

**Reference Drawings:**

1. Requirement on the size of shielding and air clearances for valve hall and DC yard (Document No.1JNL100129-668 Rev.01)
2. Insulation Coordination (Document No.1JNL100126-008 Rev.07)
3. Main Circuit Single Line Diagram, Agra (Document No.1JNL100122-185 Rev.06)

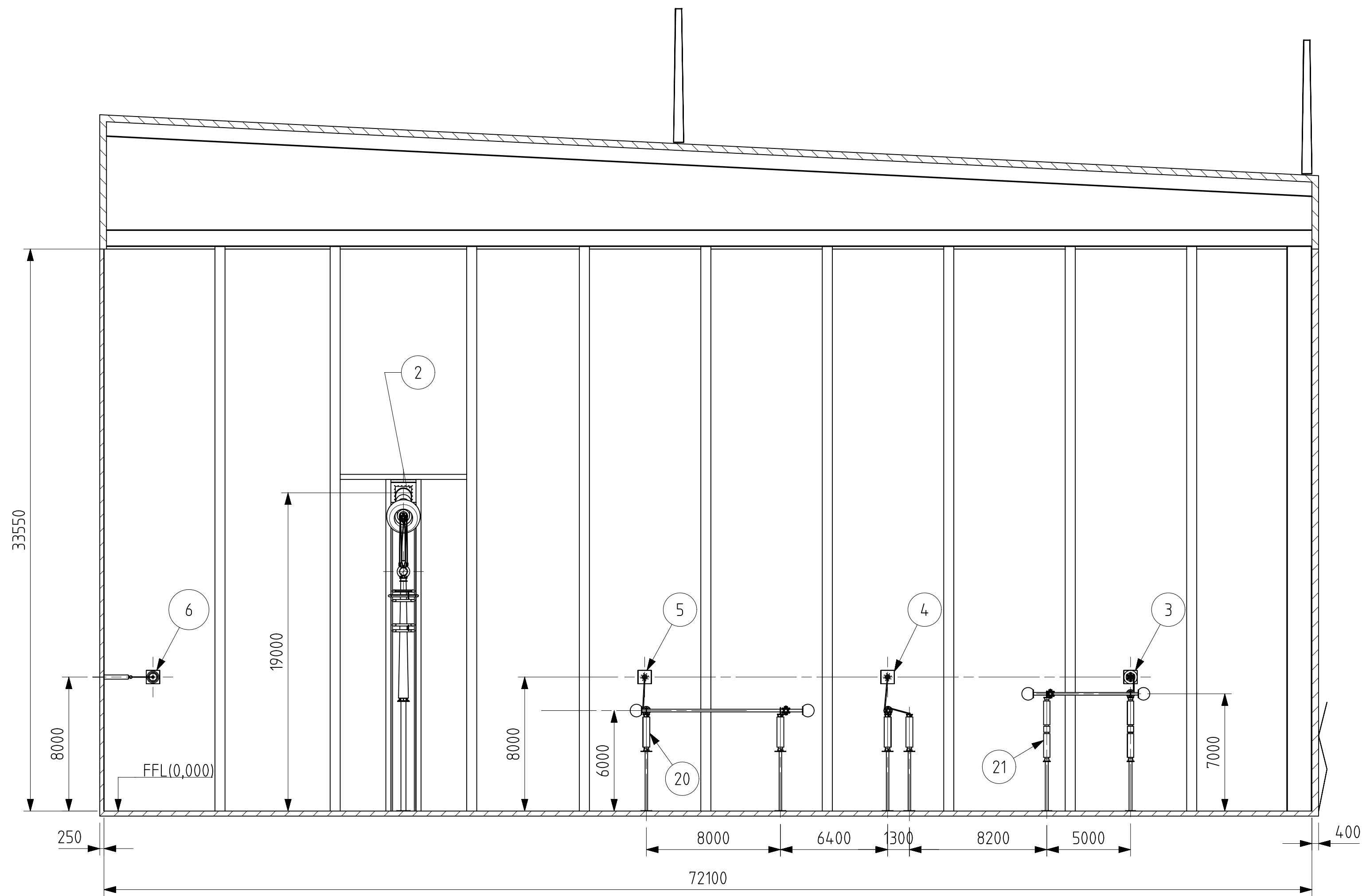
**NOTE:**

- SECTION B-B SEE SHEET NO 2
- SECTION C-C SEE SHEET NO 3
- SECTION D-D SEE SHEET NO 2
- SECTION E-E SEE SHEET NO 3
- SECTION F-F SEE SHEET NO 4
- SECTION H-H SEE SHEET NO 4
- SECTION J-J SEE SHEET NO 4

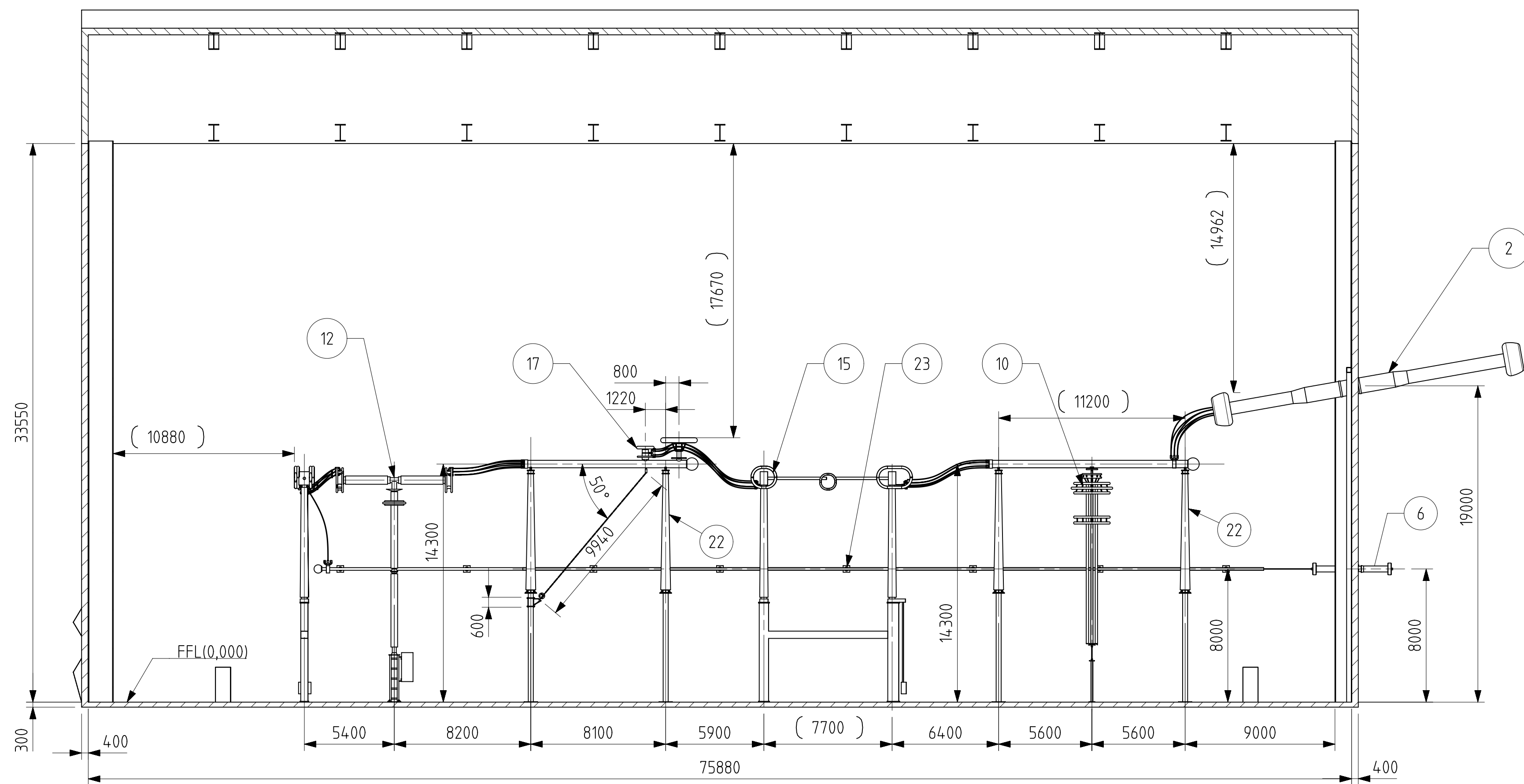
**PRELIMINARY DRAWING**

Contract No: C-61901R-S056-8/CA-I/3659	
Client: POWER GRID CORPORATION OF INDIA LIMITED (A government of India Enterprise)	
Based on: -	Project name: ± 800KV, 6000 MW HVDC MULTI TERMINAL
Prepared: Prabakaran, Rajan 2012-07-31	NER/ER-NR/WR INTERCONNECTOR-1
Approved: -	Item designation: -
Title: DC Hall Pole 2 Layout and sections	Status: Issued
Resp. dept: PSDC/TPM	Rev. ind: 01
Document number: 1JNL100401-306	Language: -
ABB ABB AB - HVDC	
1JNL100401-306	
Sheet for 1 / 6	

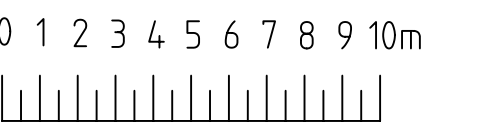
01	Updated as per powergrid comments 30.03.2012	SK, Loganathan	2012-07-31
Rev	Revision	Approved	Date



SECTION B-B



SECTION D-D



\*FFL - Finished Floor Level

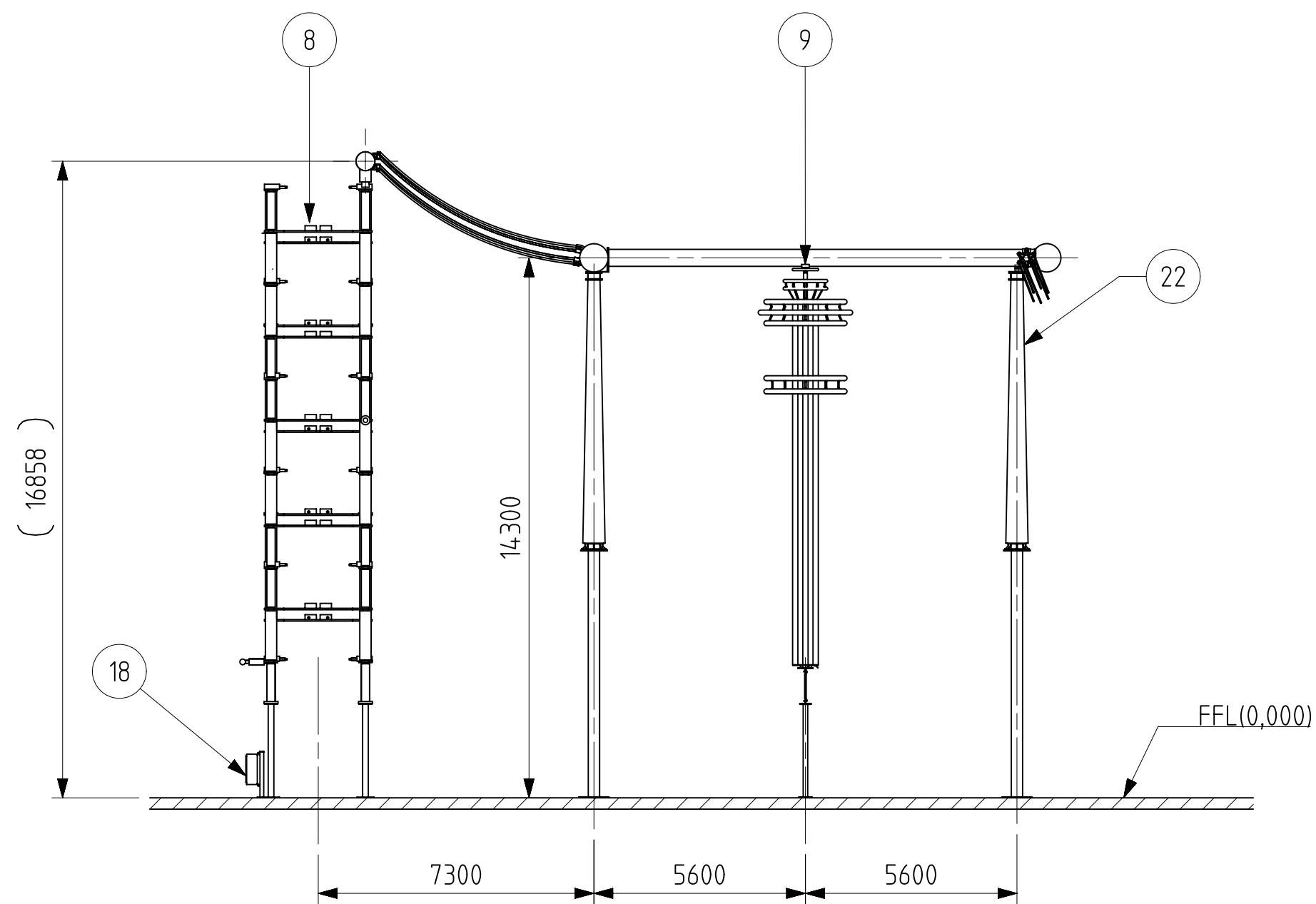
PRELIMINARY DRAWING

Contract No: C-61901R-S056-8/CA-I/3659	
Client: POWER GRID CORPORATION OF INDIA LIMITED (A government of India Enterprise)	
Project name: ± 800KV, 6000 MW HVDC MULTI TERMINAL NER/ER-NR/WR INTERCONNECTOR-1	
Based on: -	Prepared: Prabakaran, Rajan 2012-07-31
Approved: -	Approved: -
Title: DC Hall Pole 2 Layout and sections	Status: Issued
Resp dept: PSDC/TPM	Rev ind: 01
Document number: 1JNL100401-306	Language: -
ABB AB - HVDC	
Sheet for 2 / 6	

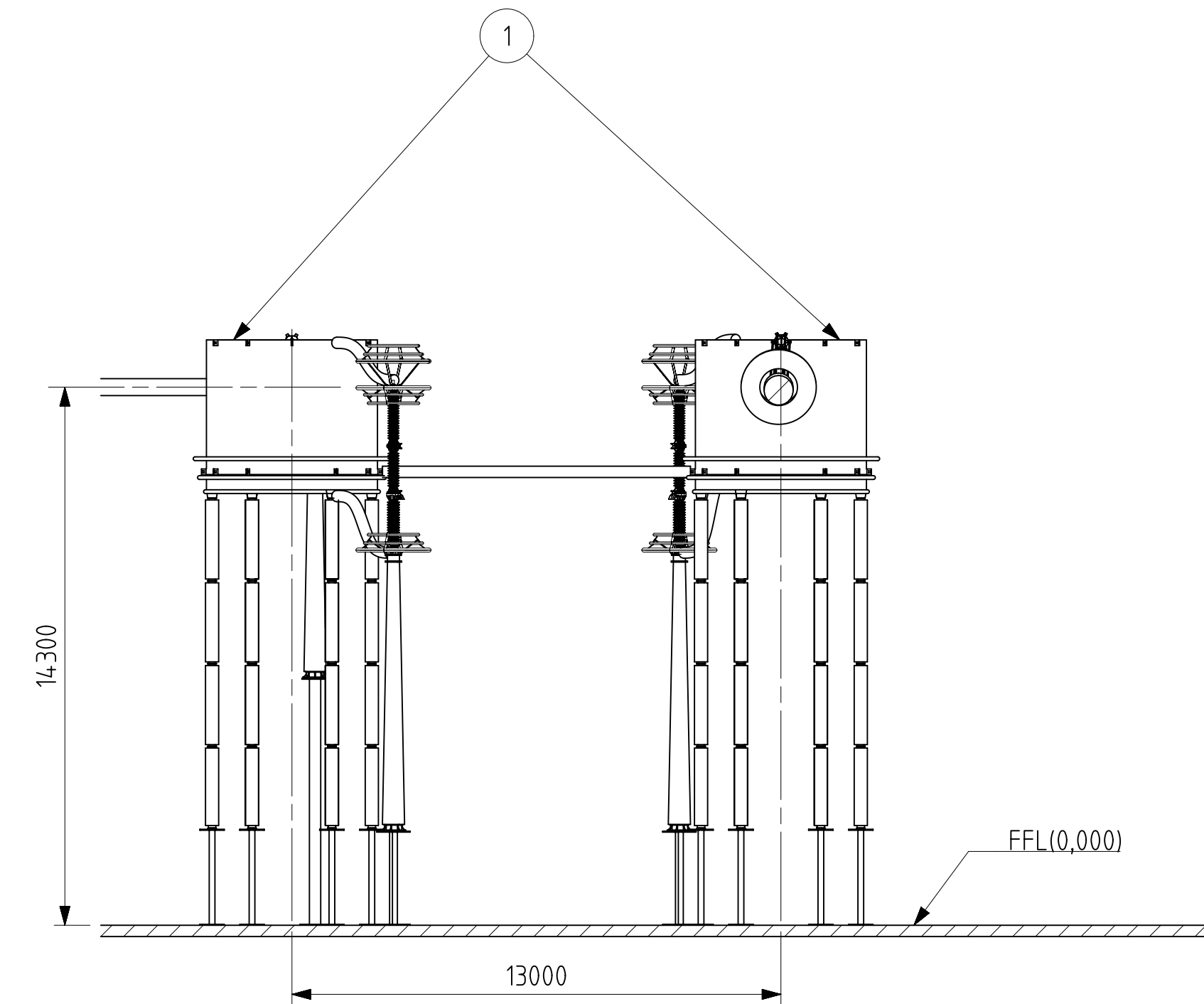
01	Updated as per powergrid comments 30.03.2012	SK, Loganathan	2012-07-31
Rev	Revision	Approved	Date

We reserve all rights in this document and in the system. The original and all copies are the property of the client and shall be returned to the client upon completion of the project. A license agreement is for reference.

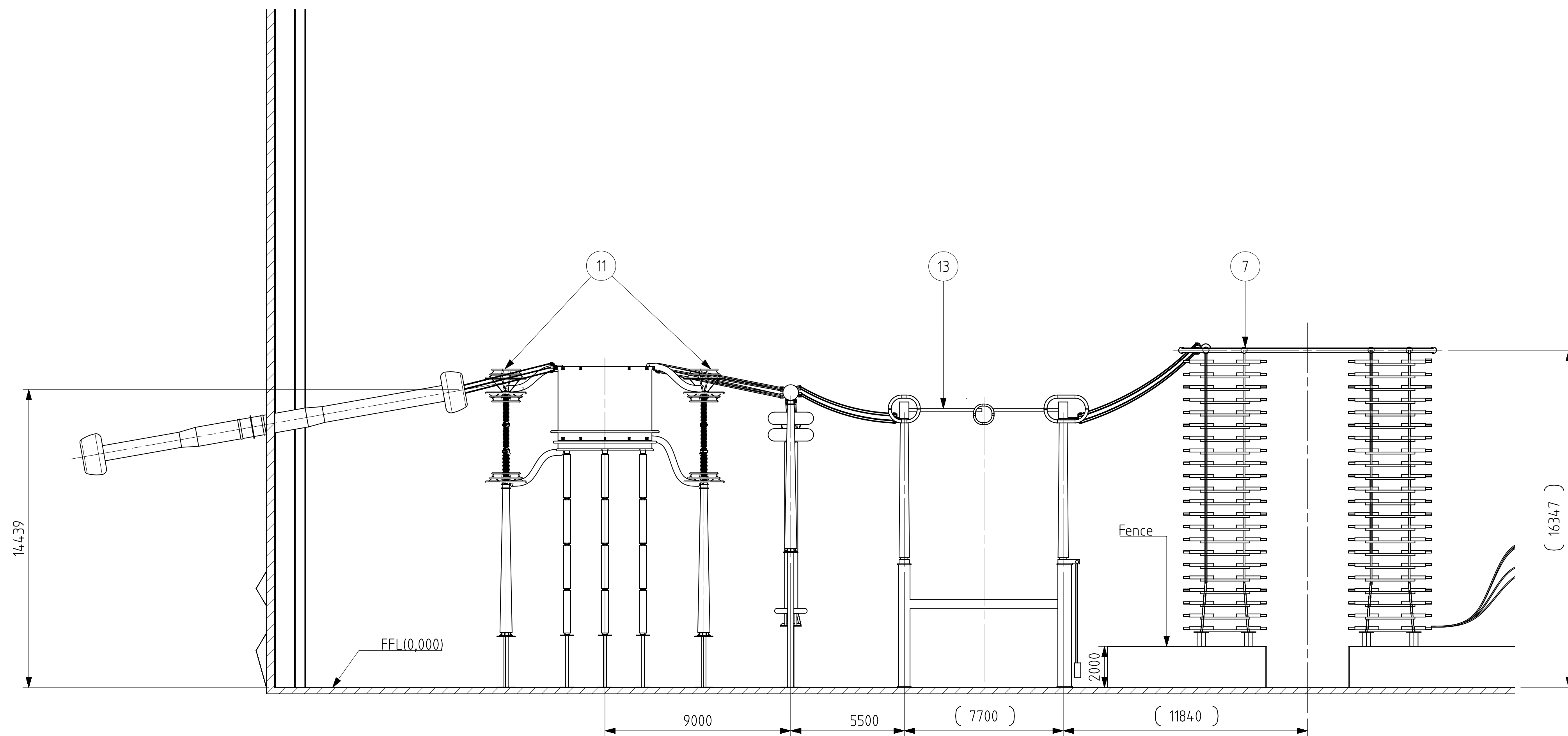
The design is based on the basis of a preliminary design. The design is subject to change without any notice. A license agreement is for reference.



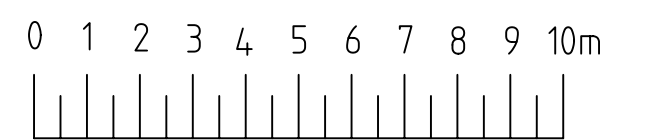
SECTION E-E



SECTION C-C



SECTION F-F

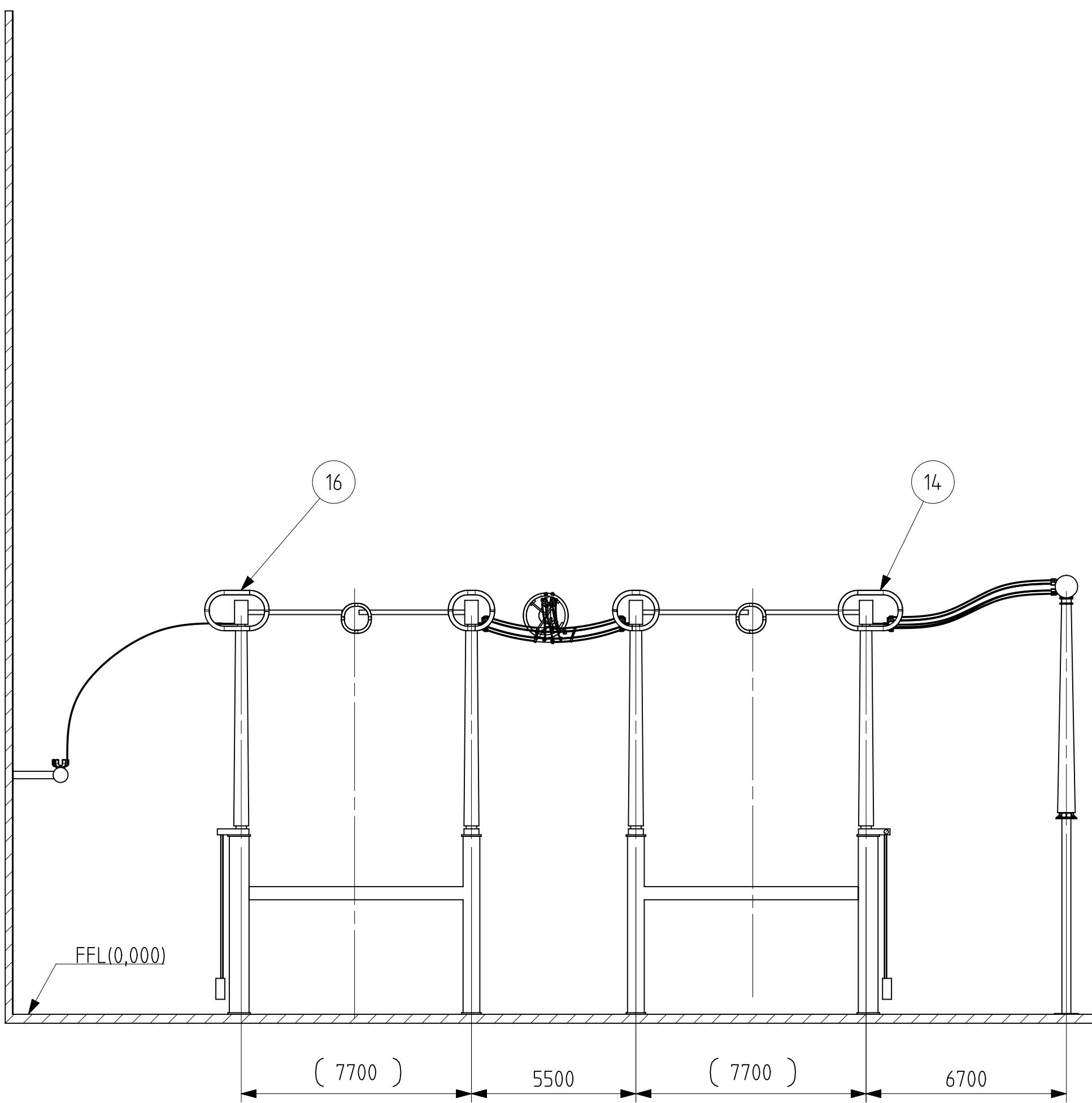


\*FFL - Finished Floor Level

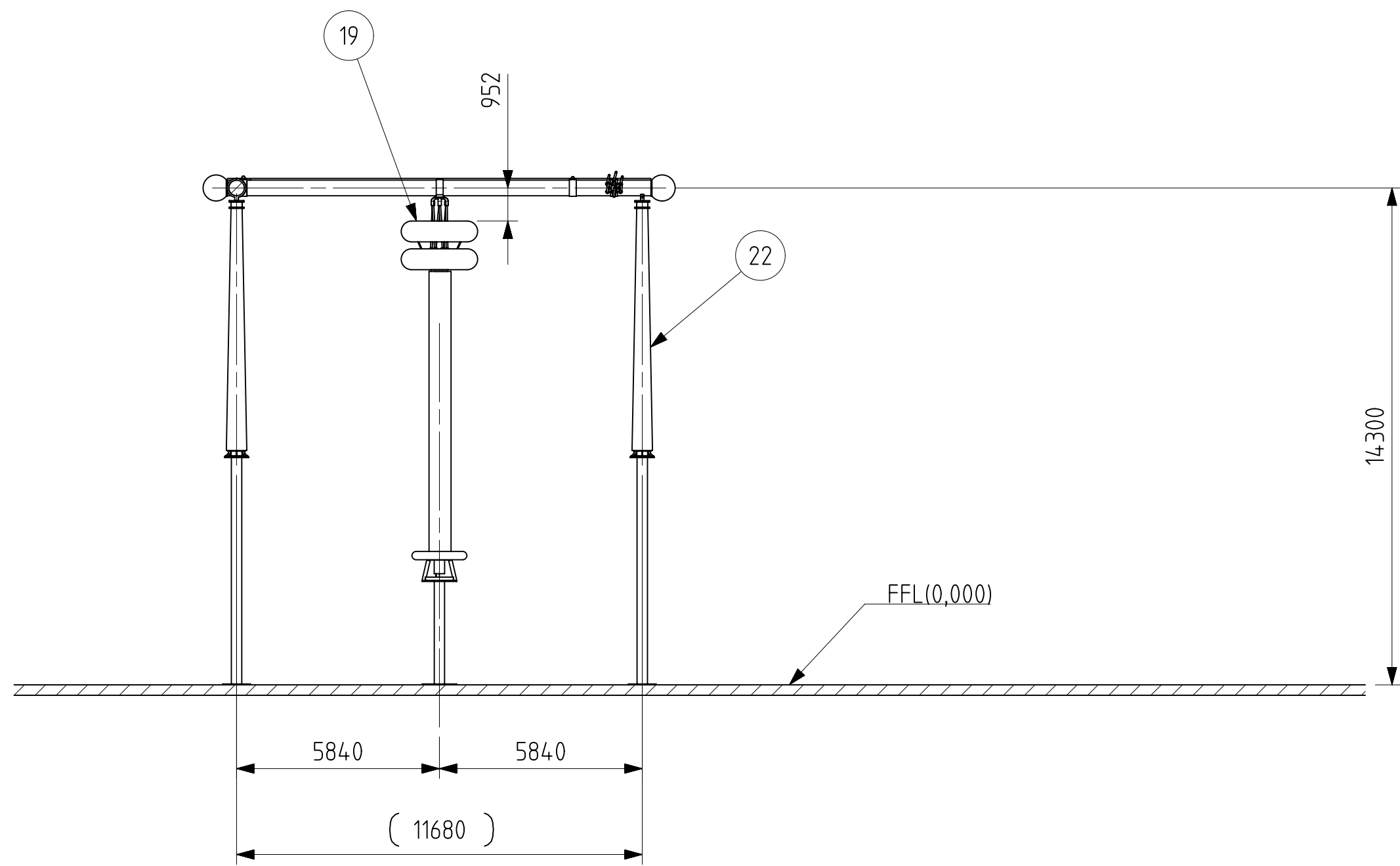
PRELIMINARY DRAWING

Contract No: C-61901R-S056-8/CA-I/3659			
Client: POWER GRID CORPORATION OF INDIA LIMITED (A government of India Enterprise)			
Based on: -		Project name: ± 800KV, 6000 MW HVDC MULTI TERMINAL	
Prepared: Prabakaran, Rajan		2012-07-31	
Approved: -		NER/ER-NR/WR INTERCONNECTOR-1	
Title: DC Hall Pole 2 Layout and sections		Status: Issued	
Agra station		Rev ind 01	
Resp dept: PSDC/TPM		Language: -	
Document number: 1JNL100401-306		Sheet for 3 / 6	
01 Updated as per powergrid comments 30.03.2012		SK, Loganathan 2012-07-31	
Rev		Date	
Revision		Date	
ABB		ABB AB - HVDC	

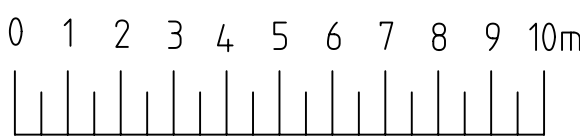
This drawing is issued by means of a computerized system. The original signed version is electronically stored and is not subject to any change or alteration. A manual signature is not required.



SECTION H-H



SECTION J-J



\*FFL - Finished Floor Level

PRELIMINARY DRAWING

01	Updated as per powergrid comments 30.03.2012	SK, Loganathan	2012-07-31
Rev	Revision	Approved	Date

Contract No: C-61901R-S056-8/CA-I/3659		Client: POWER GRID CORPORATION OF INDIA LIMITED (A government of India Enterprise)	
Based on: -	Prepared: Prabakaran, Rajan	2012-07-31	Project name: ± 800KV, 6000 MW HVDC MULTI TERMINAL NER/ER-NR/WR INTERCONNECTOR-1
Approved: -	Status: Issued		
Title: DC Hall Pole 2 Layout and sections Agra station		Resp dept: PSDC/TPM	Rev ind: 01
Document number: 1JNL100401-306		Language: -	
ABB ABB AB - HVDC		Sheet for 4 / 6	



Qty	Item no	Item designation	Name of item
2	1	=P2.WP.L(1,2)	Smoothing reactor(Pole)
1	2	=WB2.X1	Pole Bus Wall bushing (indoor-outdoor)
1	3	=P2.Z1.Z1.X1	HP2/6 DC filter Wall bushing (indoor-outdoor)
1	4	=P2.Z1.Z2.X1	HP12/24 DC filter Wall bushing (indoor-outdoor)
1	5	=P2.Z1.Z3.X1	ST/RI DC filter Wall bushing (indoor-outdoor)
1	6	=P2.WN.X1	Wall Bushing, neutral
1	7	=P2.(Z1,Z2,Z3).C1	HP2/6, HP12/24 ST/RI DC filter capacitor (indoor)
1	8	=P2.WP.C1	DC PLC/RI capacitor
1	9	=P2.WP.F2	DC pole arrester
1	10	=WB2.F3	DC line arrester
1	11	=P2.WP.F(1,4)	Smoothing reactor arrester (DR)

Contract No: C-61901R-S056-8/CA-I/3659

Client:

**POWER GRID CORPORATION OF INDIA LIMITED**  
( A government of India Enterprise)



01	Updated as per powergrid comments 30.03.2012				SK, Loganathan		2012-07-31	
Rev	Revision				Approved			
Based on		-		Title DC Hall Pole 2 Layout and sections Agra station	Status Issued		Item designation -	
Prepared		Prabakaran, Rajan 2012-07-31			Resp dept PSDC/TPM		Rev ind 01	
Approved		-			Language		-	
Project name ± 800KV, 6000 MW HVDC MULTI TERMINAL NER/ER-NR/WR INTERCONNECTOR-1				ABB AB - HVDC		Document number 1JNL100401-306		
						Sheet/of		5 / 6


Qty	Item no	Item designation	Name of item
1	12	=WB2.Q1	DC pole high speed switch
1	13	=P2.Z1.Q11	DC filter disconnector with 1 earth switch, pole side
1	14	=P2.WP.Q11	Disconnector with 1 earth switch, pole side
1	15	=WB2.Q12	DC pole disconnector
1	16	=WB2.Q13	DC disconnector, pole
1	17	=WB2.T3	Optical current transducer (COCT), pole bus
1	18	=P2.WP.T1	Trigger unit LFL Junction box
1	19	=P2.WP.T2	pole bus voltage divider
6	20		Bus Support Insulator, neutral
3	21		Bus Support Insulator, neutral
7	22		Bus post Insulator, Pole
8	23		Wall mounted insulator

Contract No: C-61901R-S056-8/CA-I/3659

Client:

**POWER GRID CORPORATION OF INDIA LIMITED**  
(A government of India Enterprise)



01	Updated as per powergrid comments 30.03.2012			SK, Loganathan	2012-07-31
Rev	Revision			Approved	
Based on	-	Title DC Hall Pole 2 Layout and sections Agra station	Status	Issued	
Prepared	Prabakaran, Rajan 2012-07-31		Resp dept	PSDC/TPM	Rev ind 01
Approved	-		Language	-	
Project name ± 800KV, 6000 MW HVDC MULTI TERMINAL NER/ER-NR/WR INTERCONNECTOR-1		 <b>ABB AB - HVDC</b>		Document number 1JNL100401-306	Sheet/of 6 / 6