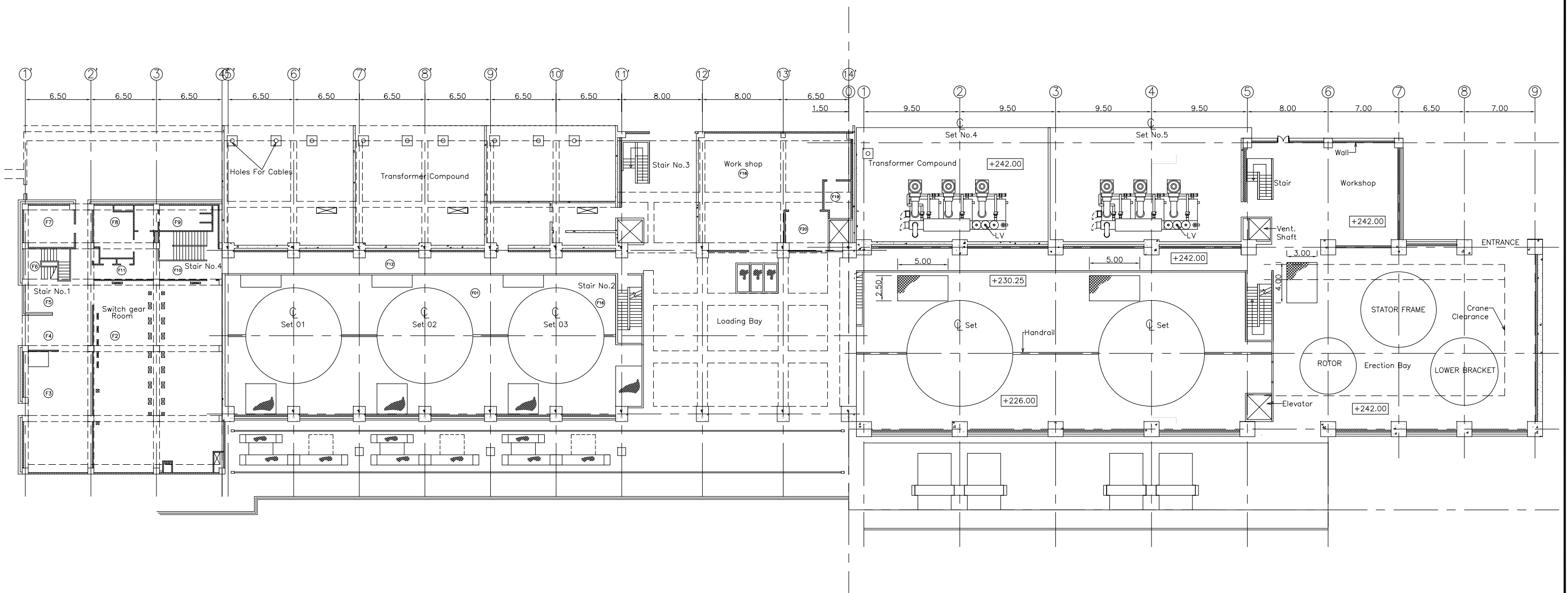


EXPANSION

Feasibility Study for Expansion of Victoria Hydropower Station, in Sri Lanka	
POWERHOUSE COMPARISON OF SECTION	
Electric Power Development Co., Ltd. & Nippon Koei Co., Ltd.	
DATE: January 2009	Drawing 027

EXISTING

EXPANSION



Feasibility Study for Expansion of
Victoria Hydropower Station, in Sri Lanka

POWERHOUSE COMPARISON OF PLAN
at ELEVATION 242.00

Electric Power Development Co., Ltd.
& Nippon Koei Co., Ltd.

DATE: January 2009

Drawing 028