



# CERTIFICATE OF COMPLETION

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You have successfully completed an Autodesk® Authorized Training Center® course specifically designed to satisfy your training requirements. Authorized Training Center instructors deliver quality-learning experiences with courses related to Autodesk products utilizing relevant content and comprehensive courseware. Autodesk's vision is to help people imagine, design, and create a better world.

Certificate No. **AP702813097236675157631**

**THEINGI TUN**  
NAME

**REVIT ADVANCED FOR SPECIALIZED STRUCTURE**  
COURSE TITLE

**REVIT 2022**  
PRODUCT

**YE ZARNI TUN**  
INSTRUCTOR

**08-JANUARY-2023**  
COURSE DATE

**41-100 HOURS**  
COURSE DURATION

**ZEON LIGHT TRAINING CENTRE**  
AUTODESK AUTHORIZED TRAINING CENTER

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 **AUTODESK**  
Authorized Training Center



# BIM ACE Engineering Training Center

## CERTIFICATE OF SUCCESSFUL COMPLETION

It is hereby certified that



**THEINGI TUN**

has successfully completed the course in:

**BIM Modeling for Architecture & Structure**

Date of Completion : 15 September 2020



Zay Yar Htut  
B.E (Aerospace)  
Training Principal  
BIM ACE Engineering Training Center

Reg: No. **J-14546**.....

## CERTIFICATE OF TRAINING

*This is to certify that*

**THEINGI TUN**..... son / daughter of..... **U THEIN WIN**.....

has successfully completed the computer course in the  
undermentioned subject (s) from **13-1-15** to **13-3-15**

1. **AUTODESK REVIT**.....
2. **ARCHITECTURE DESIGN COURSE**.....
3. ....
4. ....
5. ....
6. ....
7. ....
8. ....



**QUICKCAD COMPUTER TRAINING CENTER.**

YANGON, Dated the **15<sup>th</sup> MARCH 2015**.....

**TIN MAUNG HTWE**

Principal,  
B.E (CIVIL)  
MES., ASEAN Engineer  
Senior Licensed Engineer (L.S 287) Y.C.D.C  
Computer Technology (I.T.C)  
Aluminium & Glass Technology (B.K.K)

Reg: No. H - 1730 .....

# CERTIFICATE OF TRAINING

*This is to certify that*

THEINGI TUN ~~son~~ / daughter of U THEIN WIN  
has successfully completed the computer course in the  
undermentioned subject (s) from 22-10-13 to 22-12-13

1. AUTOCAD
2. ADVANCED COURSE
3. ....
4. ....
5. ....
6. ....
7. ....
8. ....



**QUICKCAD COMPUTER TRAINING CENTER.**  
YANGON, Dated the 24<sup>th</sup> DECEMBER 2013

*Tin Maung Htwe*  
**TIN MAUNG HTWE**  
Principal,  
B.E (CIVIL)  
MES.,ASEAN Engineer  
Senior Licensed Engineer (L.S 287) Y.C.D.C  
Computer Technology (I.T.C)  
Aluminium & Glass Technology (B.K.K)

Reg: No. H-14279 .....

# CERTIFICATE OF TRAINING

*This is to certify that*

THEINGI TUN ~~son~~ / daughter of U THEIN WIN  
has successfully completed the computer course in the  
undermentioned subject (s) from 19-12-14 to 19-3-15

1. 3DS MAX
2. ENGINEERING DESIGN COURSE
3. ....
4. ....
5. ....
6. ....
7. ....
8. ....



**QUICKCAD COMPUTER TRAINING CENTER.**  
YANGON, Dated the 21<sup>st</sup> MARCH 2015

*Tin Maung Htwe*  
**TIN MAUNG HTWE**  
Principal,  
B.E (CIVIL)  
MES.,ASEAN Engineer  
Senior Licensed Engineer (L.S 287) Y.C.D.C  
Computer Technology (I.T.C)  
Aluminium & Glass Technology (B.K.K)



**Certificate**  
in  
Engineering Drawing ( Google SketchUp )

*This is to certify that*

**THEINGI TUN**

*has successfully completed the following computer training course(s):*

- 3D Design
- Texturing & Material
- Dimension
- Match Photo



*Sai Myint*  
SAI MYINT  
Principal  
PRO COMPUTING CO., LTD.

Issued Date: 1 December 2013  
Issued Place: Yangon, Myanmar



**ENGINEERING TRAINING CENTRE**

**CERTIFICATE OF COMPETENCE**

This is to certify that

**THEINGI TUN**

holder of the NRC No. 5/ Ya Ba Na (N) 193371

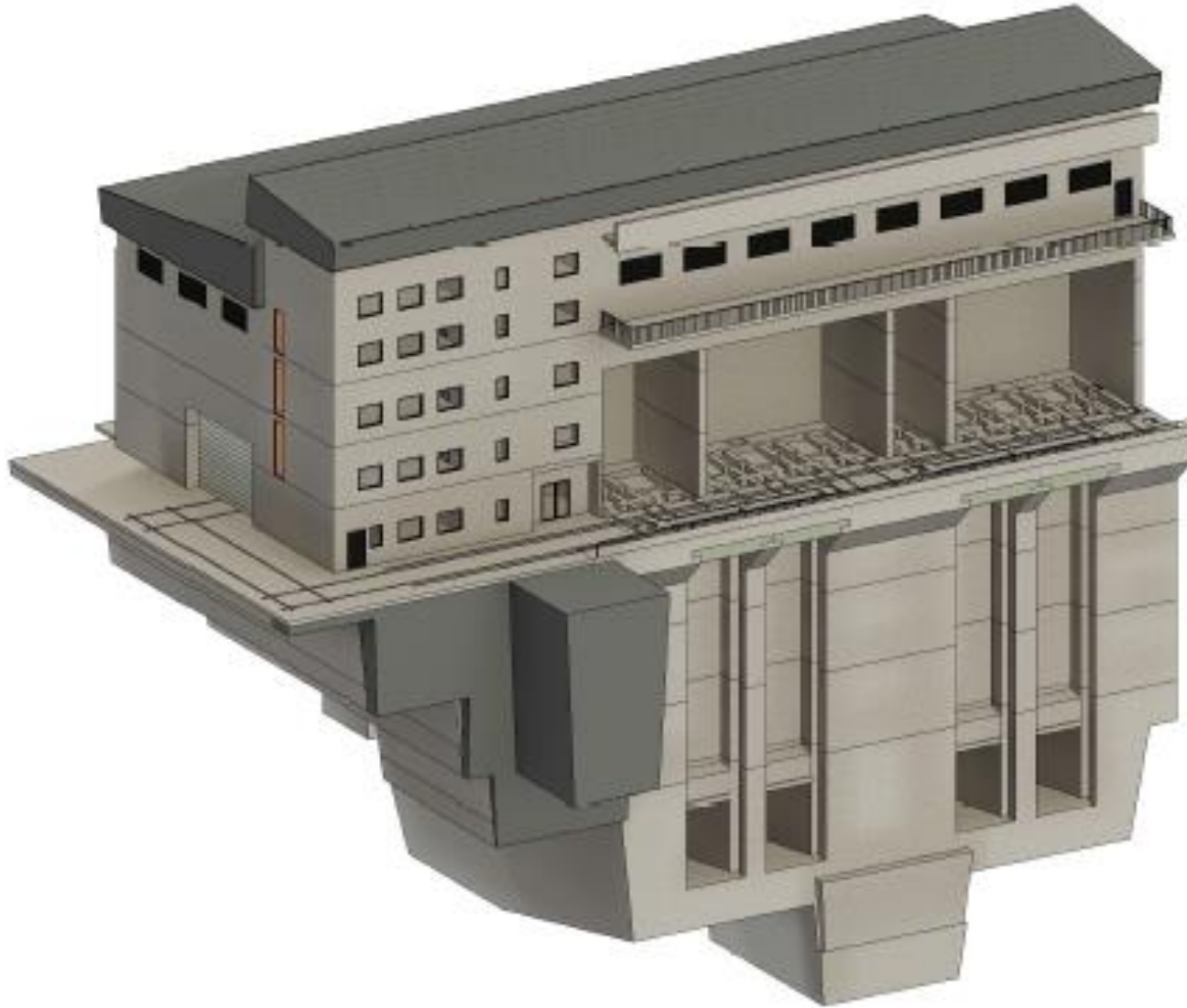
**QUANTITY SURVEY AND SITE MANAGEMENT COURSE**



Reg No. 010215081  
Date of Issue. 13.2.2015

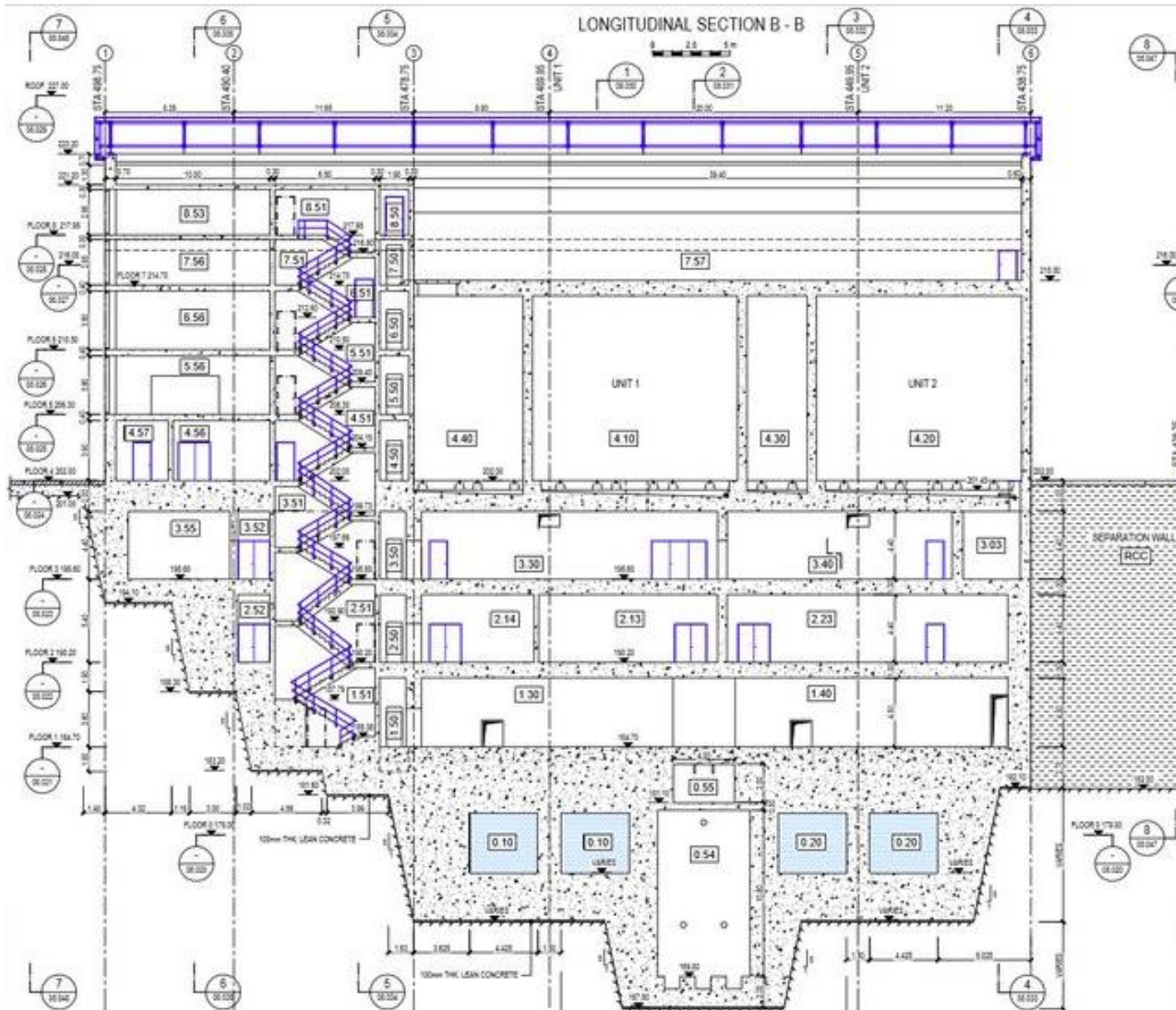
*U Myint Thein*  
U MYINT THEIN  
MT Engineering Group

I can explain the models and demonstrate it on demand.



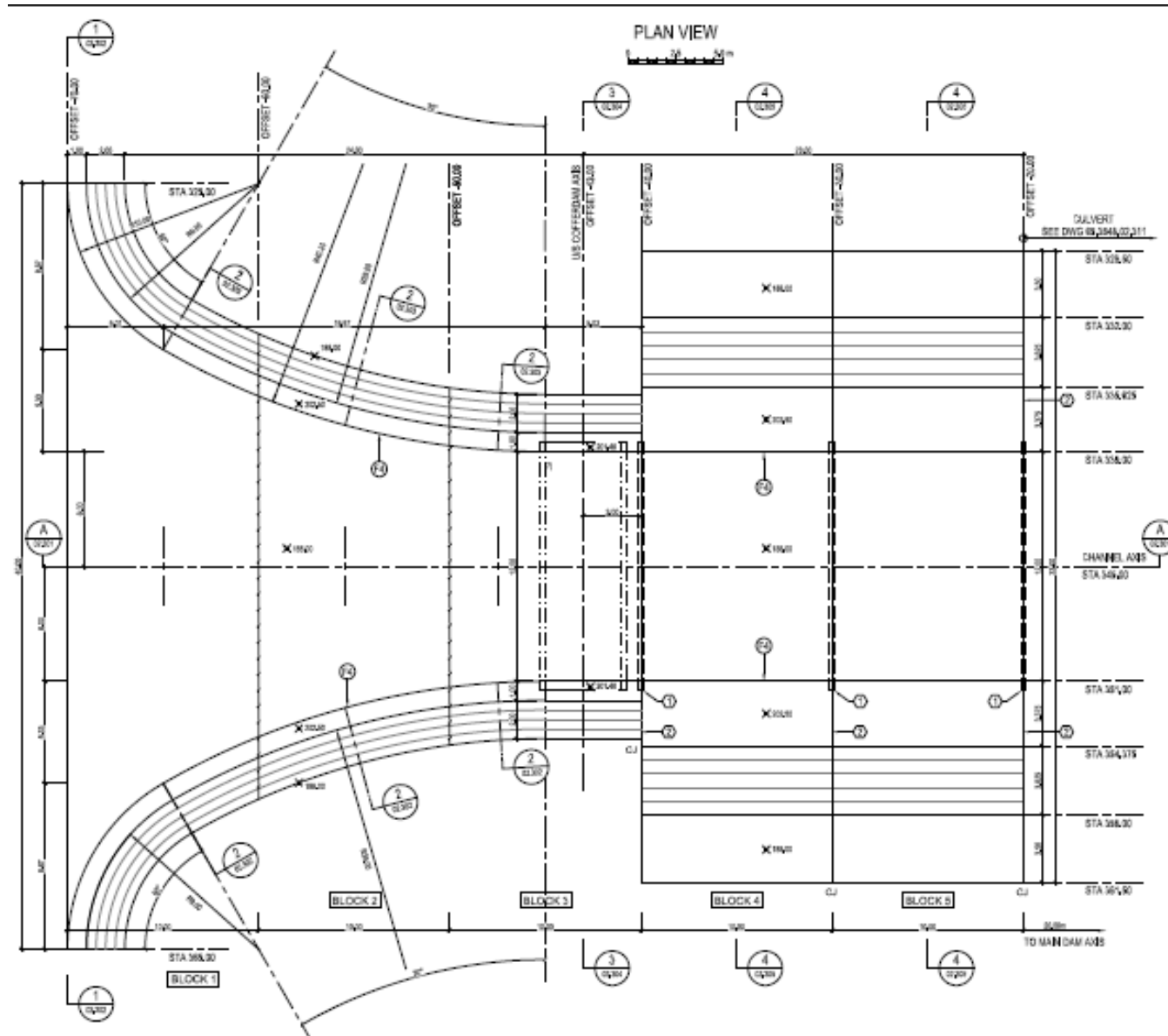
- Project \_ Middle Paung Laung Hydropower Project (152MW)
- Structure \_ Powerhouse Building
- Location \_ Nay Pyi Taw, Myanmar
- Objective \_ 3D Layout Design and Quantities  
Take-off for Basic Design by Revit

I can explain the models and demonstrate it on demand.



- Project \_ Middle Paung Laung Hydropower Project (152MW)
- Structure \_ Powerhouse Building
- Location \_ Nay Pyi Taw, Myanmar
- Objective \_ General Arrangement for Basic / Tender Design Drawings

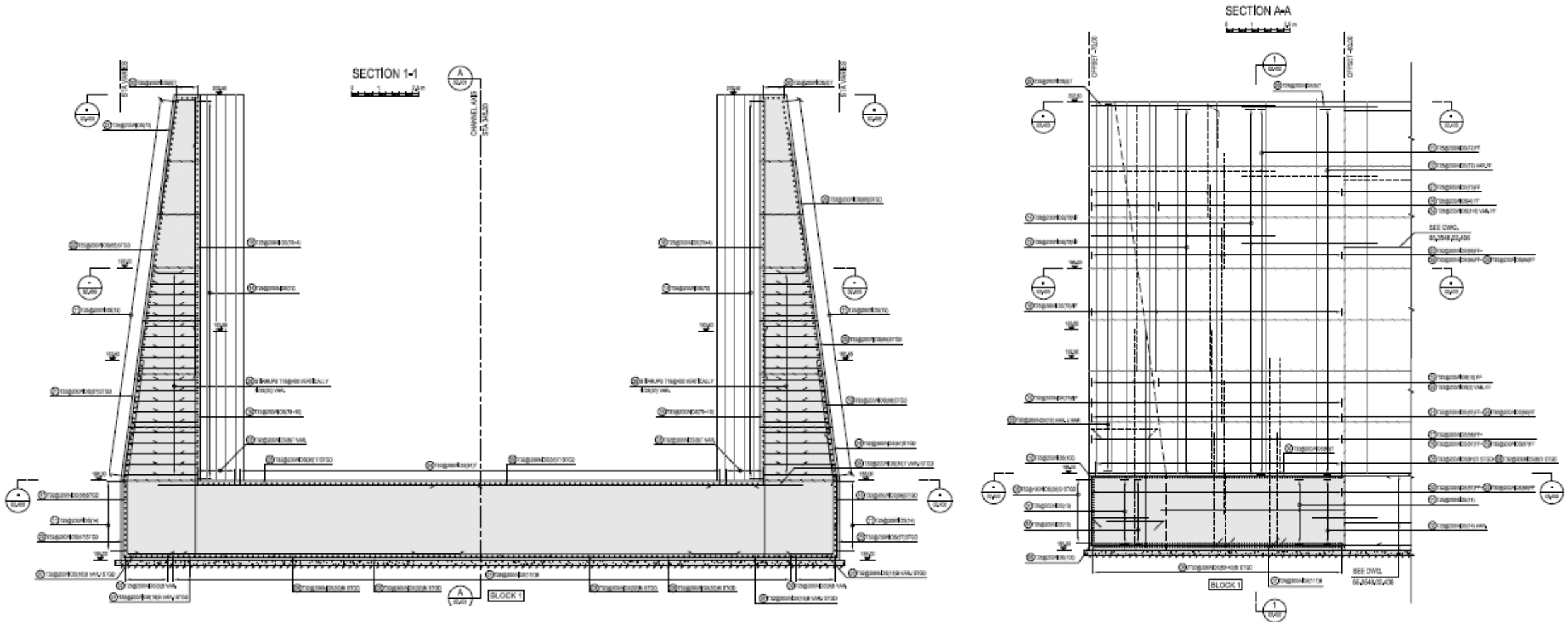
I can explain the models and demonstrate it on demand.



- Project \_ Middle Paung Laung Hydropower Project (152MW)
- Structure \_ River Diversion Inlet Chanel
- Location \_ Nay Pyi Taw, Myanmar
- Objective \_ Construction Formwork

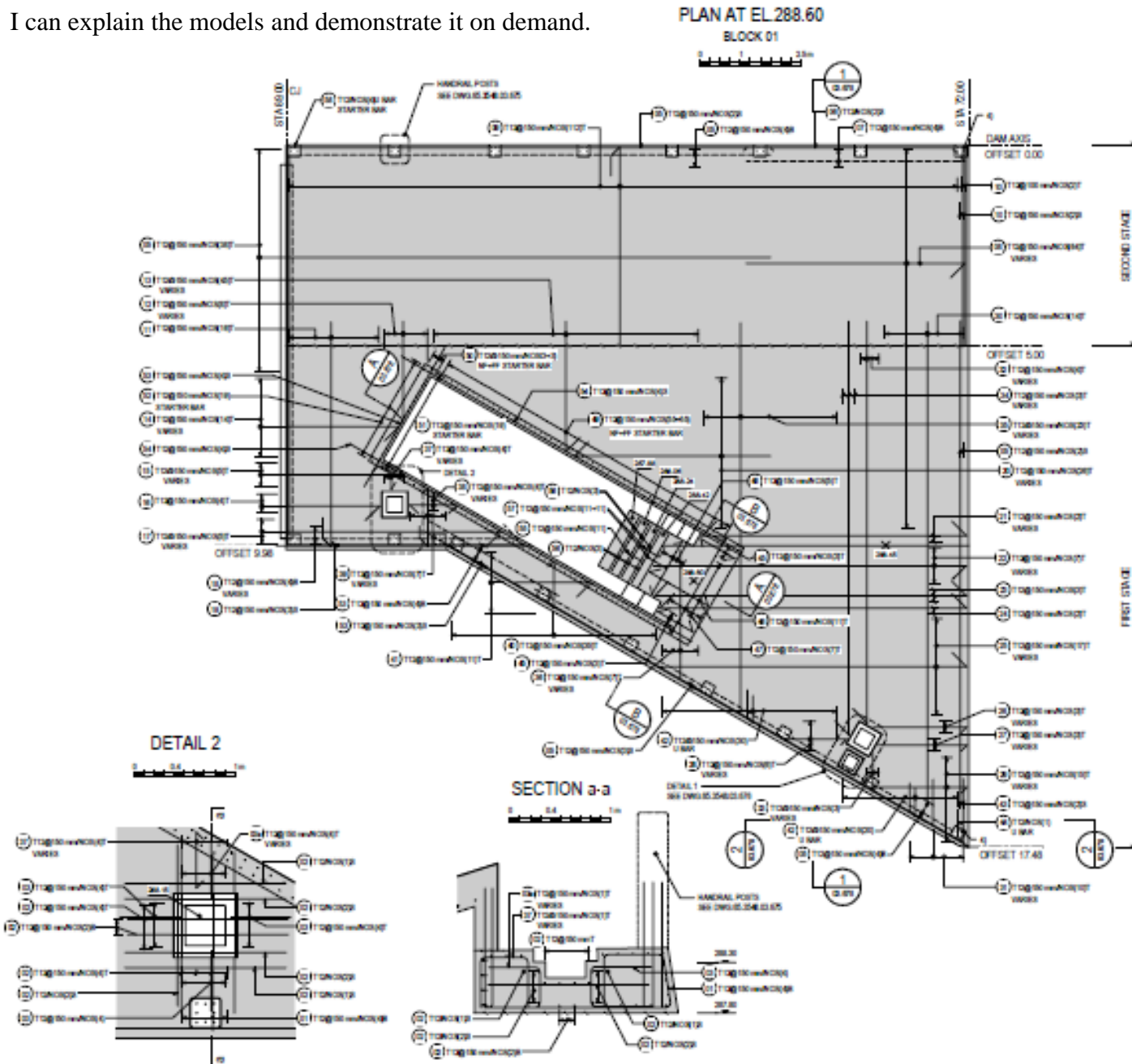
I can explain the models and demonstrate it on demand.

Project \_ Middle Paung Laung Hydropower Project (152MW)  
Structure \_ River Diversion Inlet Chanel  
Location \_ Nay Pyi Taw, Myanmar  
Objective \_ Construction Reinforcement





I can explain the models and demonstrate it on demand.



- Project \_ Middle Paung Laung Hydropower Project (152MW)
- Structure \_ Dam Crest Slab
- Location \_ Nay Pyi Taw, Myanmar
- Objective \_ Reinforcement for Construction Design by Revit

I can explain the models and demonstrate it on demand.

BAR BENDING SCHEDULE, MAIN DAM, CREST SLAB - BLOCK OF REINFORCEMENT																	
Bar Mark	Type and Size	No. of Bars	Length of each Bar (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	Bar Shape	Length per Bar (mm)	Mass per Length (kg/m)	Mass per Quantity (kg)	
01	T12	8	3480	1725	525	300	210	0	0	0	0	525	75		3720	0.88	34.56
02	T12	40	1800	0	1800	0	0	0	0	0	0	0	0		1800	0.88	36.00
03	T12	20	1810	0	885	410	300	0	0	0	0	0	0		1810	0.88	36.20
04	T12	4	1440 - 1360	0	325 - 375	410	210 - 175	0	0	0	0	0	0		1407	0.88	6.94
05	T12	8	2080	130	940	420	340	130	0	0	0	0	0		2080	0.88	14.24
06	T12	53	1280	0	1280	0	0	0	0	0	0	0	0		1280	0.88	34.76
08	T12	2	520	0	520	0	0	0	0	0	0	0	0		520	0.88	4.48
07	T12	4	3670	0	570	480	0	0	0	0	0	0	0		3280	0.88	28.16
08	T12	84	5880 - 8028	0	5400	420	300	0	0	0	0	0	0		38175	0.88	33.81
09	T12	112	5840	0	880	380	480	0	70	480	0	0	0		6820	0.88	34.76
10	T12	4	4800 - 4880	0	4870	0	0	0	0	0	0	0	0		4837	0.88	17.85
11	T12	16	880	880	0	0	0	0	85	0	0	525	75		10074	0.88	34.85
12	T12	8	1880 - 3880	0	1825 - 2440	440	0	0	0	0	0	0	0		2210	0.88	19.76
13	T12	40	1760 - 5580	0	1740 - 3330	440	0	0	0	0	0	0	0		1680	0.88	14.80
14	T12	14	2840 - 3840	0	2330 - 3650	480	0	0	0	0	0	0	0		4720	0.88	42.16
15	T12	5	2880 - 3840	0	2375 - 3615	480	0	0	0	0	0	0	0		1704	0.88	15.16
16	T12	4	2870	0	2380	480	0	0	0	0	0	0	0		1728	0.88	9.84
17	T12	5	5210 - 6280	0	4740 - 5230	420	0	0	0	0	0	0	0		3910	0.88	25.84
18	T12	4	5720 - 6580	0	5210 - 5980	0	0	0	0	0	0	0	0		3475	0.88	21.72
19	T12	3	5880	0	5880	0	0	0	0	0	0	0	0		1740	0.88	15.84
20	T12	20	2220 - 6780	0	480 - 540	1780	0	0	0	0	0	0	0		14480	0.88	127.80
21	T12	2	7720 - 7820	580	8800 - 8880	0	0	0	0	0	0	0	0		5580	0.88	12.88
22	T12	7	8880 - 8280	580	7520 - 8170	0	0	0	0	0	0	0	0		1280	0.88	35.96
23	T12	3	8820 - 8120	580	7520 - 8040	0	0	0	0	0	0	0	0		3828	0.88	23.88
24	T12	2	8720 - 8880	580	7640 - 7740	0	0	0	0	0	0	0	0		1720	0.88	15.88
25	T12	17	8720 - 10280	0	8040 - 8720	0	0	0	0	0	0	0	0		15887	0.88	14.24

BAR BENDING SCHEDULE, MAIN DAM, CREST SLAB - BLOCK OF REINFORCEMENT																	
Bar Mark	Type and Size	No. of Bars	Length of each Bar (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	Bar Shape	Length per Bar (mm)	Mass per Length (kg/m)	Mass per Quantity (kg)	
26	T12	3	2820 - 3120	0	2820 - 2280	0	0	0	0	0	0	0	0		2784	0.88	17.80
27	T12	3	3260 - 3820	0	2720 - 2280	0	0	0	0	0	0	0	0		3284	0.88	14.40
28	T12	8	1270 - 3120	0	420 - 2280	0	0	0	0	0	0	0	0		1340	0.88	11.80
29	T12	15	670 - 4210	0	85 - 3120	0	0	0	0	0	0	0	0		3749	0.88	32.20
30	T12	14	1800	680	520	0	0	0	0	0	0	0	0		1800	0.88	14.14
31	T12	10	720 - 5220	0	720 - 1280	0	0	0	0	0	0	0	0		1219	0.88	10.17
32	T12	4	10480 - 10720	0	540 - 480	5580	0	5270	85	0	0	0	0		4230	0.88	37.85
33	T12	3	880 - 1380	0	810 - 1380	0	0	0	0	0	0	0	0		280	0.88	1.54
34	T12	3	10580 - 11100	0	540 - 480	5580	0	5270	85	0	0	0	0		3220	0.88	28.81
35	T12	20	8740 - 11120	0	380 - 1280	5280	0	0	0	0	0	0	0		2248	0.88	20.78
36	T12	7	2820 - 3440	0	2820 - 3440	0	0	0	0	0	0	0	0		2277	0.88	16.72
37	T12	4	1440 - 1870	0	1310 - 820	0	0	0	0	0	0	0	0		1574	0.88	5.40
38	T12	4	1220 - 2520	0	1220 - 1480	0	0	0	0	0	0	0	0		1440	0.88	1.92
39	T12	7	3240 - 3280	880	310 - 1820	0	0	0	0	0	0	0	72		2080	0.88	16.72
40	T12	35	3760	880	520	1100	0	0	0	0	0	0	84		3680	0.88	62.71
41	T12	11	2420	0	1880	540	0	0	0	0	0	0	0		2670	0.88	23.76
42	T12	50	1720	880	520	880	0	0	0	0	0	0	0		1820	0.88	36.12
43	T12	2	180	0	180	0	0	0	0	0	0	0	0		200	0.88	1.84
44	T12	1	140	880	240	880	0	0	0	0	0	0	0		140	0.88	1.28
45	T12	8	280	0	280	180	0	0	0	0	0	0	0		1420	0.88	12.81
46	T12	11	380	0	380	180	0	0	0	0	0	0	0		2080	0.88	38.88
47	T12	7	480	0	480	200	0	0	0	0	0	0	0		2080	0.88	25.81
48	T12	5	380	0	380	180	0	0	0	0	0	0	0		1420	0.88	12.88
49	T12	20	1380	0	1380	180	0	0	0	0	0	0	0		2080	0.88	22.24
50	T12	12	1720	0	1720	120	0	0	0	0	0	0	0		1320	0.88	11.80
51	T12	19	180	280	170	880	0	0	0	0	0	0	0		3420	0.88	38.58

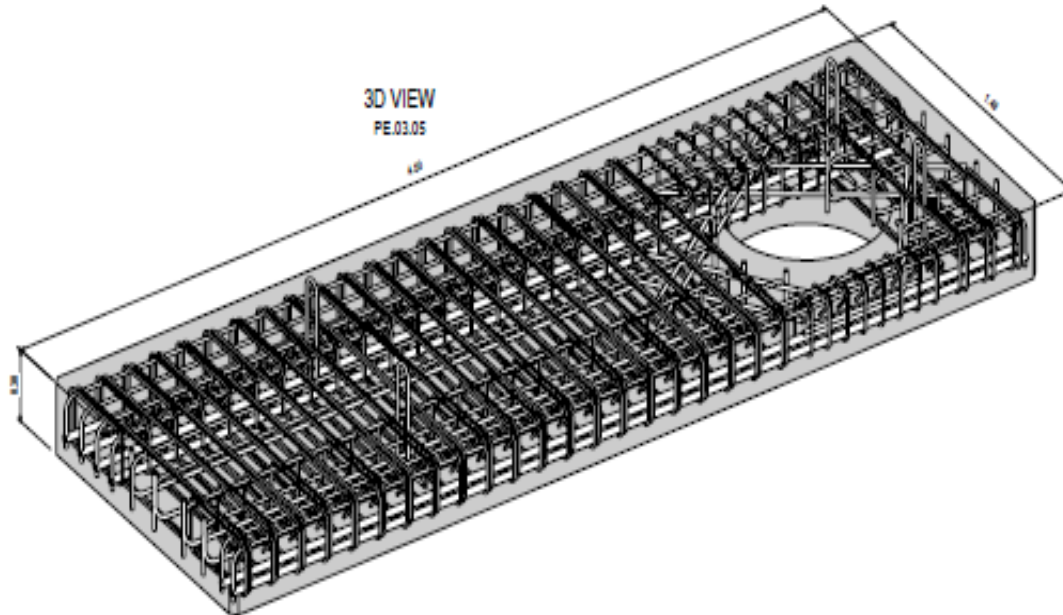
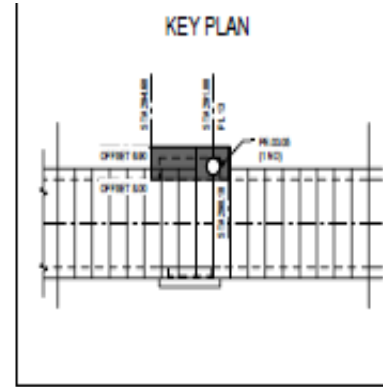
- Project \_ Middle Paung Laung Hydropower Project (152MW)
- Structure \_ Dam Crest Slab
- Location \_ Nay Pyi Taw, Myanmar
- Objective \_ Bar Bending Schedule for Construction Design by Revit



I can explain the models and demonstrate it on demand.

BAR BENDING SCHEDULE, MAIN DAM, PRECAST ELEMENT AT EL. 28.80, TYPE PE.03.05												
Item No.	Type and Size	No. of Bars	Length of Bar (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Bar Shape	Length per Bar (mm)	Volume per Bar (m <sup>3</sup> )	Mass per Bar (kg)
01	T12	24	2340	0	100	340	100	0		5080	0.00	49.70
02	T20	2	3700	0	25	370	25	0		740	2.47	18.26
03	T20	2	3500	0	25	350	25	0		710	2.47	17.94
04	T16	4	1200	100	40	100	40	100		210	1.59	9.14
05	T16	4	900	0	25	300	25	0		300	1.59	9.90
06	T16	4	900	0	25	400	25	0		340	1.59	9.62
07	T12	32	1570	110	60	340	60	110		3090	0.00	49.13
08	T20	8	4400	0	440	0	0	0		2080	0.70	18.25
09	T20	4	1400	0	300	370	0	0		540	2.47	14.72
10	T20	4	1400	0	180	0	0	0		500	2.47	14.30
11	T12	24	2340	0	100	340	100	0		5080	0.00	49.70
12	T16	2	3700	0	25	370	25	0		740	1.59	11.66
13	T16	2	3500	0	25	350	25	0		710	1.59	11.30
14	T12	24	1910	110	60	340	60	110		2090	0.00	34.23
15	T16	8	650	0	25	440	25	0		2020	1.59	49.18
16	T12	8	800	110	100	100	110	110		710	0.00	9.82
SUB TOTAL MASS (kg) FOR T20 BARS											188.258	
SUB TOTAL MASS (kg) FOR T20 BARS											14.021	
SUB TOTAL MASS (kg) FOR T16 BARS											55.880	
SUB TOTAL MASS (kg) FOR T12 BARS											183.628	
TOTAL MASS (kg) FOR 1 ELEMENT											441.787	

N.B. ELEMENT LENGTH IN BAR SHAPE AND HEIGHT IS SHOWN. THE LENGTH OF EACH BAR IS CALCULATED AS THE SUM OF ALL SEGMENTS.



- Project \_ Upper Yeywa Hydropower Project (280MW)
- Structure \_ Precast Beam of Dam Gallery
- Location \_ Shan State, Myanmar
- Objective \_ 3D View & Bar Bending Schedule for Construction Design by Revit



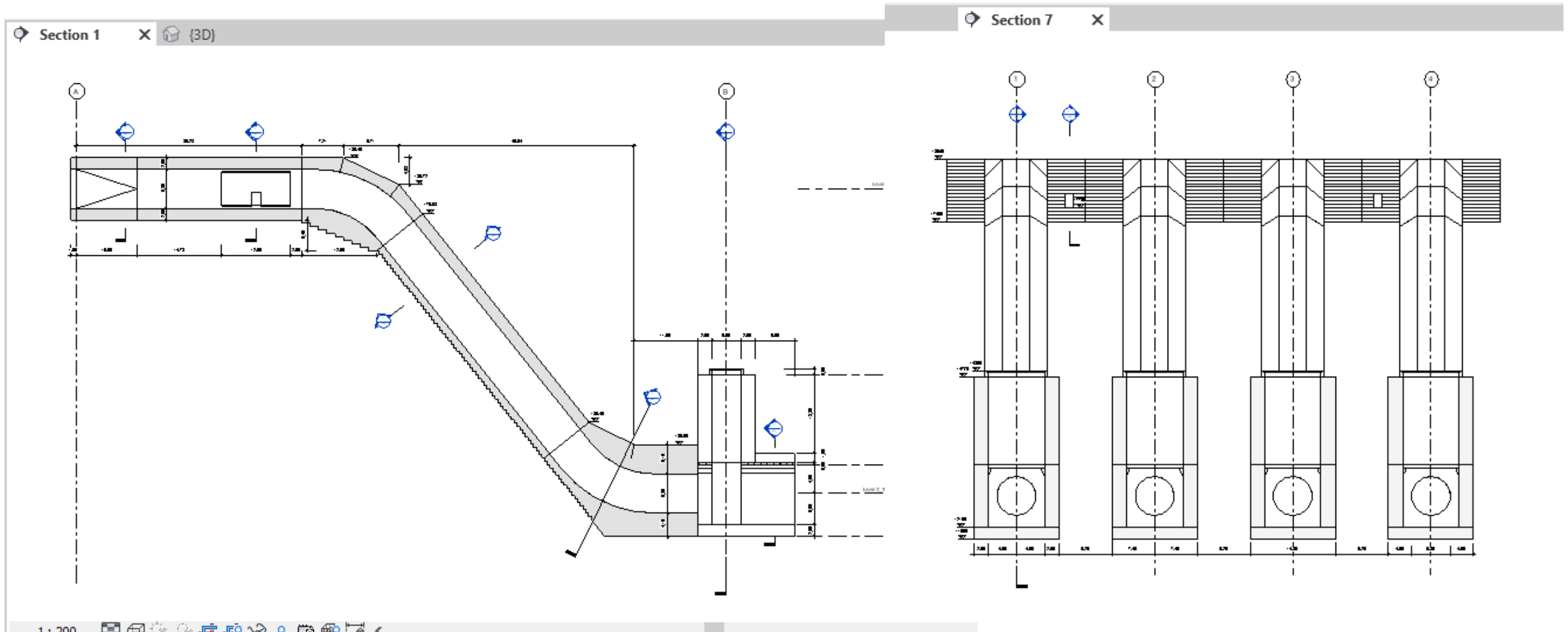
I can explain the models and demonstrate it on demand.

Project \_ Shweli 3 Hydropower Project (760MW)

Structure \_ Penstocks

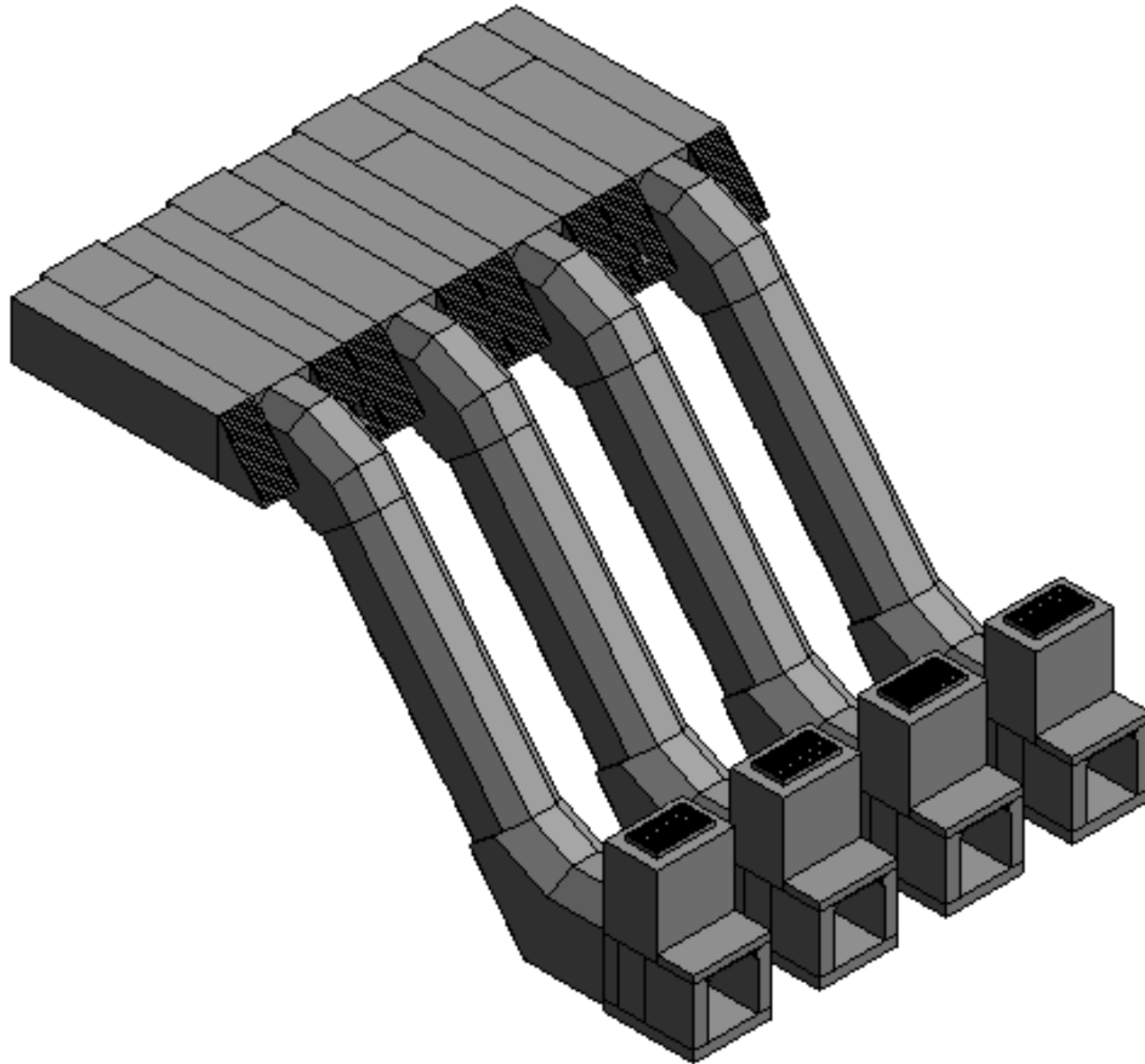
Location \_ Mandalay Division, Myanmar

Objective \_ Basic/ Tender Design Visualization by Revit



I can explain the models and demonstrate it on demand.

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Project     \_ Shweli 3 Hydropower Project (760MW)  
Structure   \_ Penstocks  
Location    \_ Mandalay Division, Myanmar  
Objective   \_ Basic/ Tender Design Visualization by  
              \_ Revit

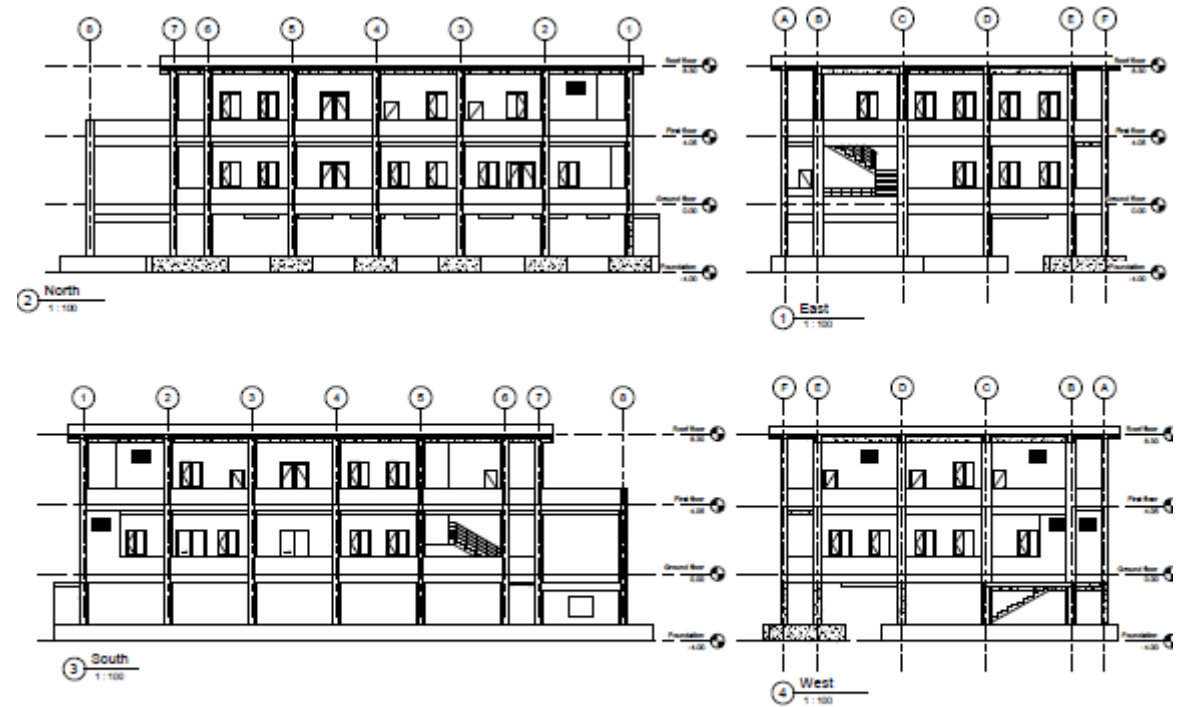
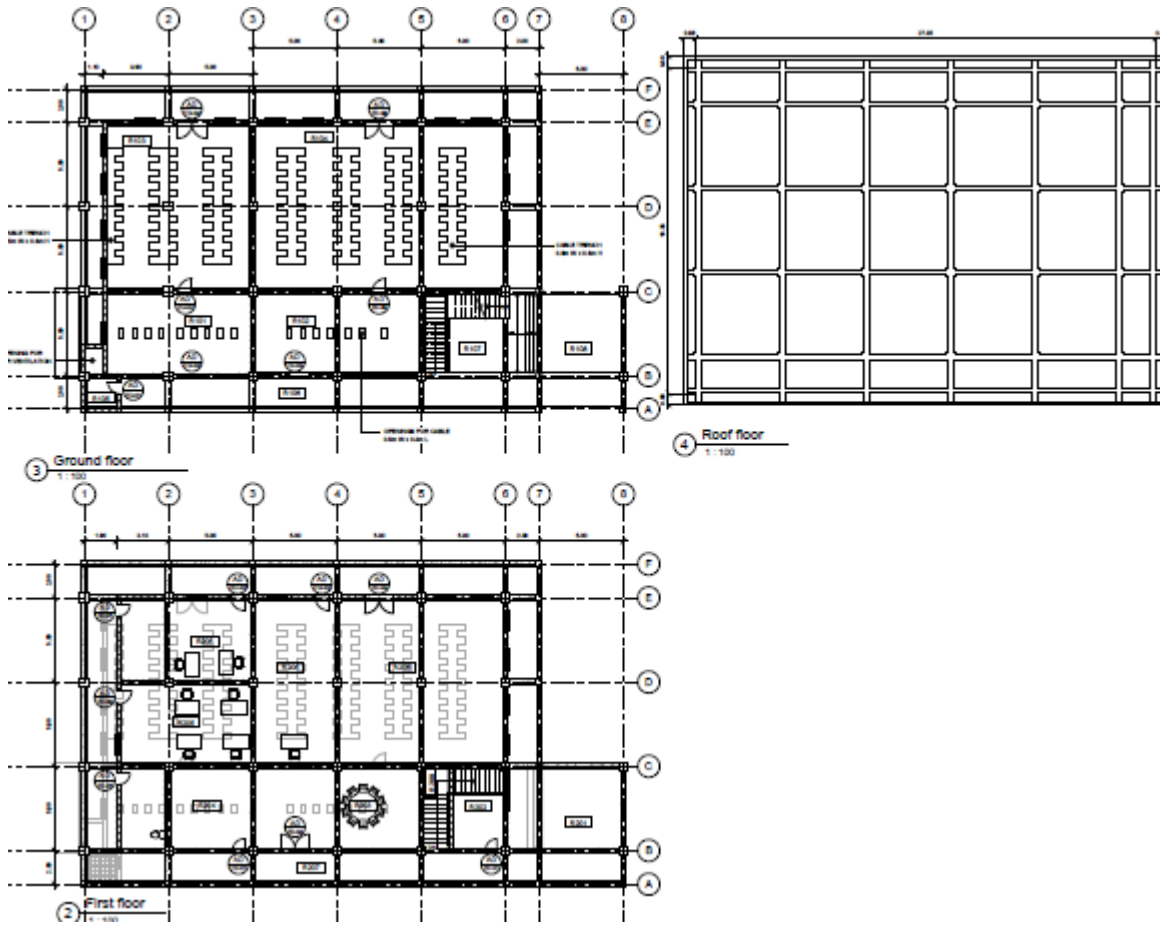
I can explain the models and demonstrate it on demand.

Project \_ Shweli 3 Hydropower Project (760MW)

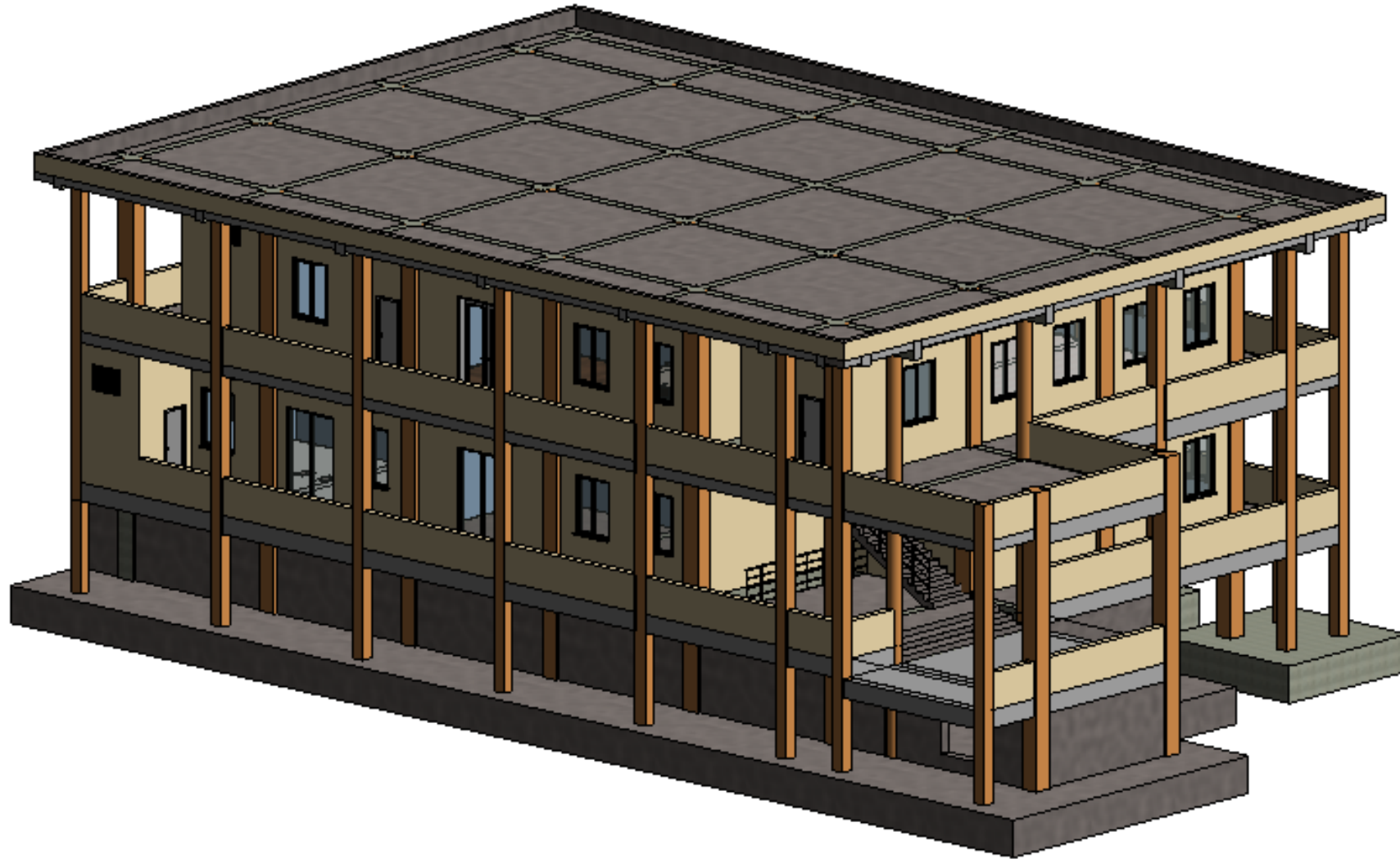
Structure \_ Service Building

Location \_ Mandalay Division, Myanmar

Objective \_ Basic/ Tender Design Layouts



I can explain the models and demonstrate it on demand.

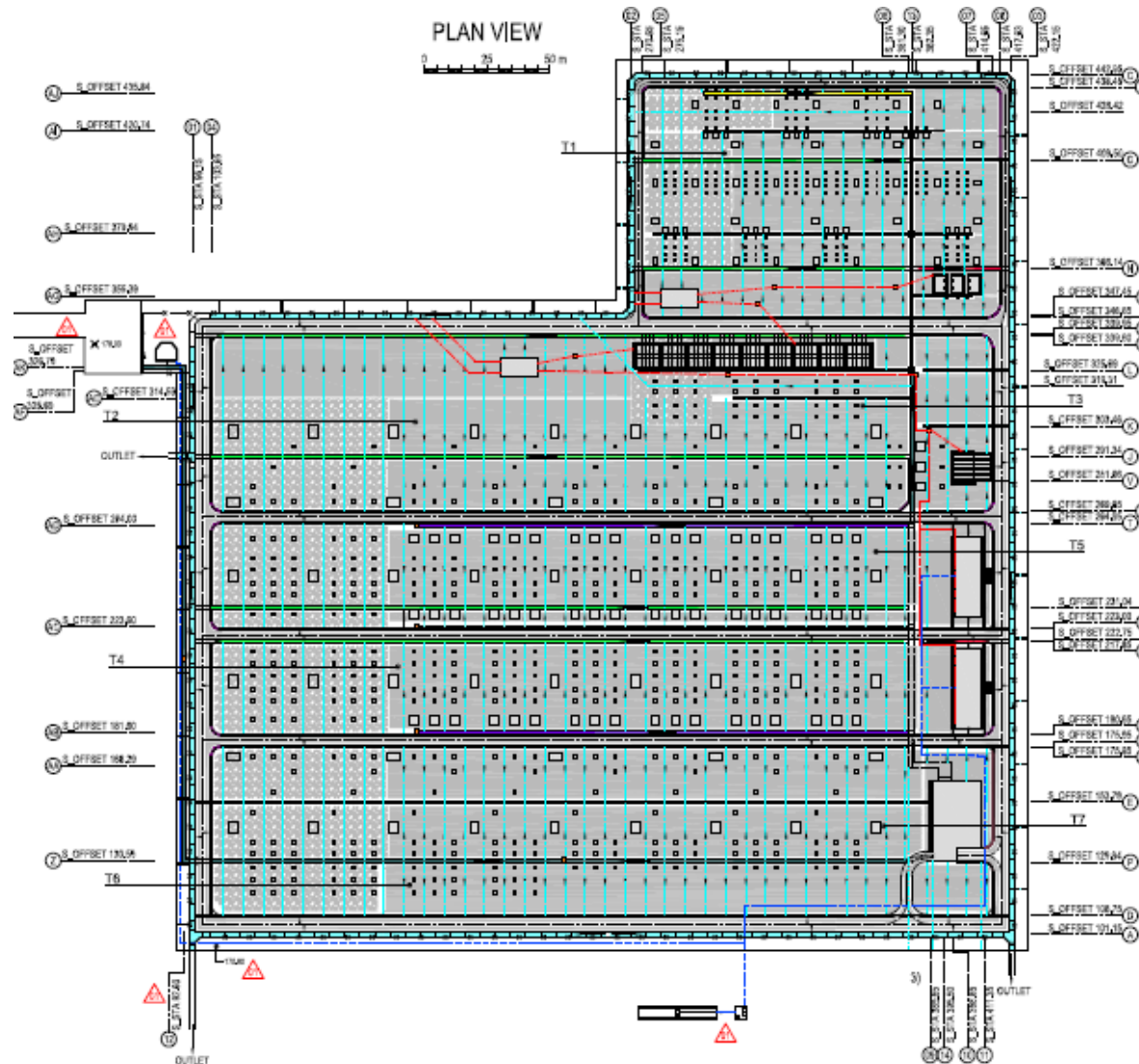


- Project \_ Shweli 3 Hydropower Project (760MW)
- Structure \_ Service Building
- Location \_ Mandalay Division, Myanmar
- Objective \_ Basic/ Tender Design Visualization by Revit

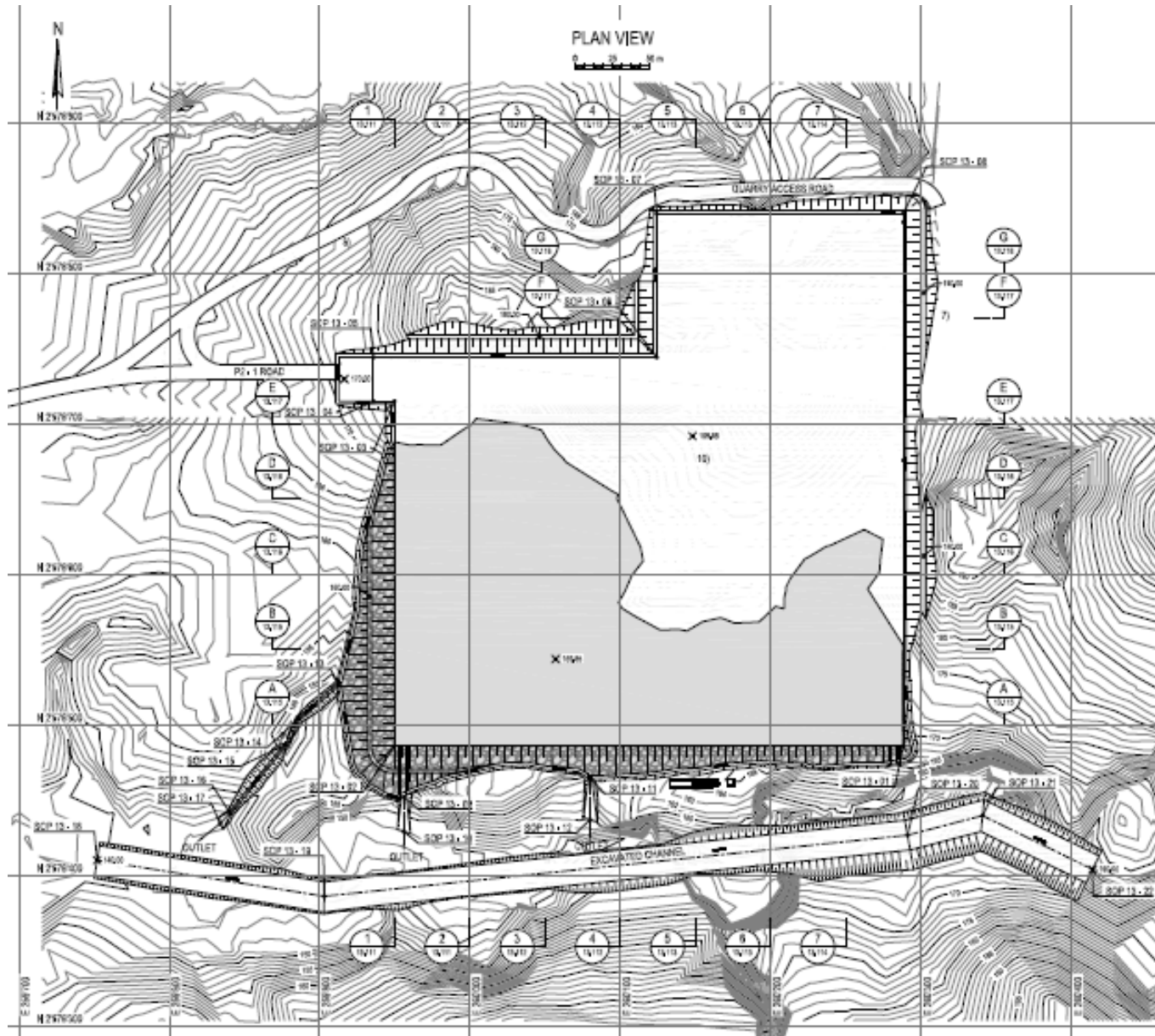


I can explain the models and demonstrate it on demand.

Project \_ Shweli 3 Hydropower Project (760MW)  
Structure \_ Substation Overall  
Location \_ Mandalay Division, Myanmar  
Objective \_ Basic/ Tender Design Layouts



I can explain the models and demonstrate it on demand.



- Project \_ Shweli 3 Hydropower Project (760MW)
- Structure \_ Substation Excavation
- Location \_ Mandalay Division, Myanmar
- Objective \_ Detail Design

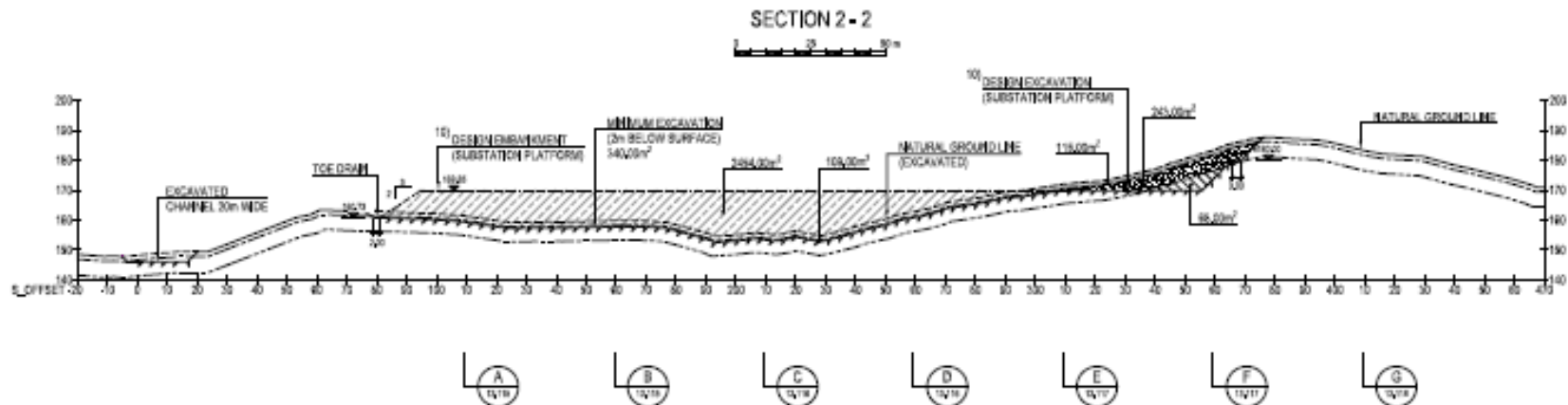
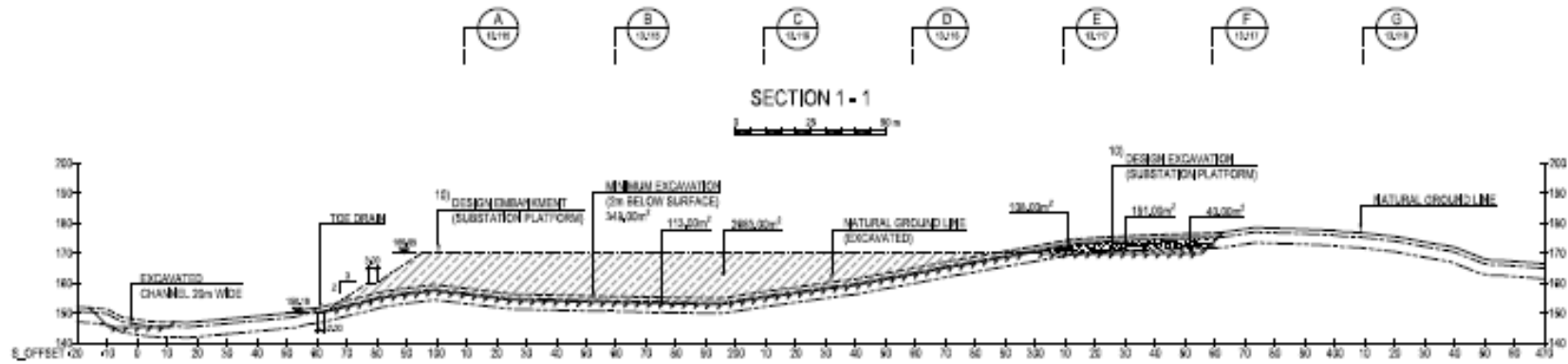
I can explain the models and demonstrate it on demand.

Project \_ Shweli 3 Hydropower Project (760MW)

Structure \_ Substation Excavation

Location \_ Mandalay Division, Myanmar

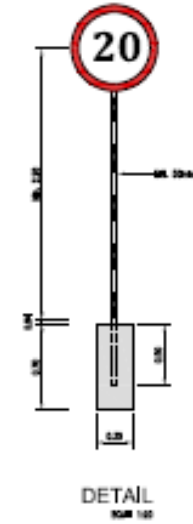
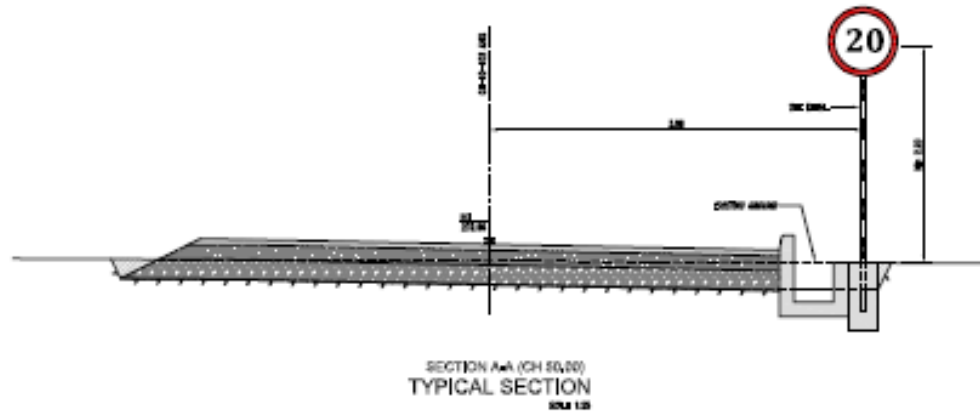
Objective \_ Detail Design







I can explain the models and demonstrate it on demand.



Project \_ Aya Pumped Storage Project (100MW)  
 Structure \_ Access Road  
 Location \_ Philippines  
 Objective \_ Detail Design / International Collaboration

ABBREVIATIONS:

ROAD CENTER LEVEL	R.L.
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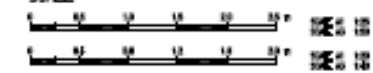
LEGEND:

TEXT FOR TRAFFIC SIGNS (TRAFFIC SIGN-ROAD NUMBER-POST NUMBER)	TS-00-1
SHALING SAND	[Pattern]
REGULAR CONC COURSE	[Pattern]
CURB-ONE COURSE	[Pattern]
CONCRETE CURBWAY	[Pattern]
GRASS-FILL	[Pattern]

NOTES:

- FOR GENERAL NOTES REFER TO DRAWING NO. PH-02-P015-02-00-001-00-000.
- THE ROAD SIGN, COLOR, SIZE AND LEGALS TO BE ACCORDING TO ROADWAY SAFETY DESIGN SPECIFICATIONS, MANUAL PART 2, ROAD SIGNS AND SYMBOLS, 1995.
- ELEVATION FOR TS-00-1 IS LISTED ON SPEC CONTRACT.
- THE DRAINAGE PROTECTION LINE IS RECOMMENDED FOR THE 18.75 MILE RADIUS OF THE ROAD-LINE.

SCALE:



SIGNAGE NOS.	TYPE OF TABLE	TRAFFIC SIGNS	QUANTITY	STATION	LEFT SIDE			RIGHT SIDE		
					EASTING	NORTHING	ELEVATION	EASTING	NORTHING	ELEVATION
TS-00-1	TO AYA GATE SHUT & CONTROL BUILDING		1	-100.00	511784.70	1746746.01	SEC. NOTE 3	-	-	-
TS-00-2	ROAD SIGN		1	30.00	-	-	-	511785.24	1746746.76	232.40
TS-00-3	SPEED LIMIT 20km/h		1	50.00	-	-	-	511785.24	1746746.00	232.47
TS-00-4	NO OVERTAKING		1	110.00	-	-	-	511789.14	1746754.87	231.75
TS-00-5	ROAD SIGN		1	270.00	-	-	-	511793.42	1746764.26	230.65
TS-00-6	ONE WAY		1	280.00	-	-	-	511793.54	1746762.04	230.67
TS-00-7	LEFT ROAD		1	410.00	-	-	-	511793.33	1746768.01	227.33