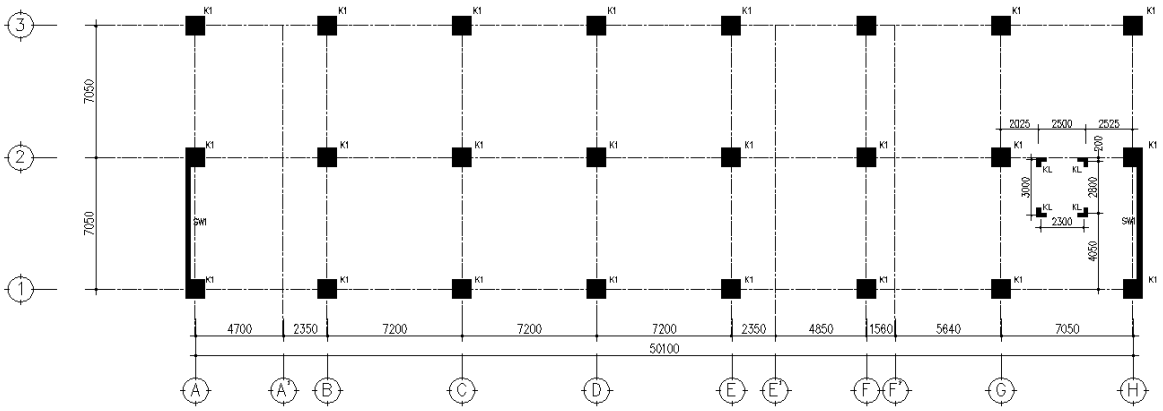
LAMPIRAN

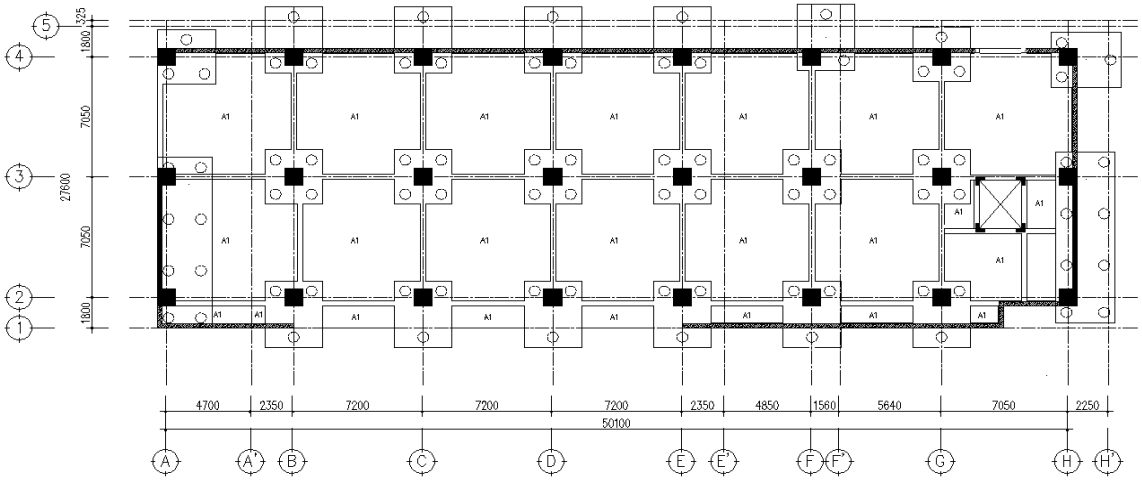
Lampiran 1. Gambar Rencana Kerja (Shop Drawing)

A. Gambar Rencana Kerja (Shop Drawing)

1. Denah Kolom Lantai *Basement* - 8

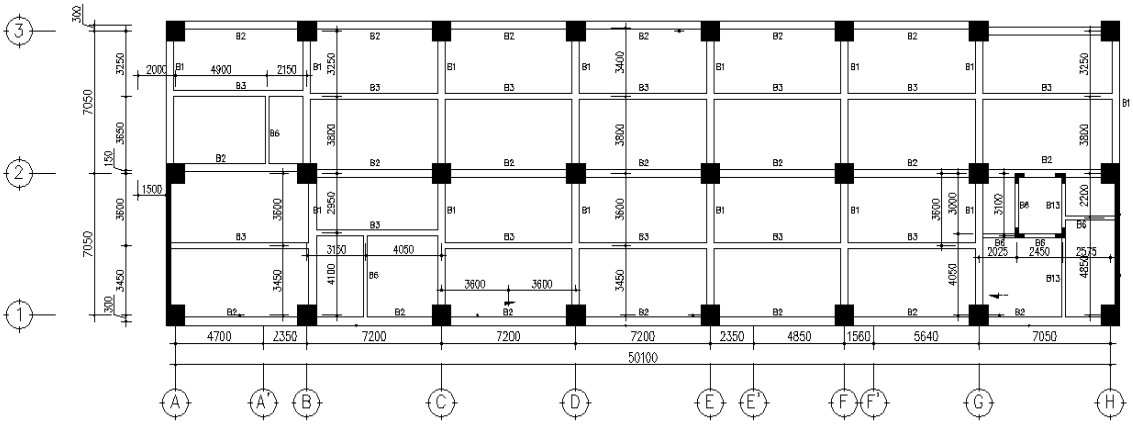


2. Denah Plat Lantai *Basement* - 8

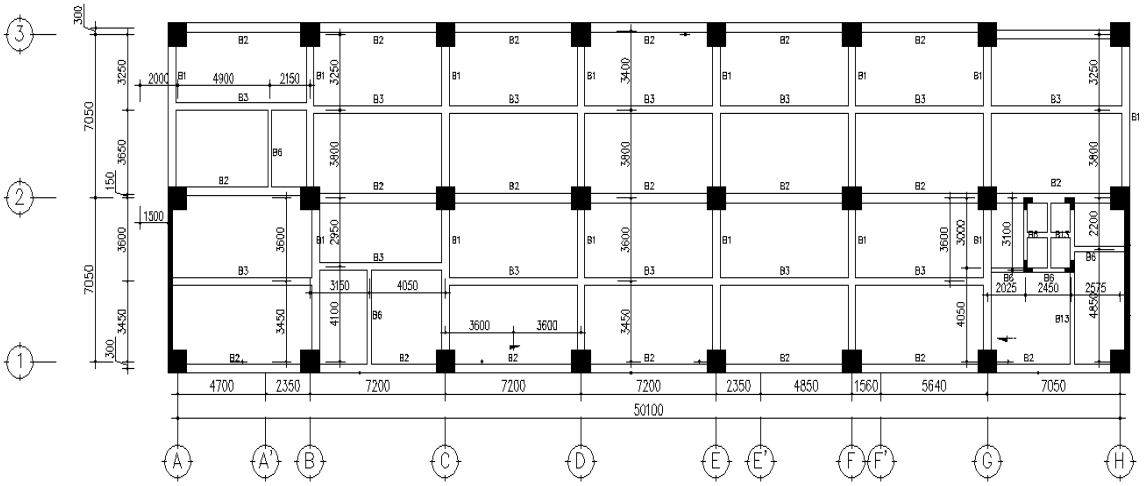


3. Denah Balok Lantai 1 – 8

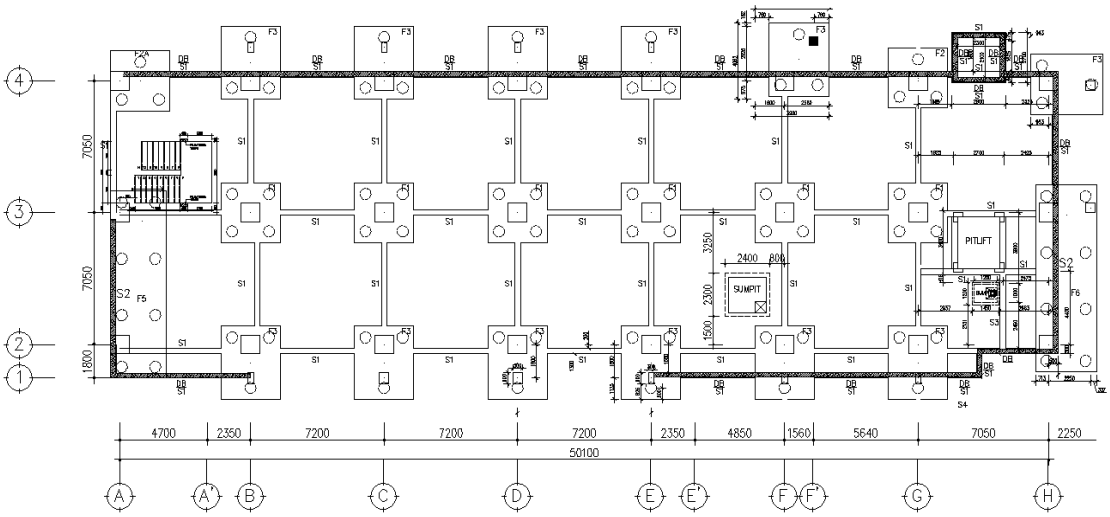
   Lantai 1 – 8



Lantai Atap

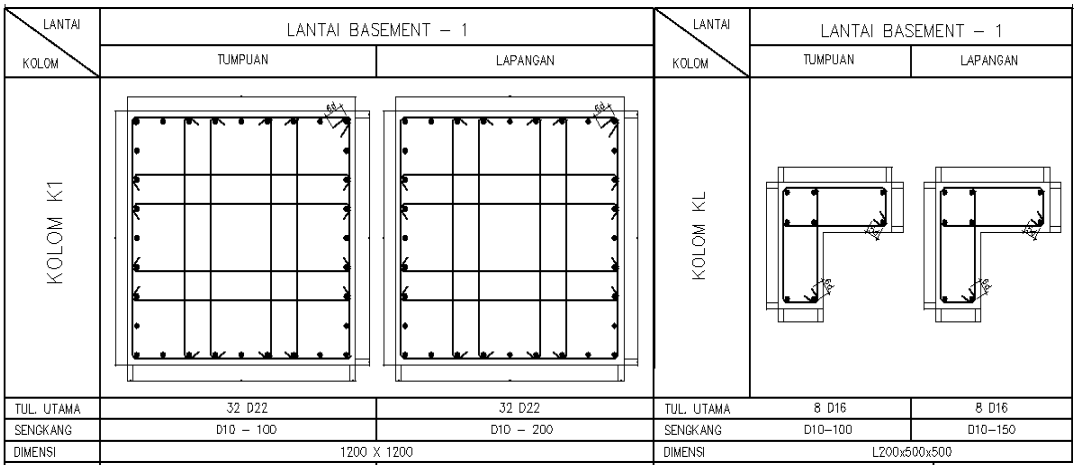


4. Denah Sloof

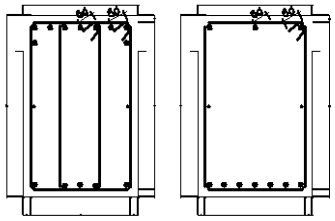
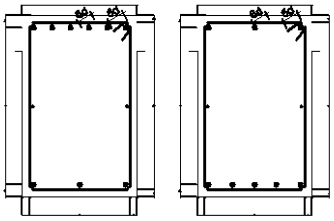
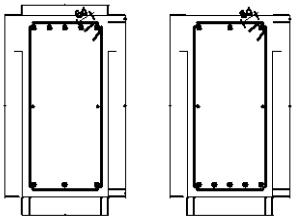


5. Detail Kolom , Balok, dan Sloof

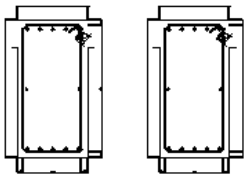
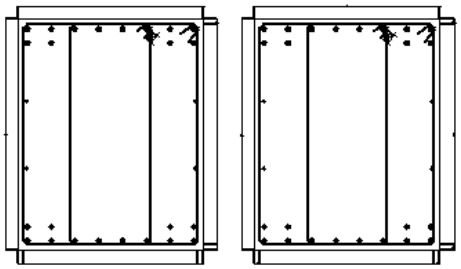
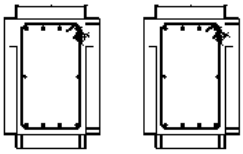
Detail Kolom



Detail Balok

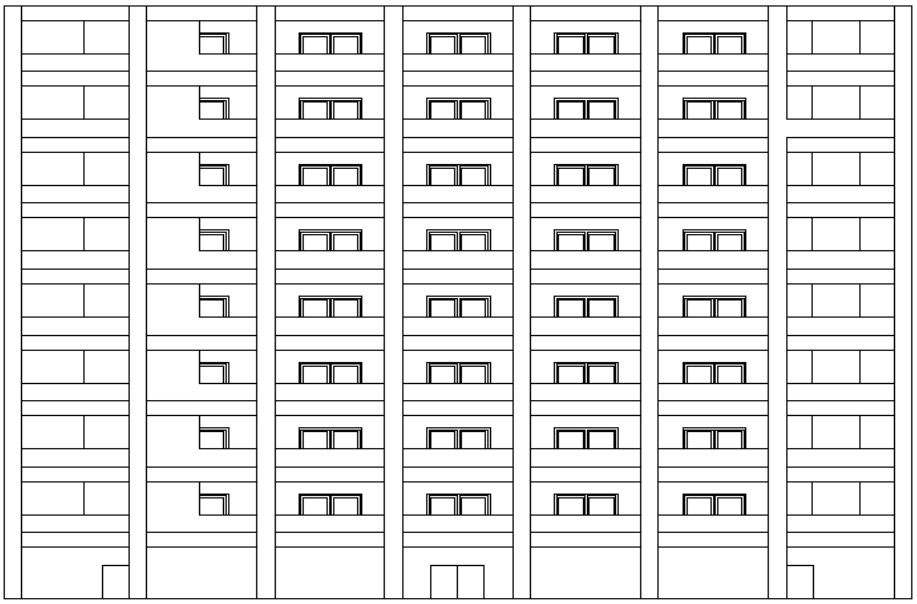
TYPE	BALOK B1 (900 x 800)		BALOK B2 (900 x 800)		BALOK B3 (700 x 300)	
POSISI	TUMPUAN	LAPANGAN	TUMPUAN	LAPANGAN	TUMPUAN	LAPANGAN
POTONGAN						
TUL. ATAS	9 D22	3 D22	6 D22	3 D22	5 D19	3 D19
TUL. BAWAH	5 D22	7 D22	3 D22	5 D22	3 D19	5 D19
SENGKANG	2D10–100	D10–150	D10–100	D10–150	D10–100	D10–150
SENGKANG	2D10		2D10		2D10	

Detail Sloof

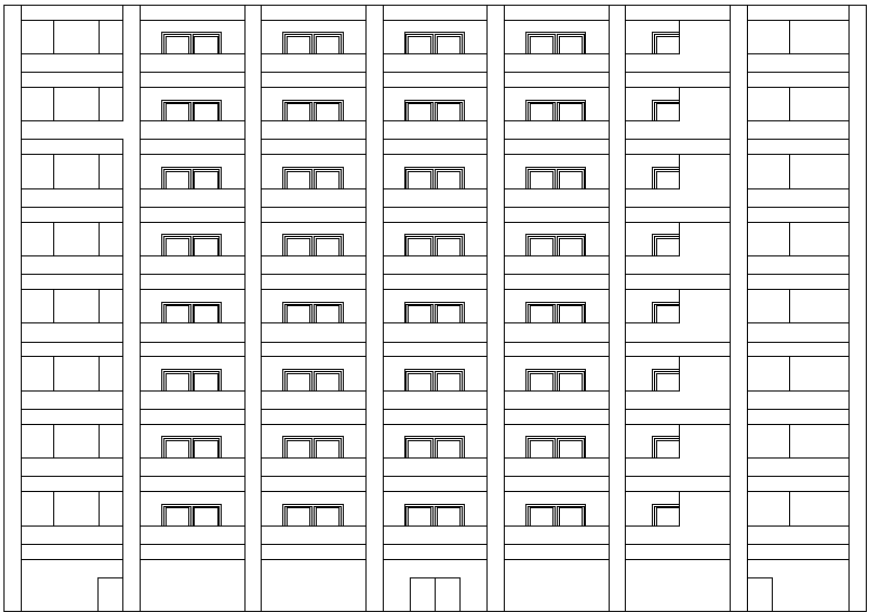
TYPE	SLOOF S1 (300 x 600)		SLOOF S2 (1000 x 800)		SLOOF S3 (800 x 500)	
POSISI	TUMPUAN	LAPANGAN	TUMPUAN	LAPANGAN	TUMPUAN	LAPANGAN
POTONGAN						
TUL. ATAS	5 D19	5 D19	12 D22	12 D22	4 D19	4 D19
TUL. BAWAH	5 D19	5 D19	12 D22	12 D22	4 D19	4 D19
SENGKANG	D10–100	D10–150	2D13–100	2D13–150	D10–100	D10–150
TUL. PINGGANG	2D10		4D13		2D10	

6. Gambar Tampak

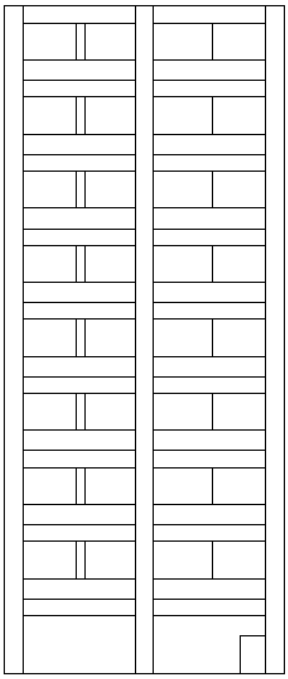
Tampak depan



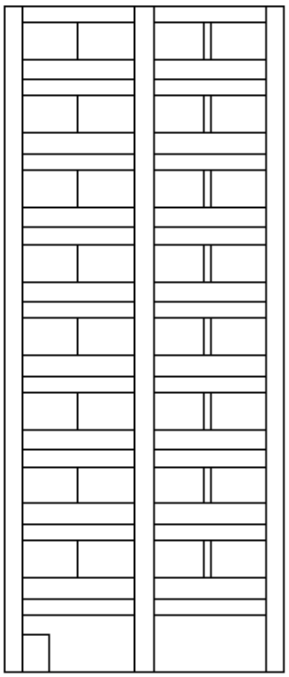
Tampak Belakang



Tampak Kanan

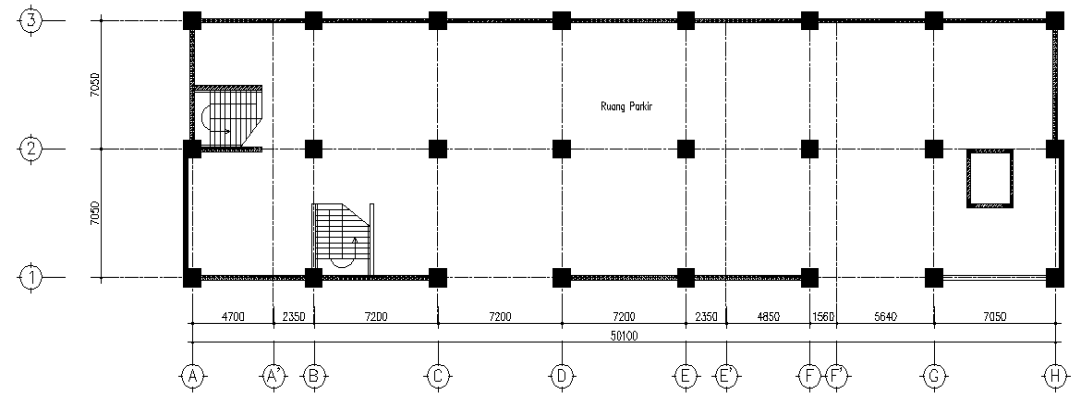


Tampak Kiri

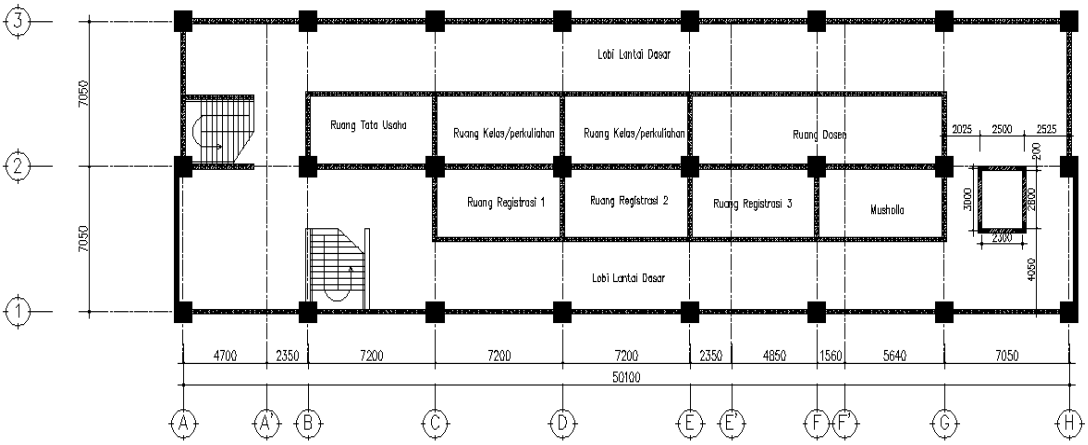


7. Denah Ruangan

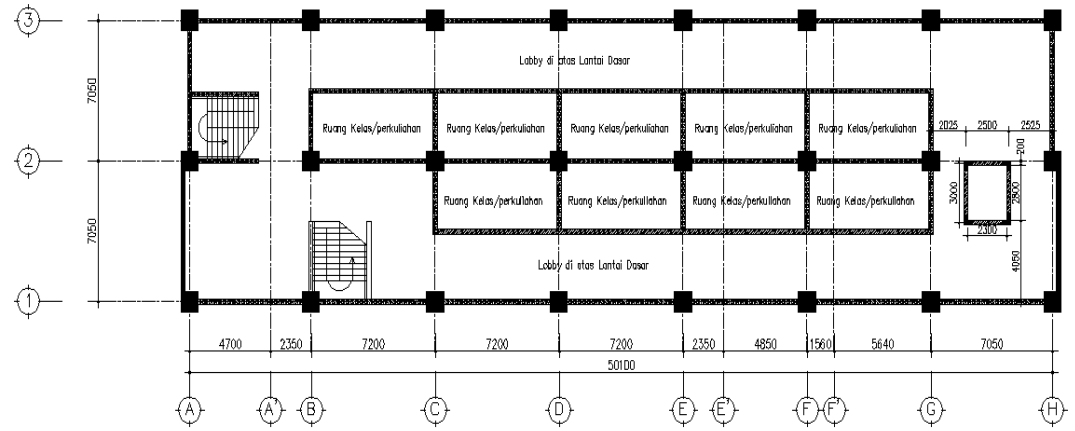
Lantai Basement



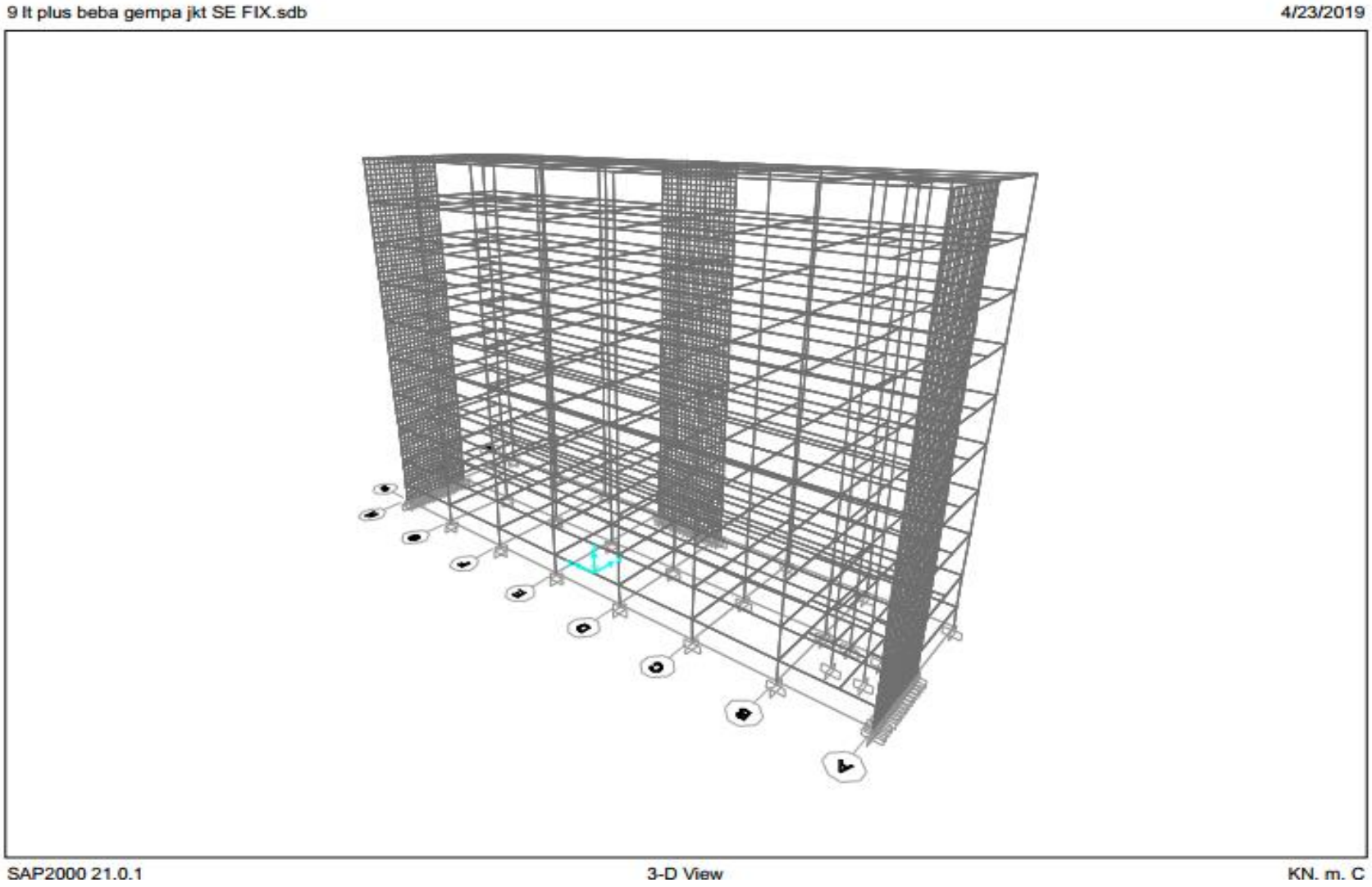
Lantai 1

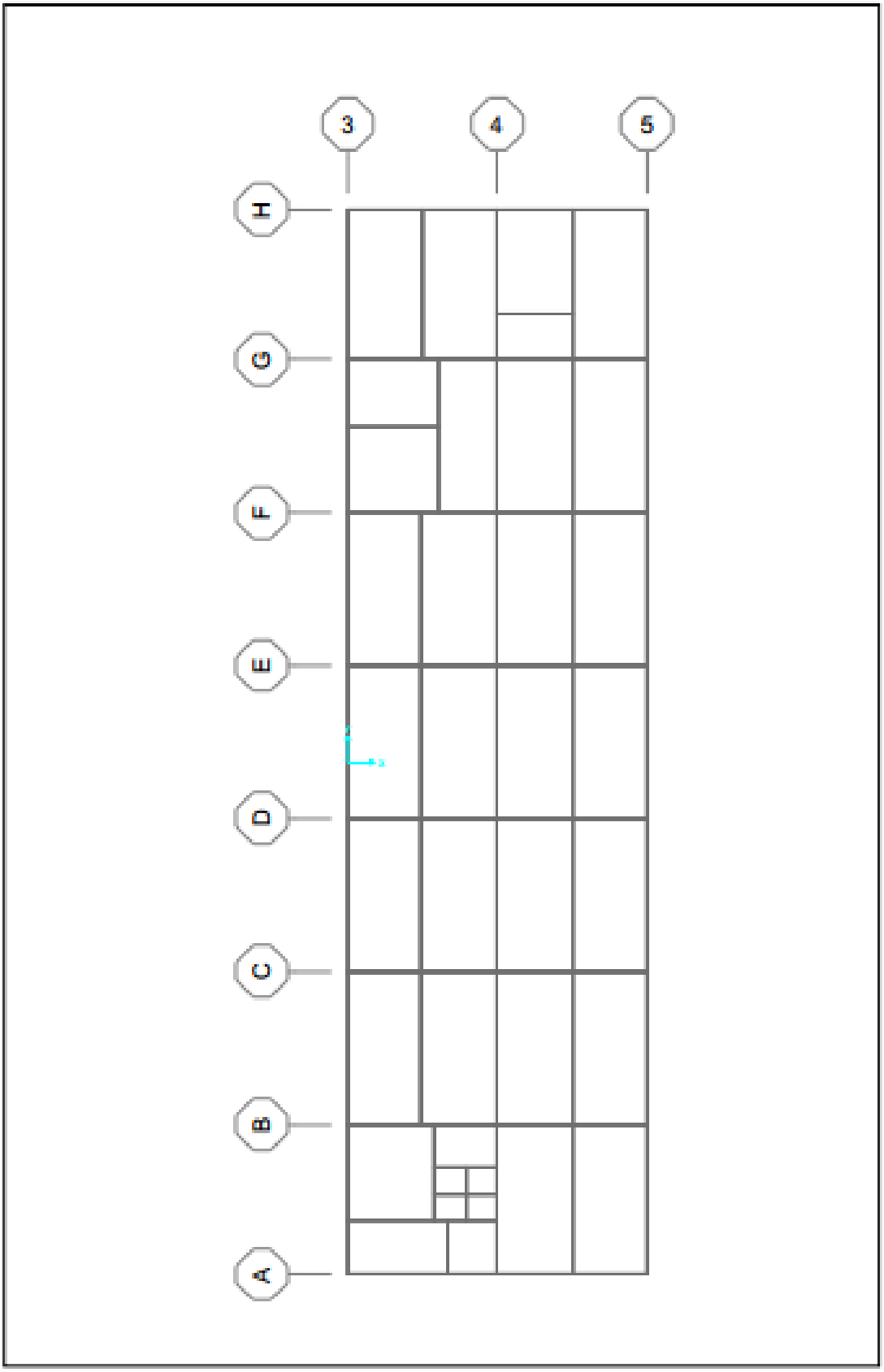


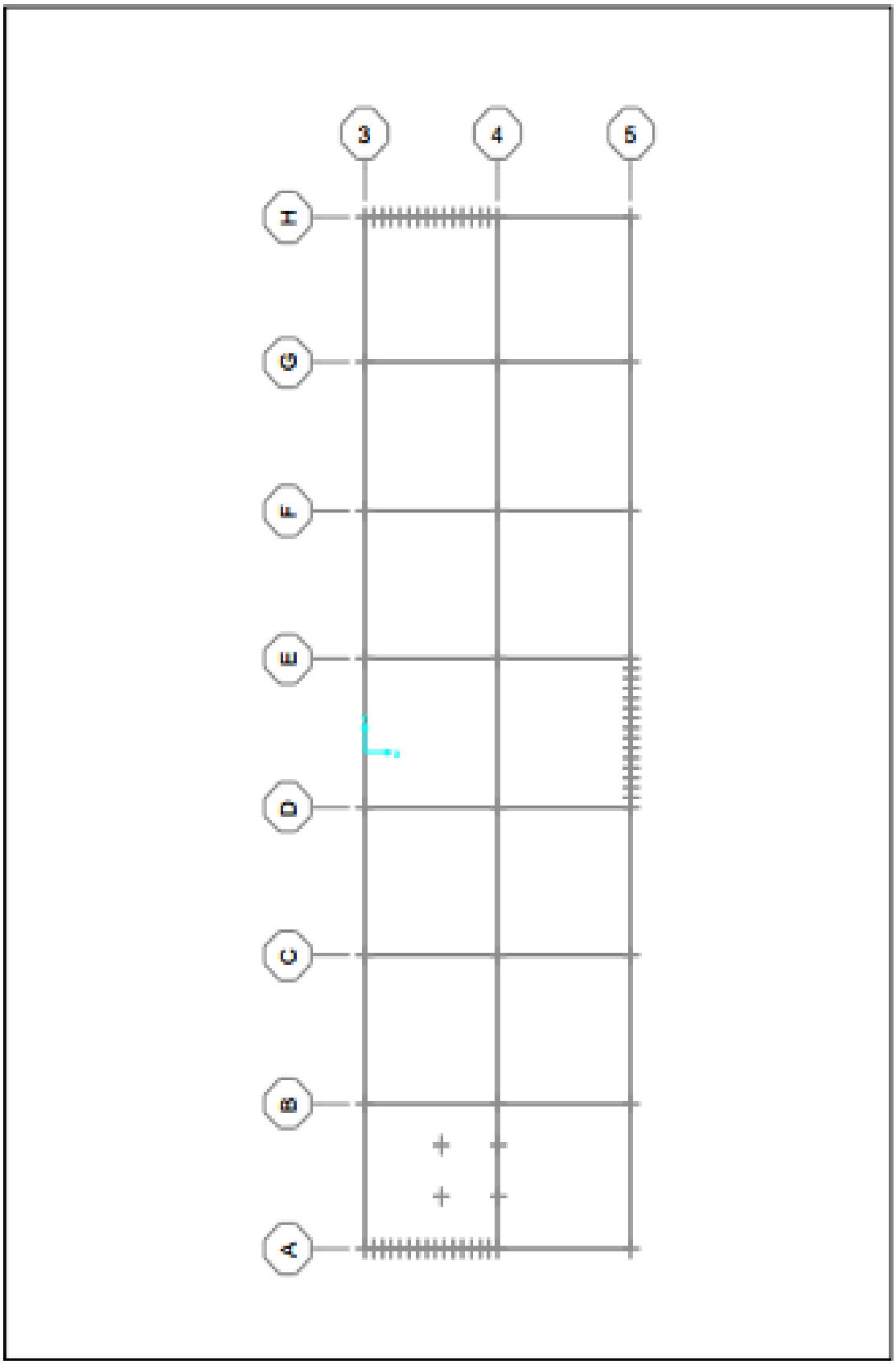
Lantai 2 – 8

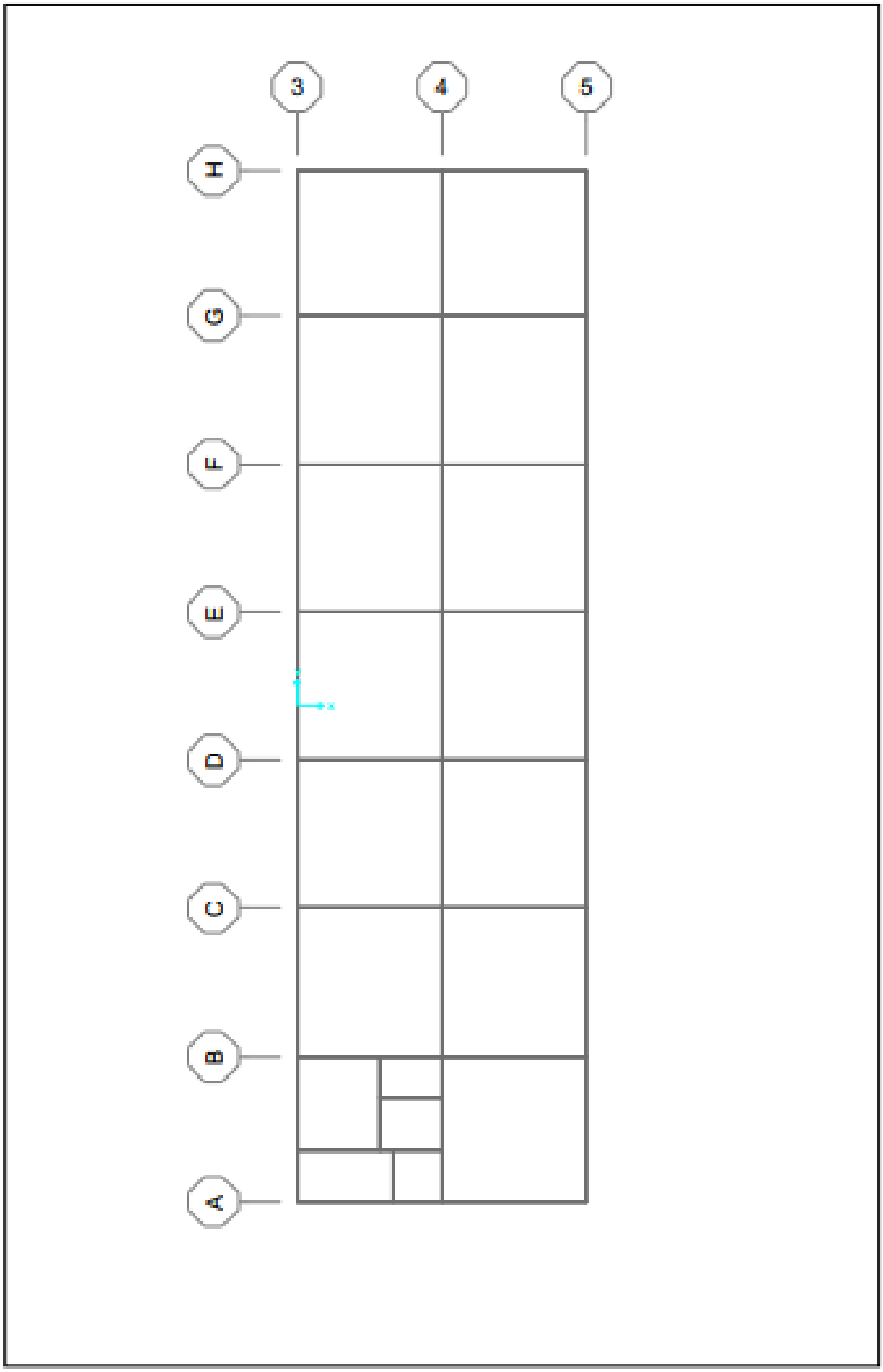


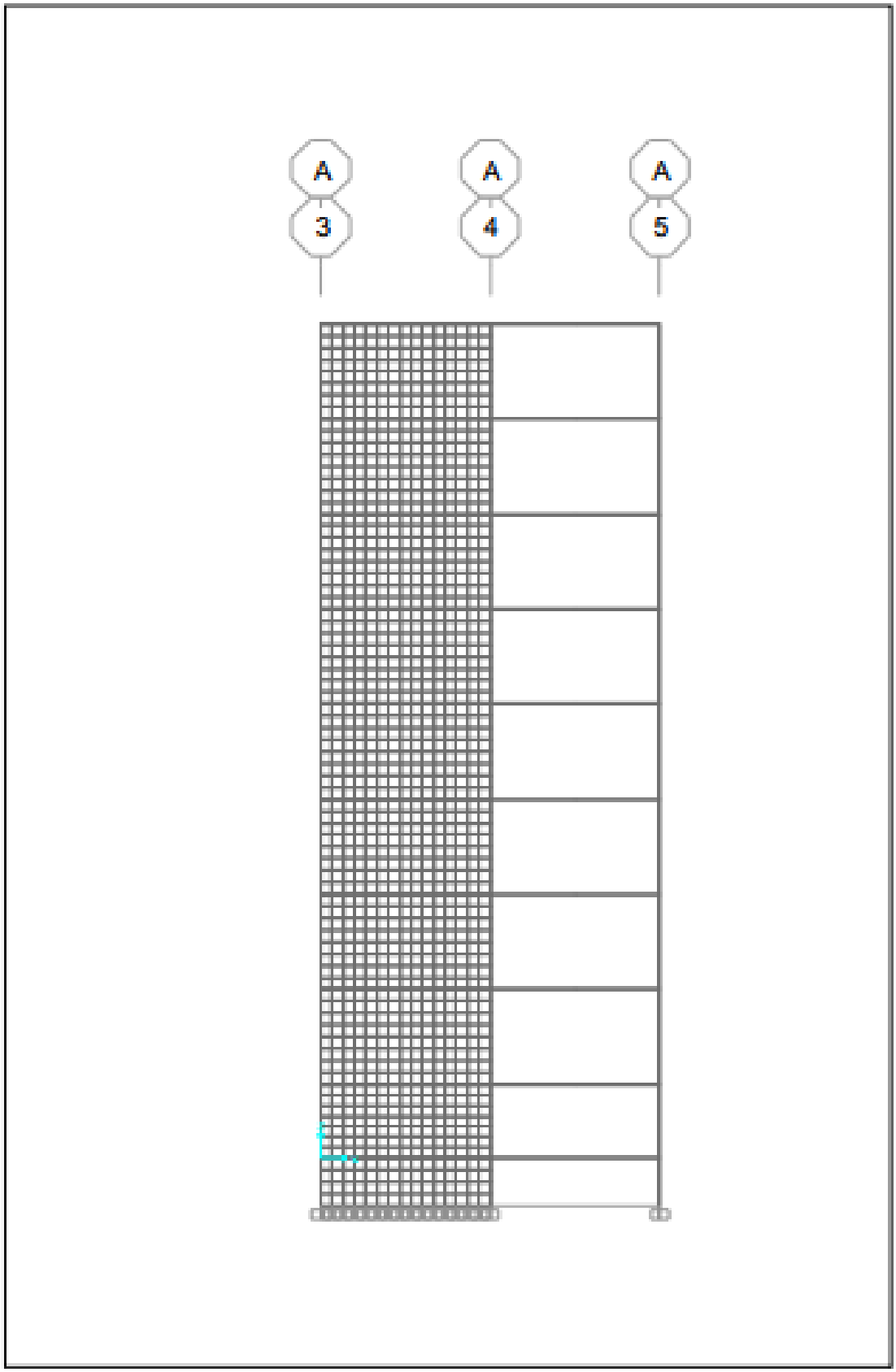
Lampiran 2. SAP2000 Versi 21 Report

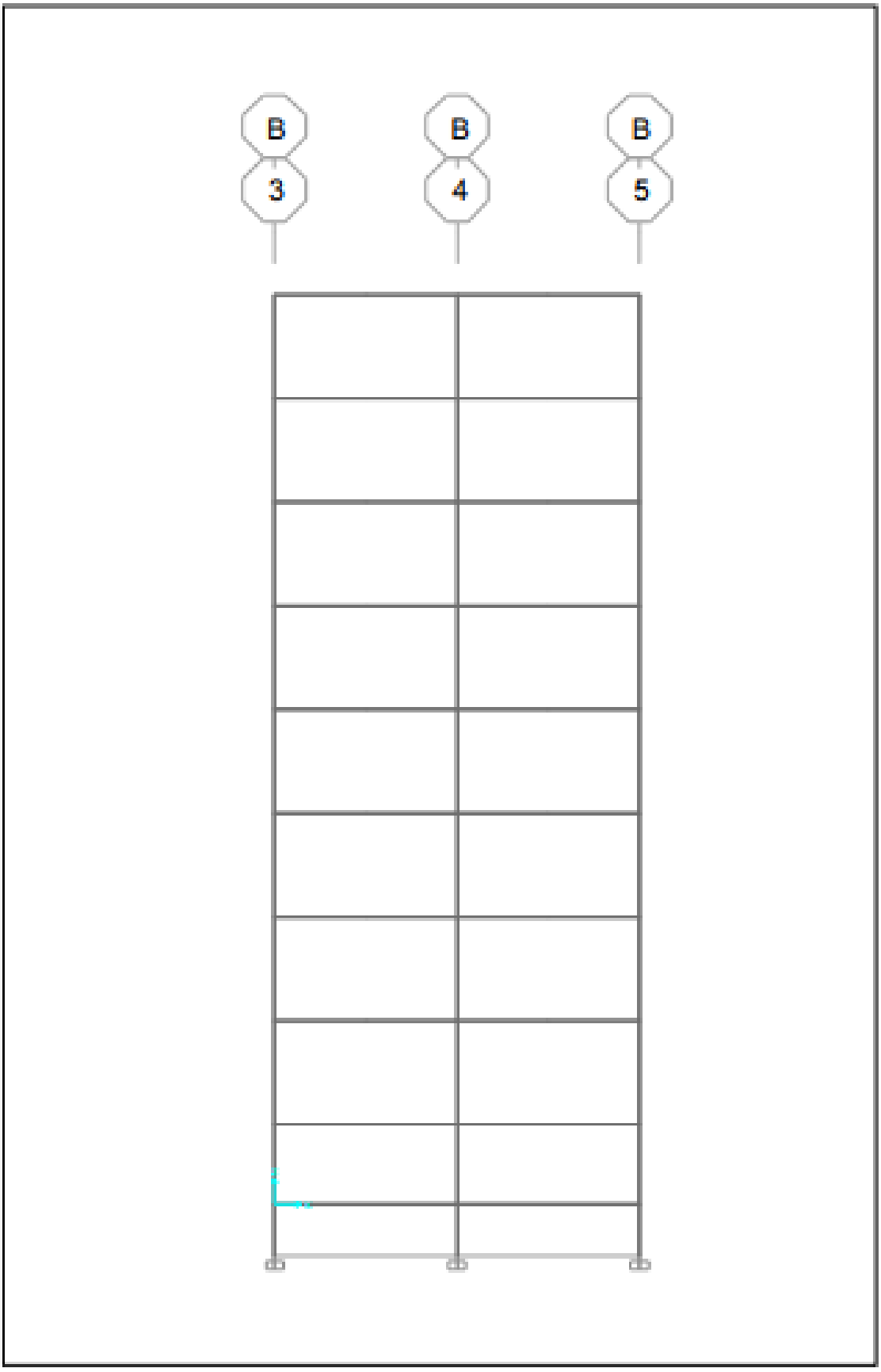



3
4
5
H
G
F
E
D
C
B
A

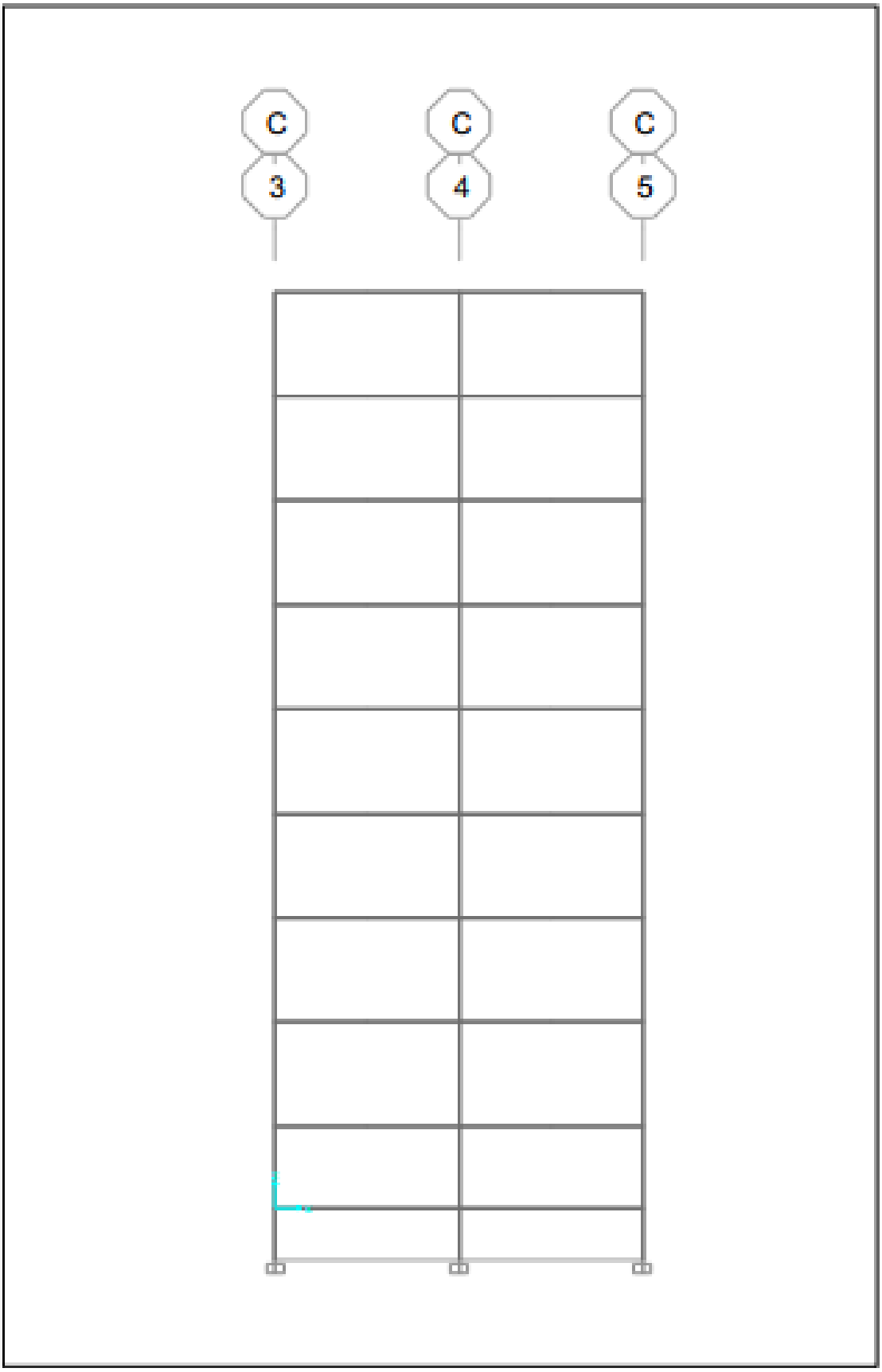

3
4
5
H
G
F
E
D
C
B
A


3
4
5
H
G
F
E
D
C
B
A

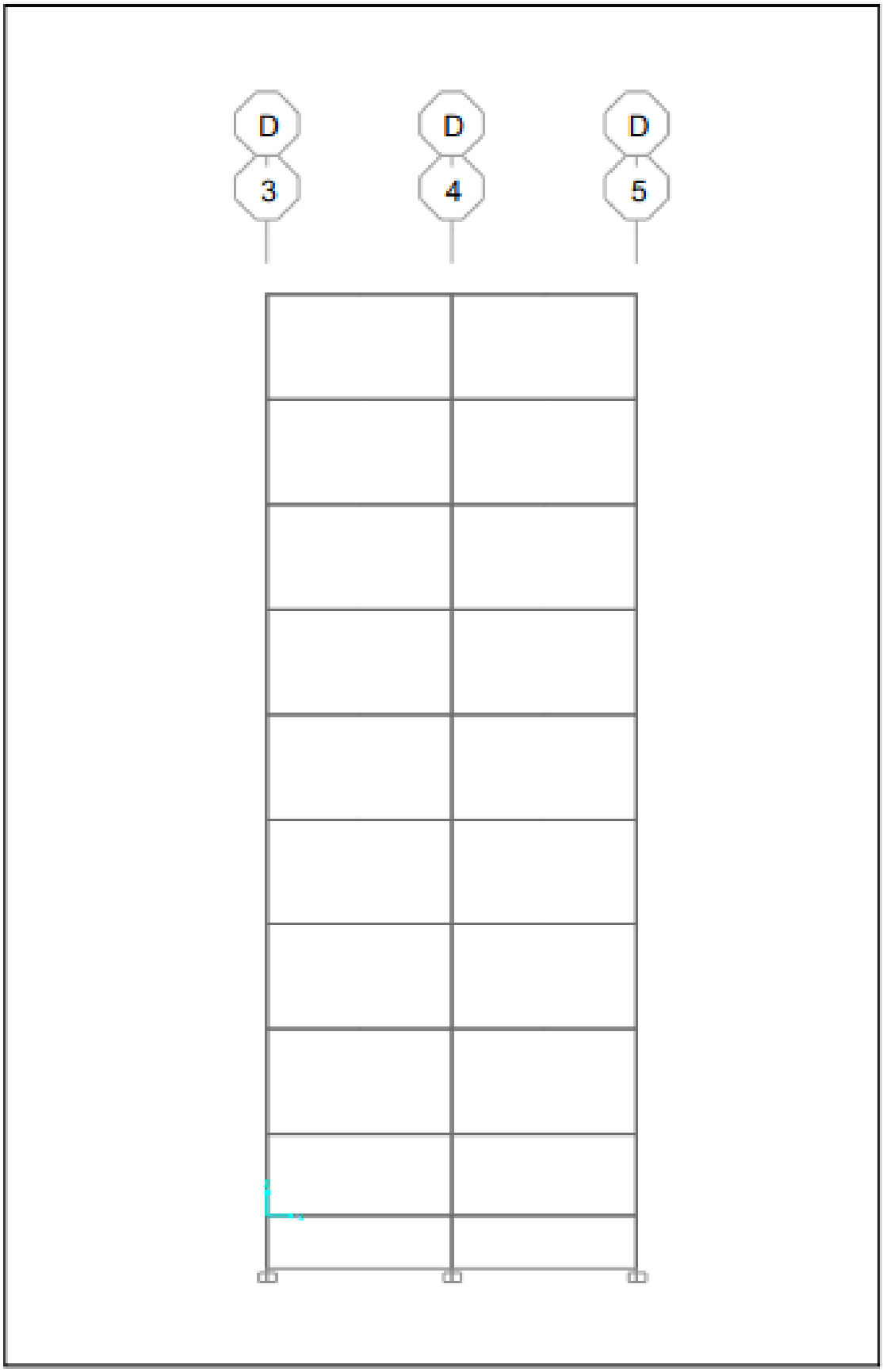

A
3
A
4
A
5


B
B
B
3
4
5

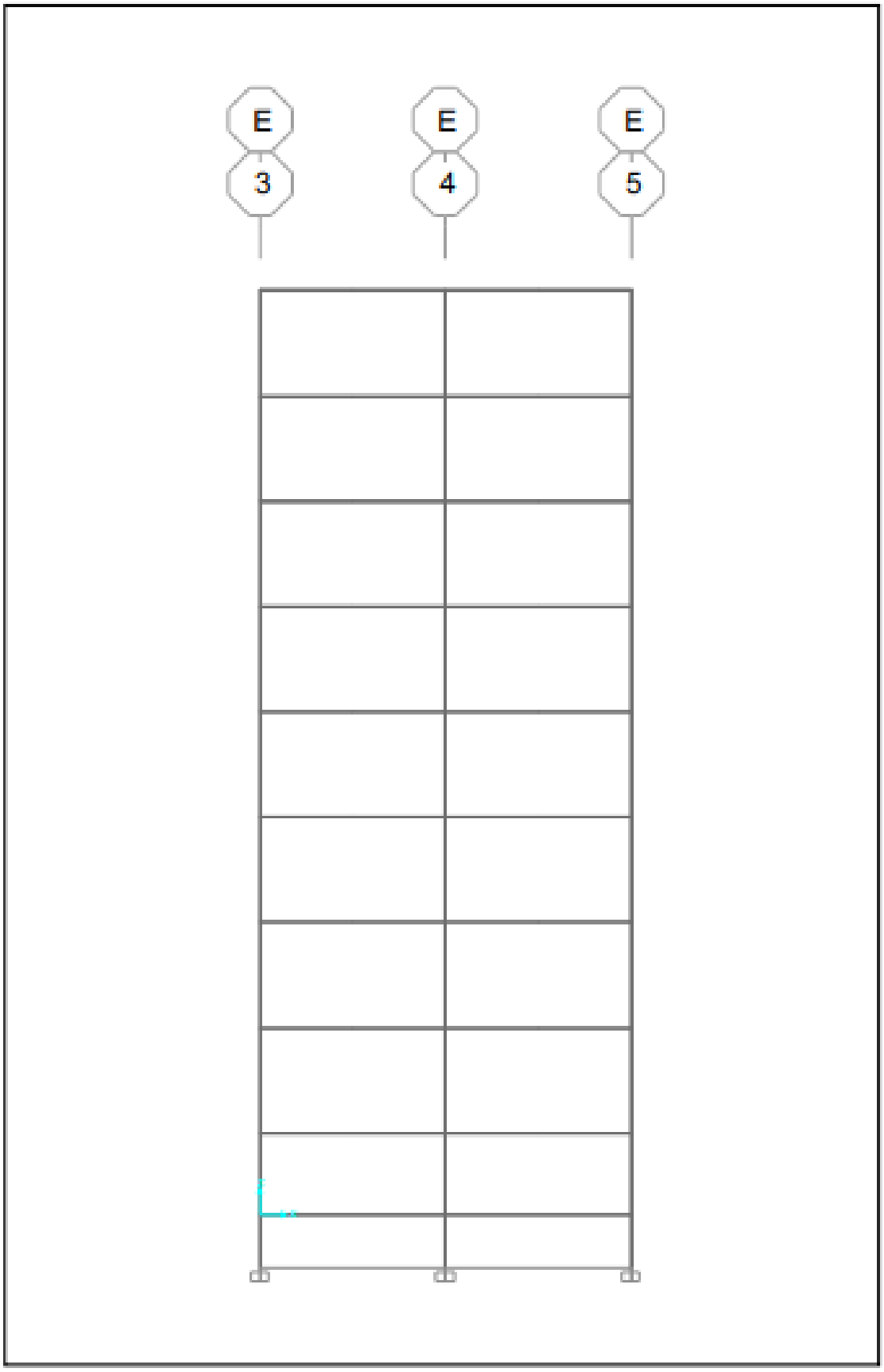
9 lt plus beba gempa jkt SE FIX.sdb 4/23/2019



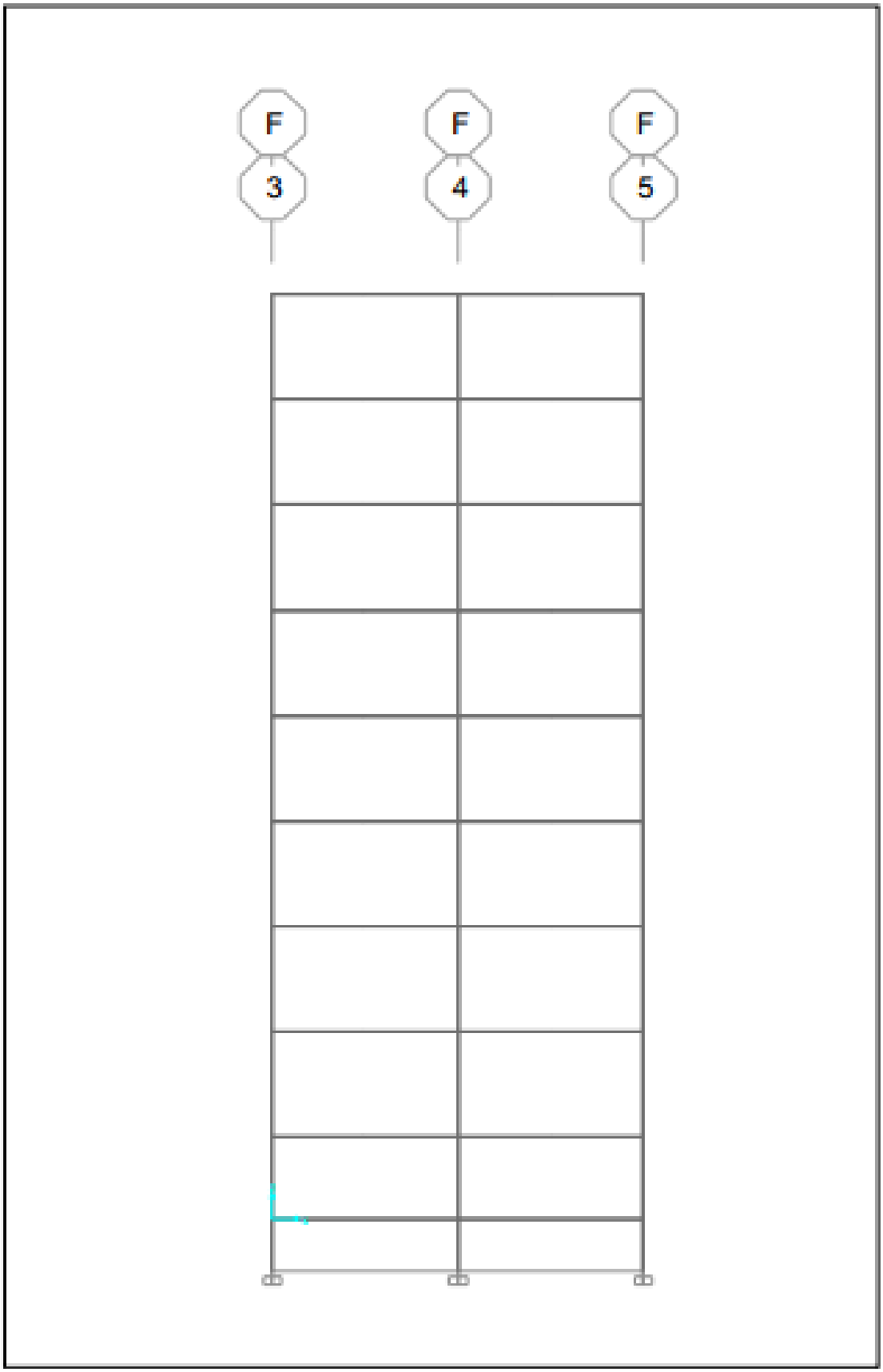
SAP2000 21.0.1 X-Z Plane @ Y=-0.85 KN, m, C

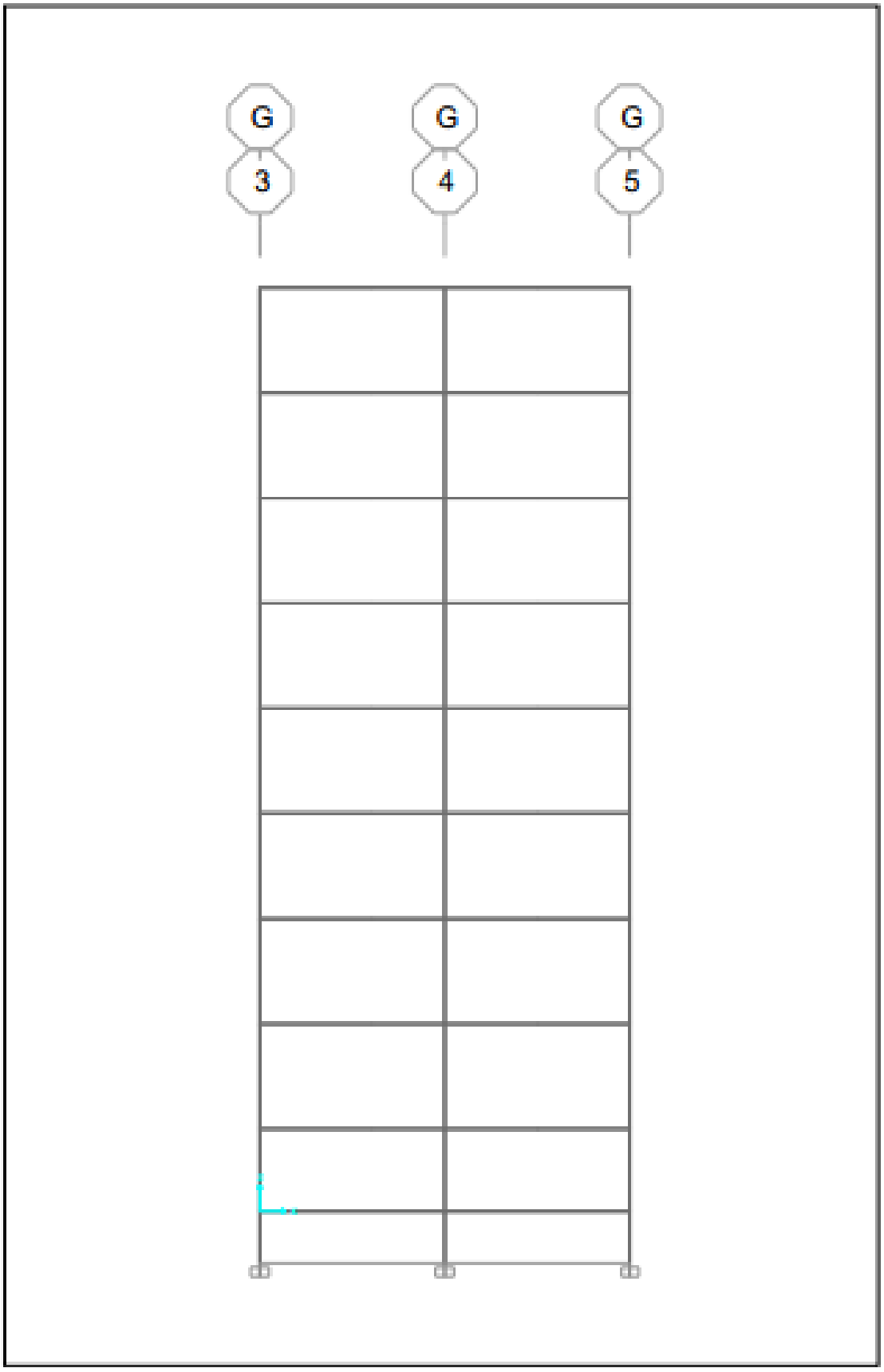

D
D
D
3
4
5

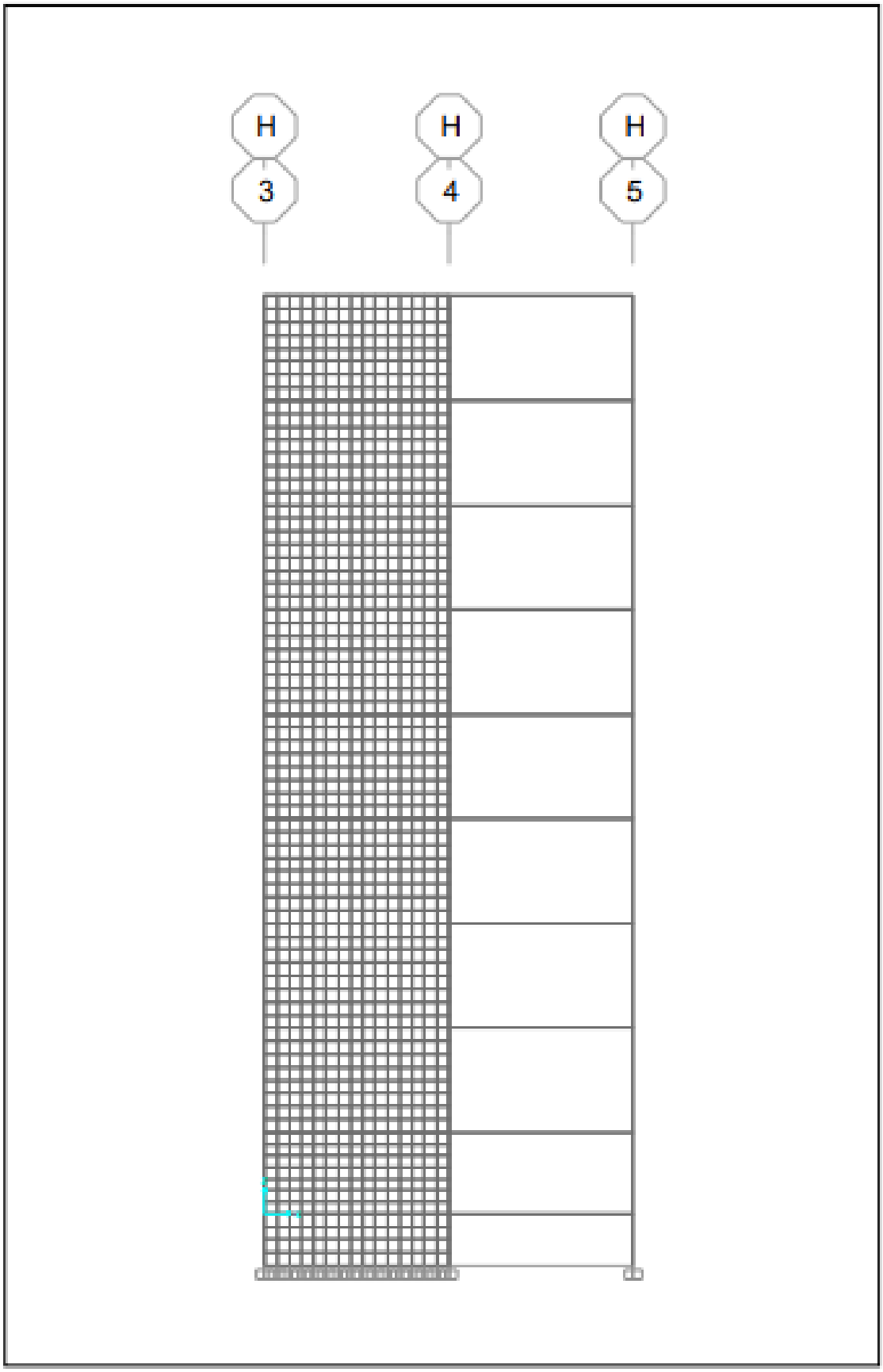
9 lt plus beba gempa jkt SE FIX.sdb 4/23/2019

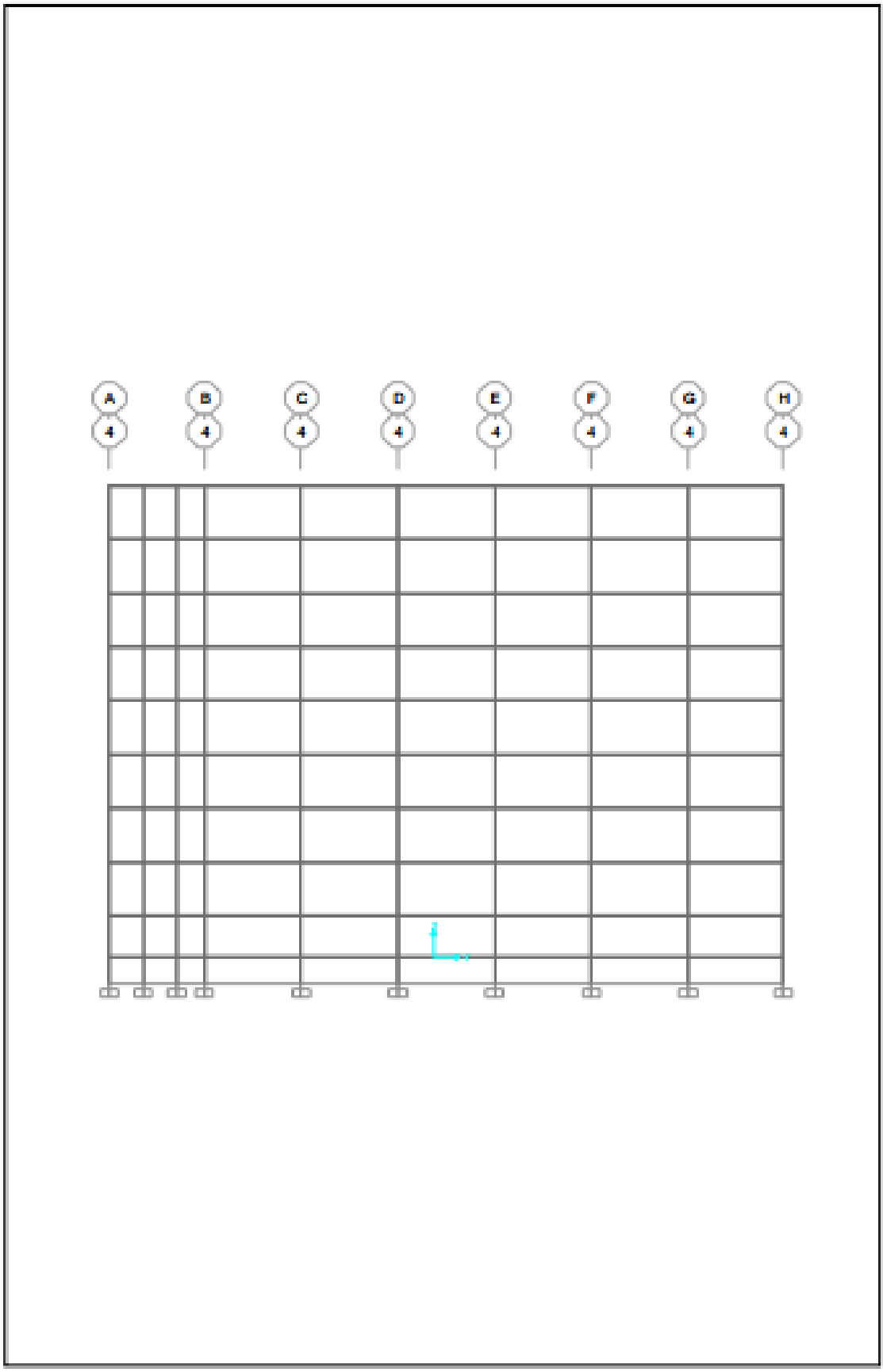


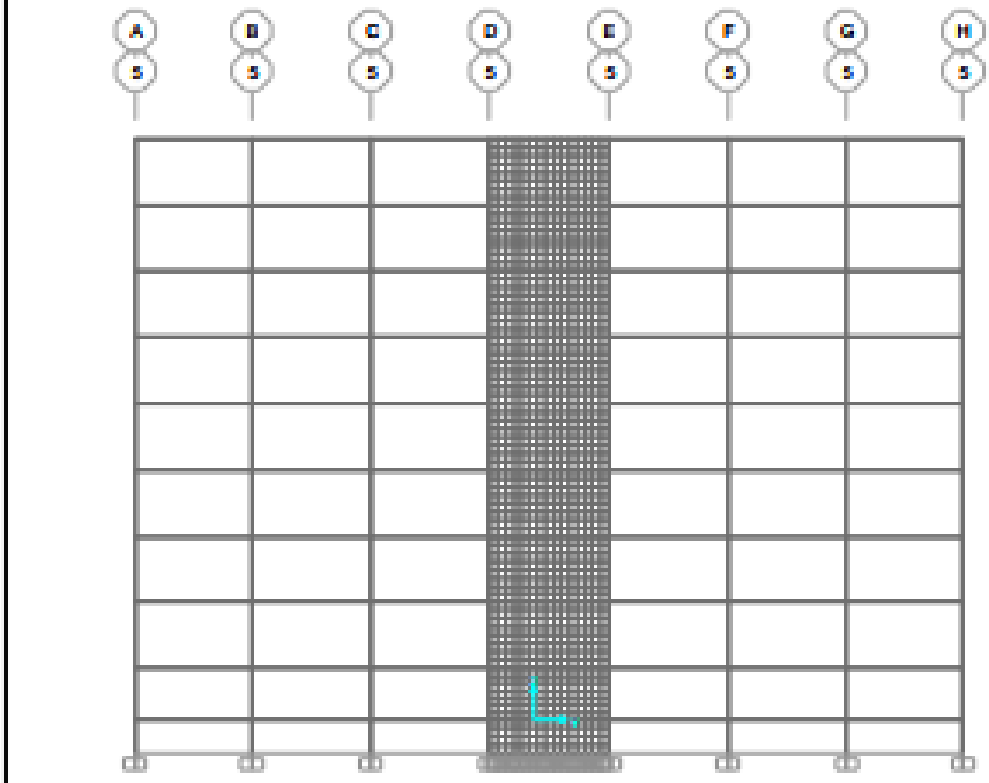
SAP2000 21.0.1 X-Z Plane @ Y=4.55 KN, m, C

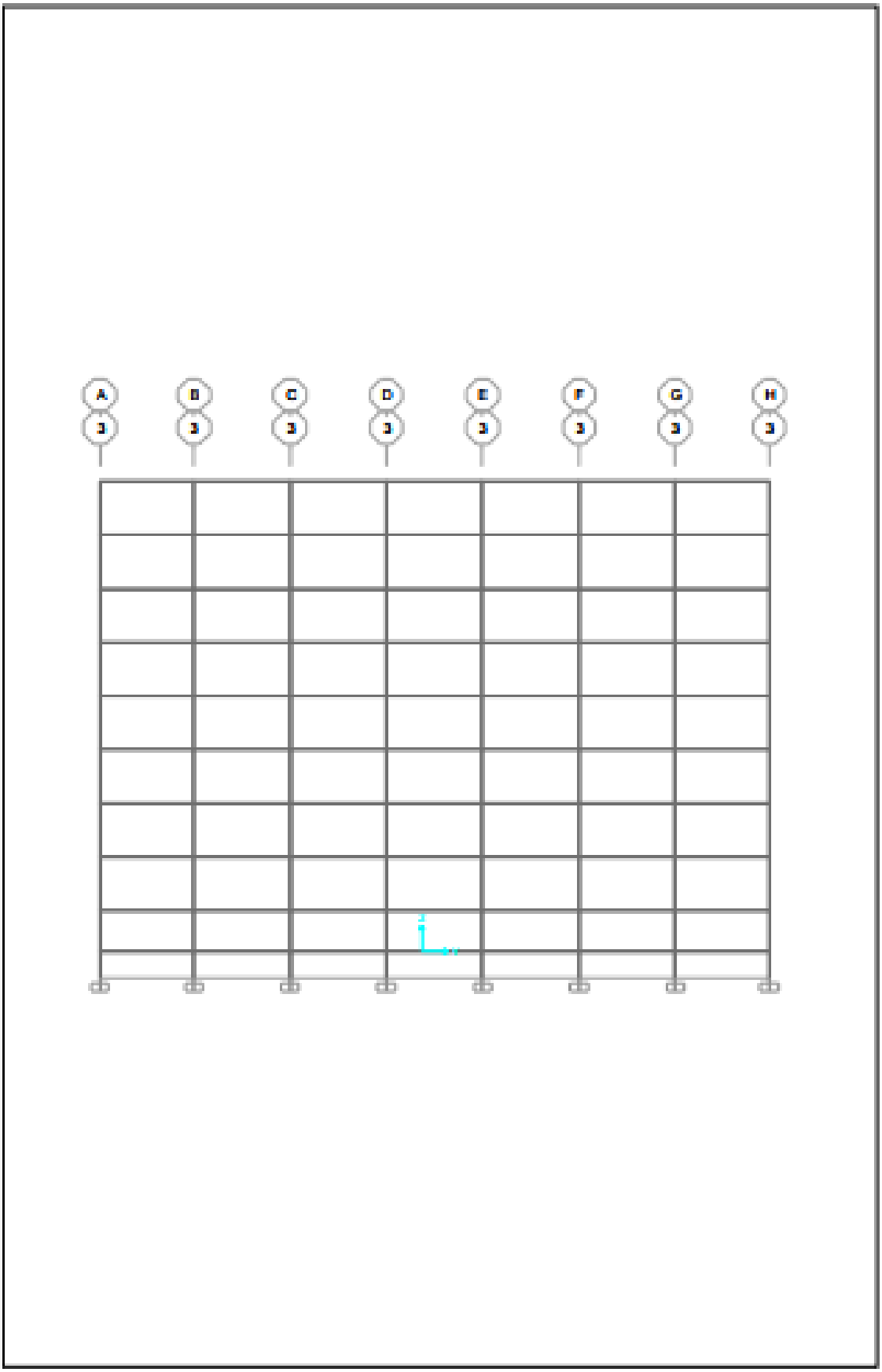

F
3
F
4
F
5


G
3
G
4
G
5


H
3
H
4
H
5


A
B
C
D
E
F
G
H
4


A
B
C
D
E
F
G
H
5


A
B
C
D
E
F
G
H
3

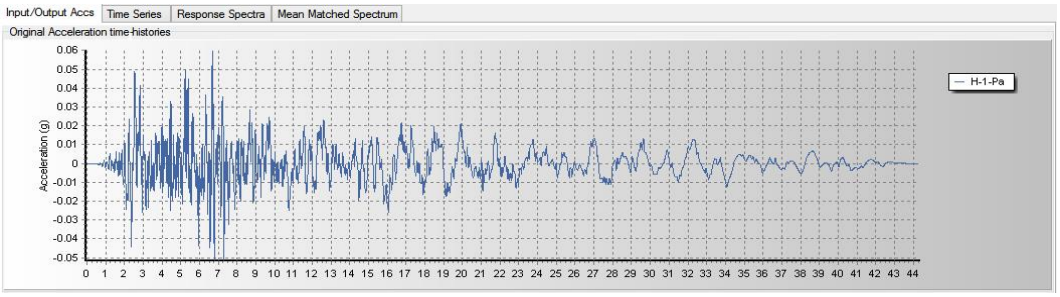
Lampiran 3. SEISMOMATCH V.16

A. Akselogram Rekaman Gempa

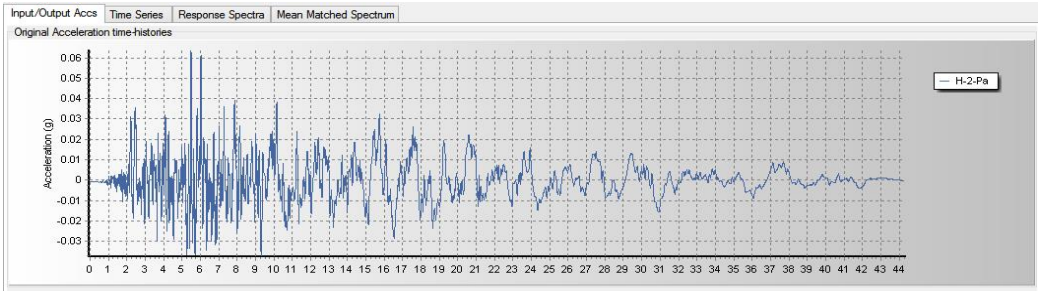
1. Tanah Keras (SC)

a. Parkfield-1966-Cholame

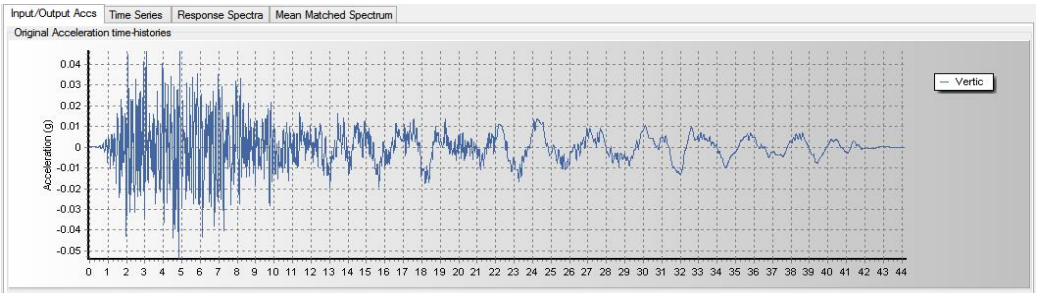
1) H-1-Parkfield Cholame



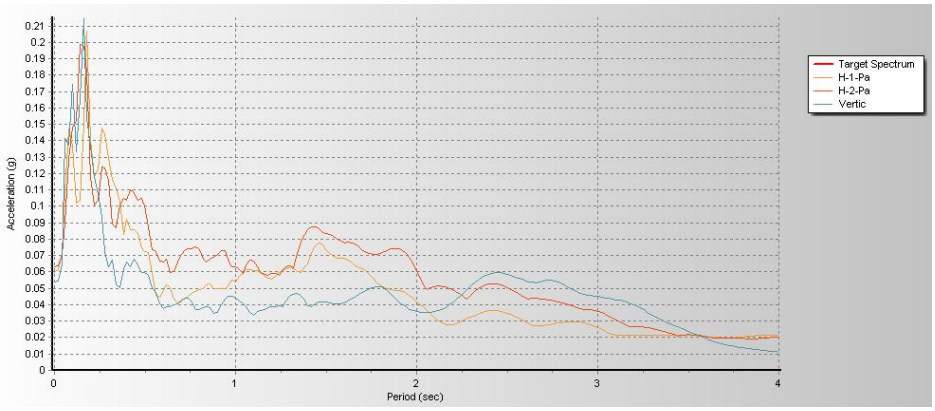
2) H-2-Parkfield Cholame



3) Vertikal-Parkfiled Cholame

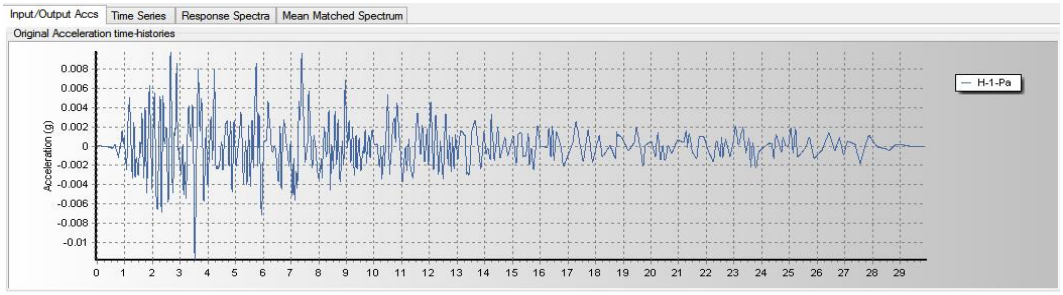


1) Respons Spektra Parkfield Cholame

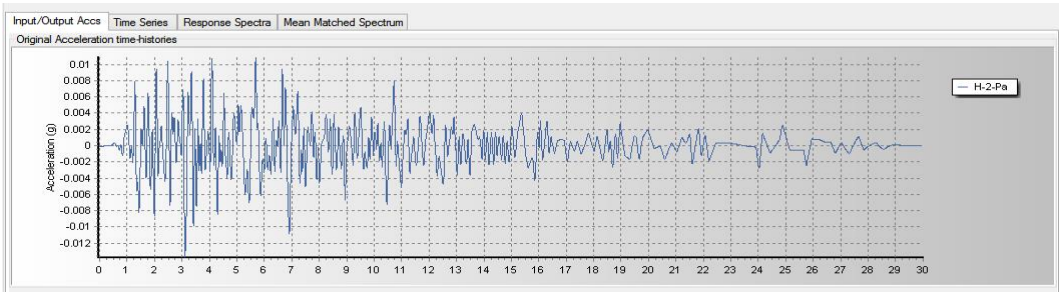


b. Parkfield-1966-San Luis Obispo

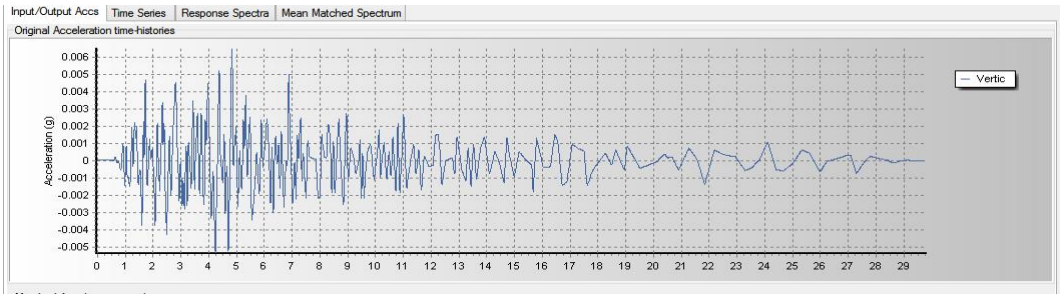
1) H-1-Parkfield San Luis Obispo



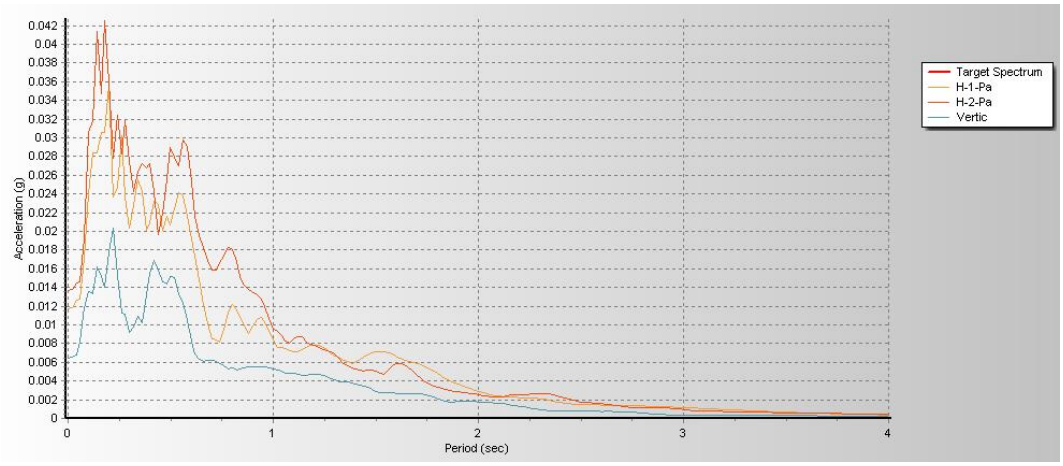
2) H-2-Parkfield San Luis Obispo



3) Vertical-Parkfield San Luis Obispo

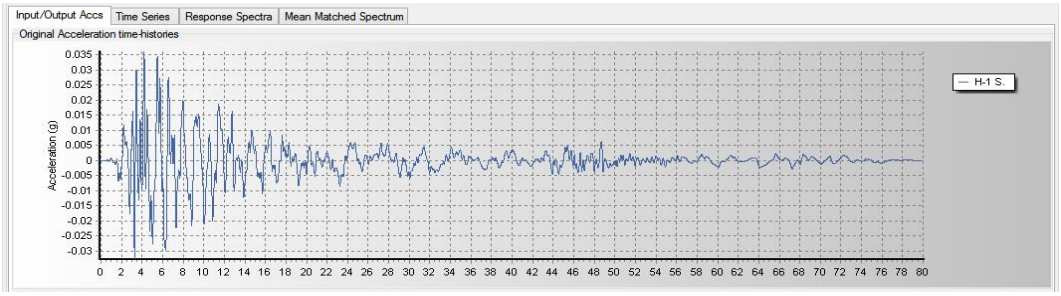


4) Respons Spektra Parkfield San Luis Obispo

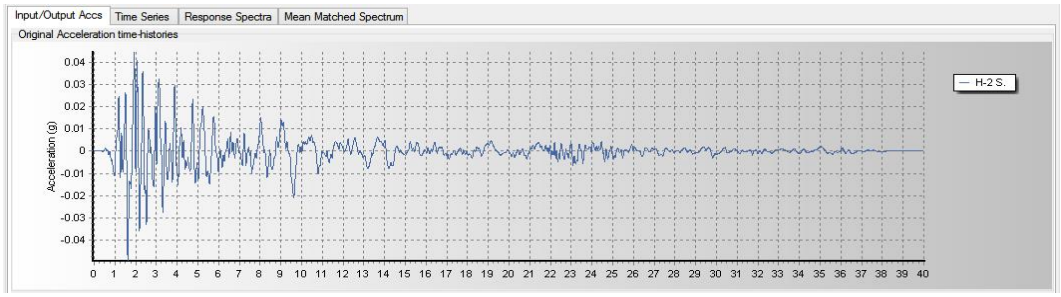


c. Southern Calif

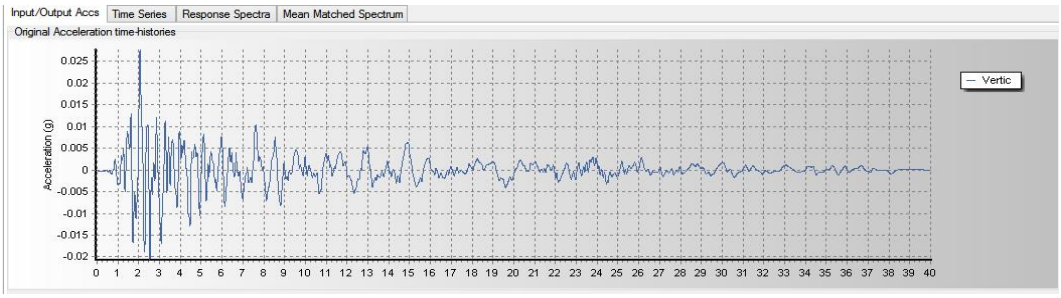
1) H-1 S.Calif



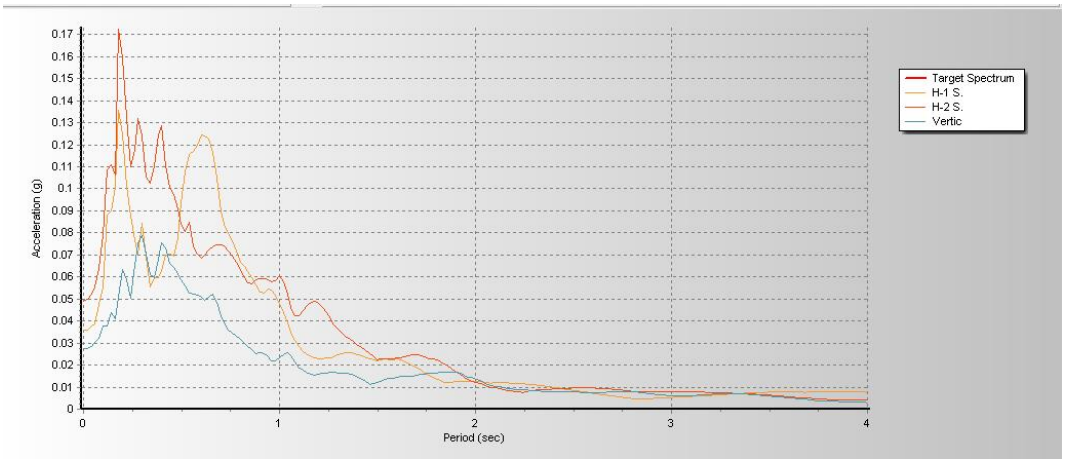
2) H-2 S.Calif



3) Vertical S.Calif



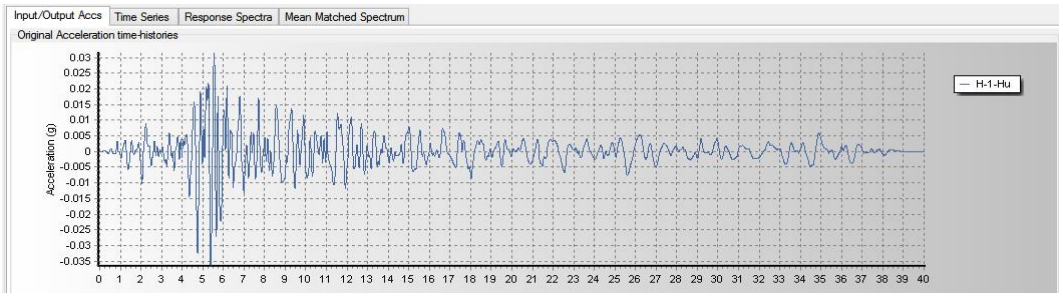
4) Respons Spektra S.Calif



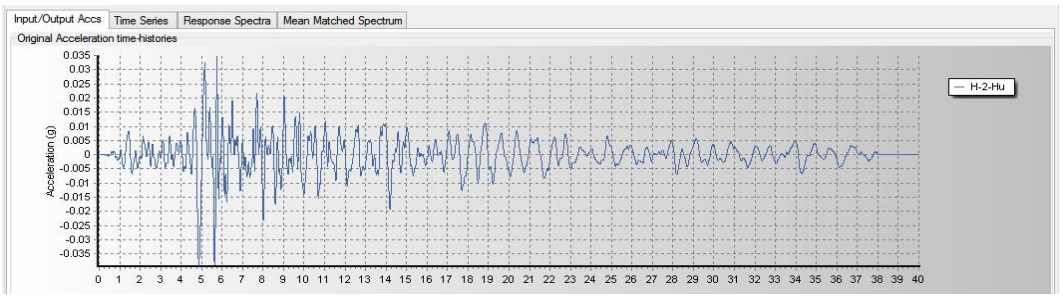
2. Tanah Sedang (SD)

a. Humbolt Bay-1937-Ferndale City Hall

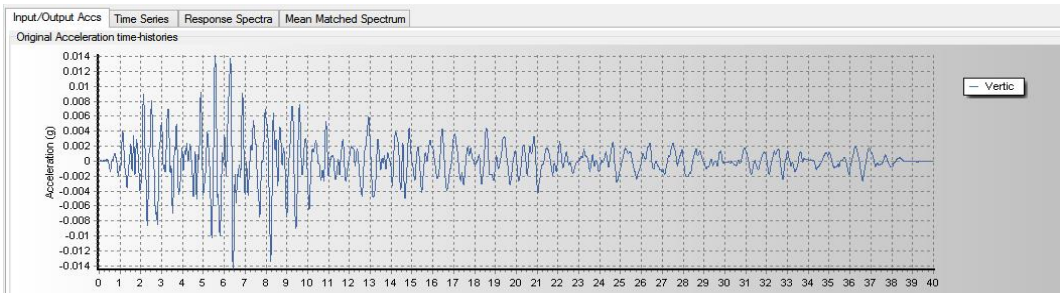
1) H-1-Humbolt



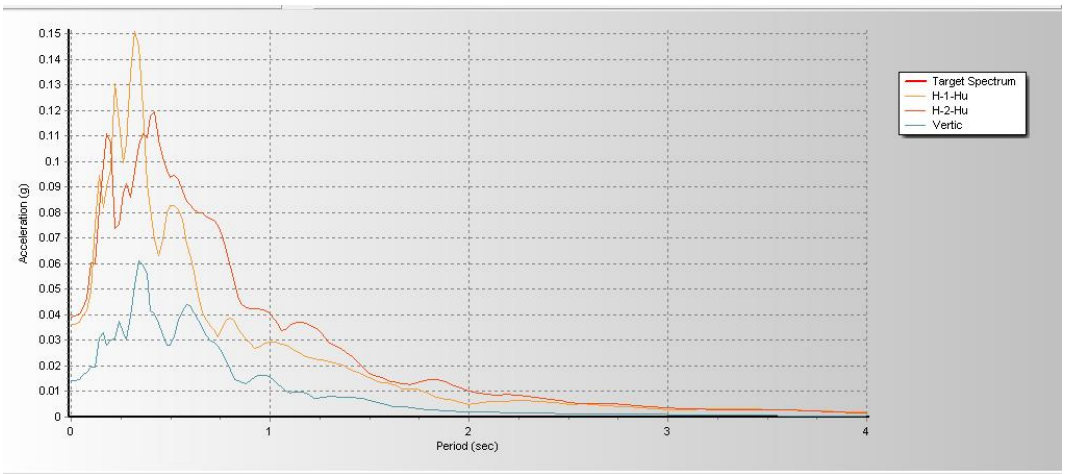
2) H-2-Humbolt



3) Vertical-Humbolt

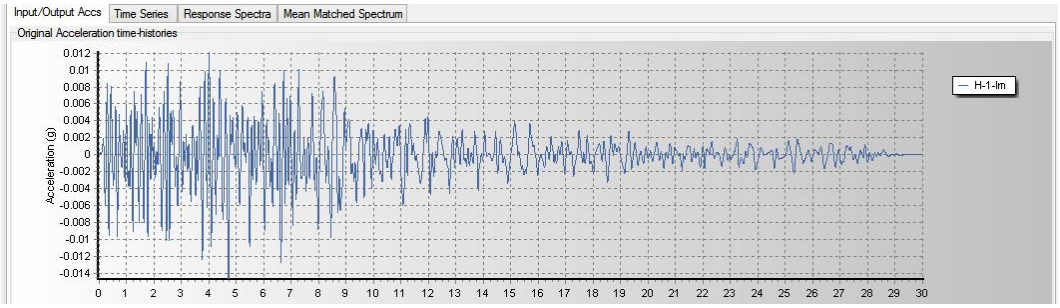


4) Respons Spektra Humbolt

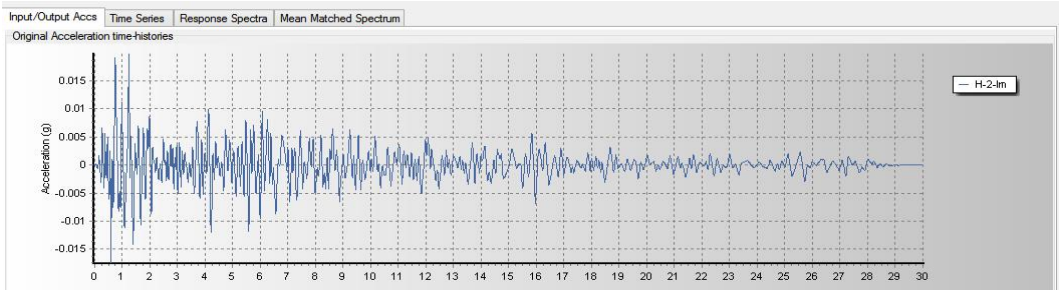


b. Imperial Valley-1938-El Centro Array

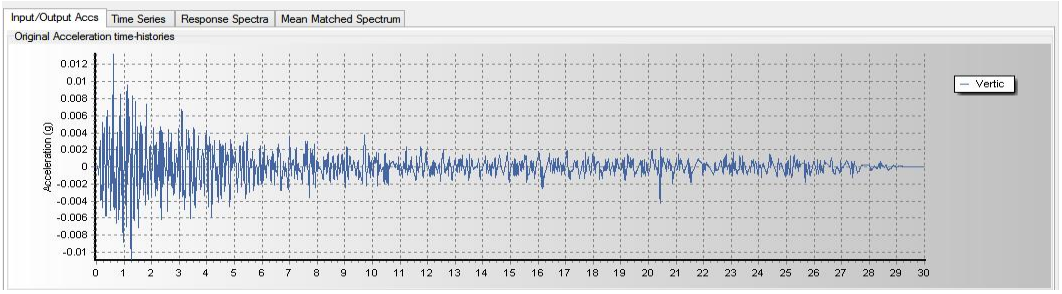
1) H-1-Imperial Valley



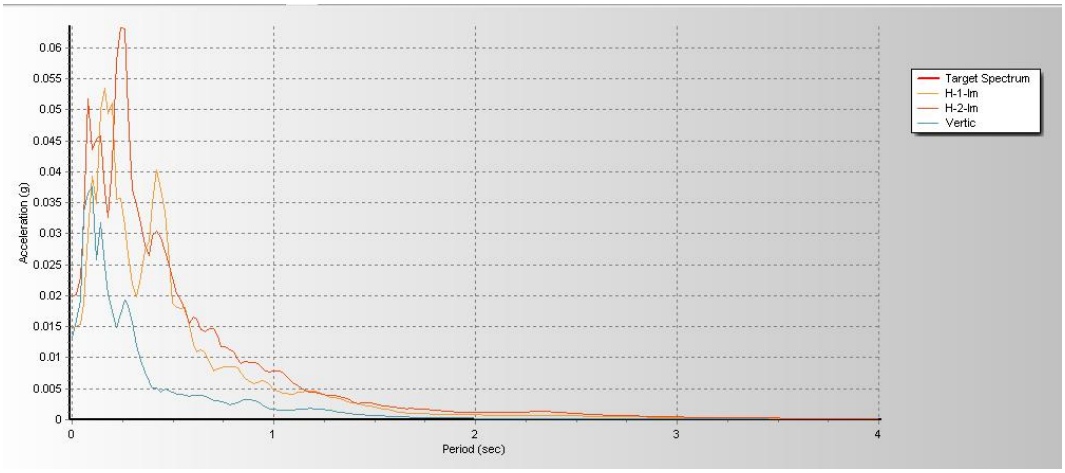
2) H-2-Imperial Valley



3) Vertical-Imperial Valley

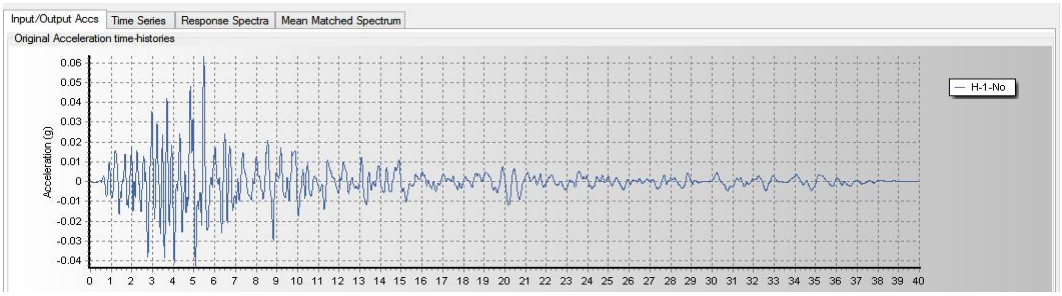


4) Respons Spektra Imperial Valley

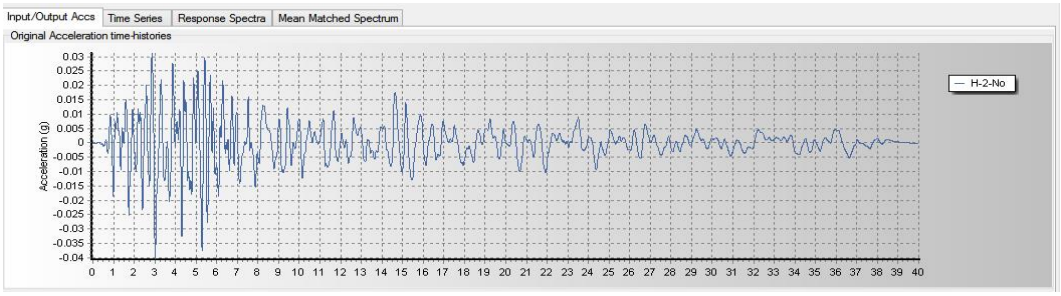


c. Northwest Calif (02)-1941-Ferndale City Hall

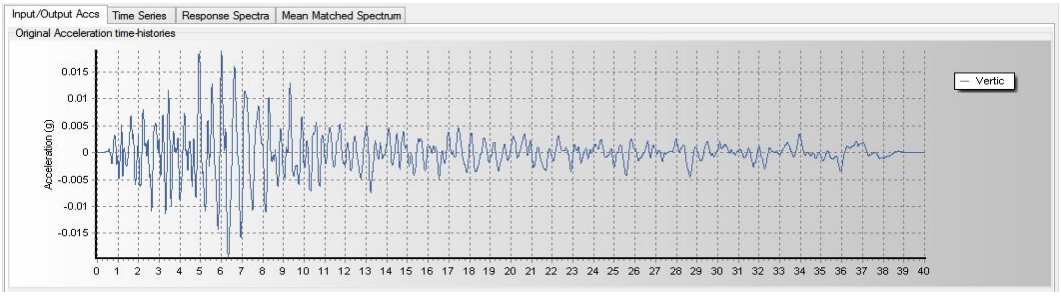
1) H-1-Northwest Calif



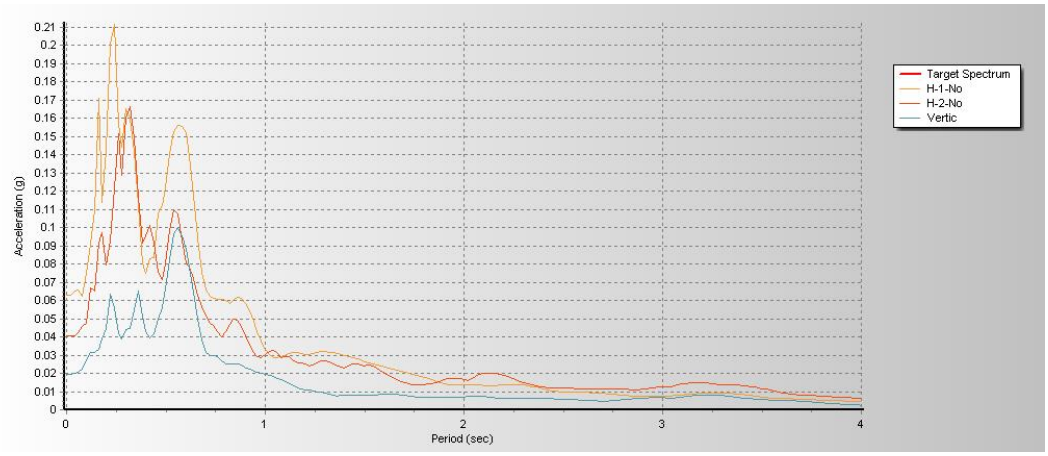
2) H-2-Northwest Calif



3) Vertical-Northwest Calif



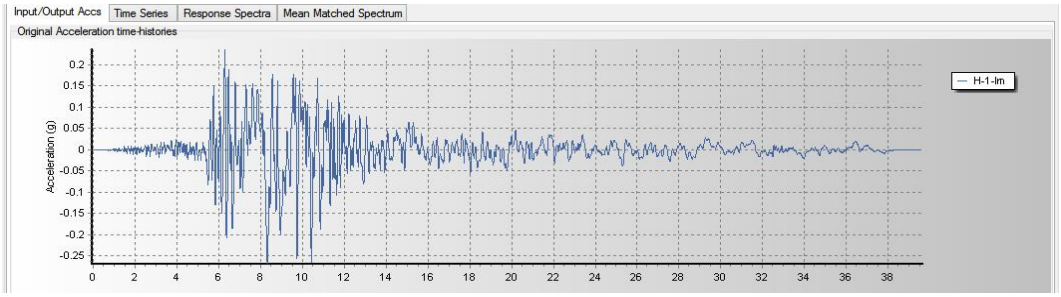
4) Respons Spektra Northwest Calif



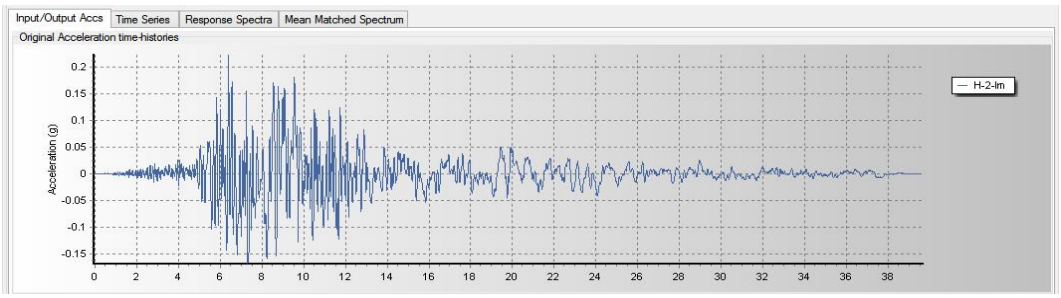
3. Tanah Lunak (SE)

a. Imperial Valley (06)-1979-El Centro Array

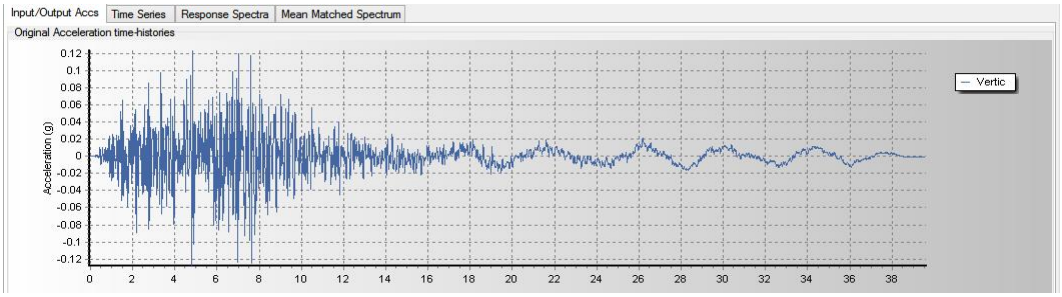
1) H-1-Imperial Valley



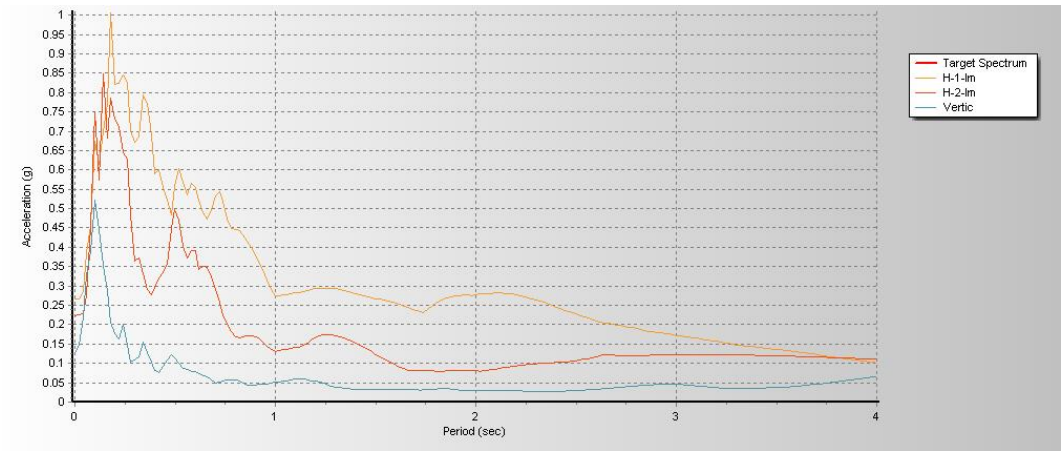
2) H-2-Imperial Valley



3) Vertical-Imperial Valley

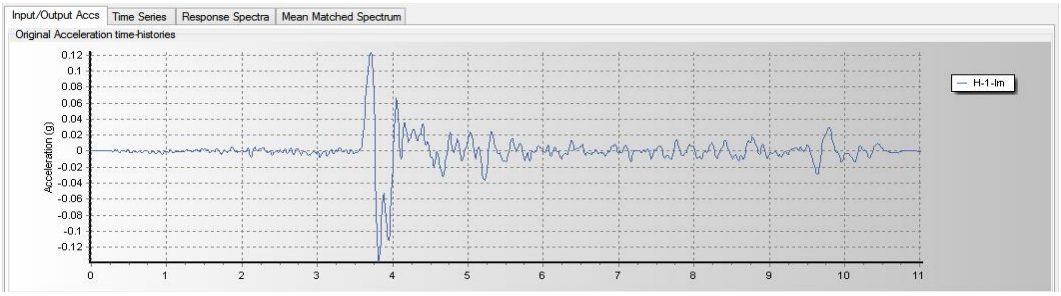


4) Respons Spektra Imperial Valley

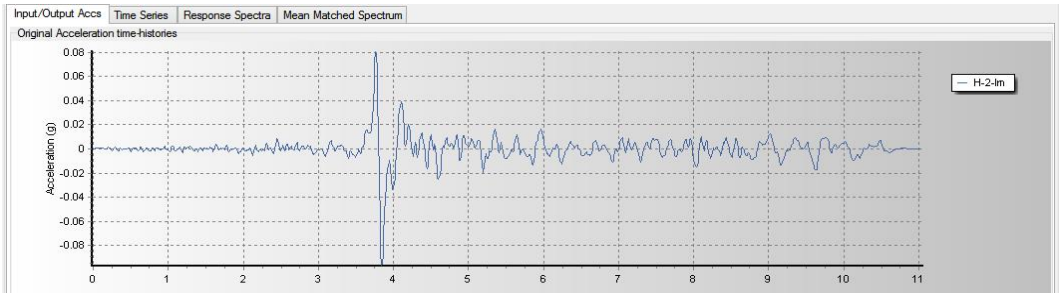


b. Imperial Valley (07)-1979-El Centro Array

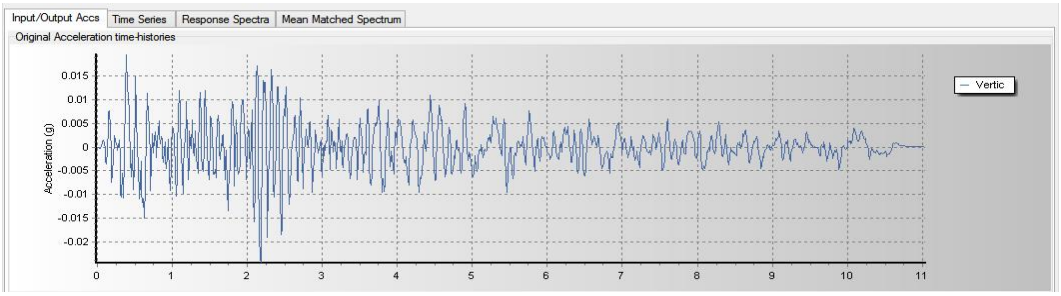
1) H-1-Imperial Valley (07)



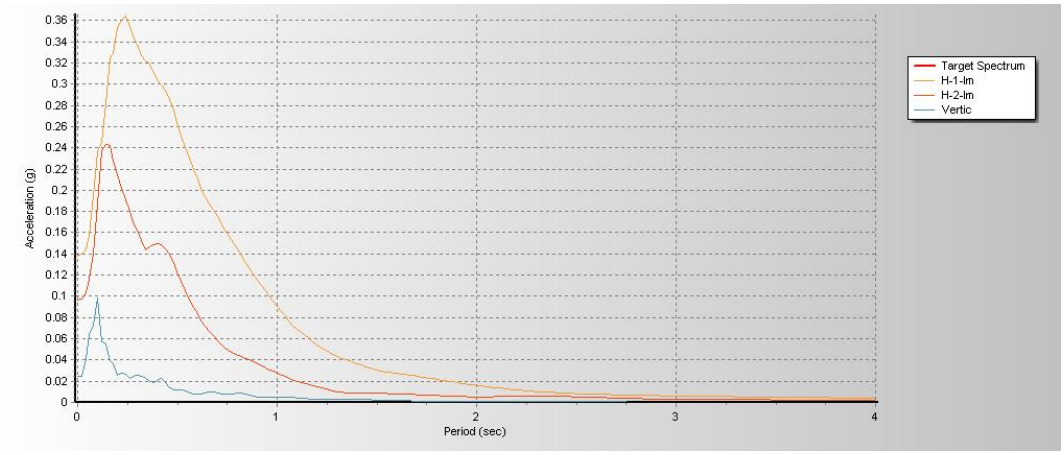
2) H-2-Imperial Valley (07)



3) Vertical-Imperial Valley (07)

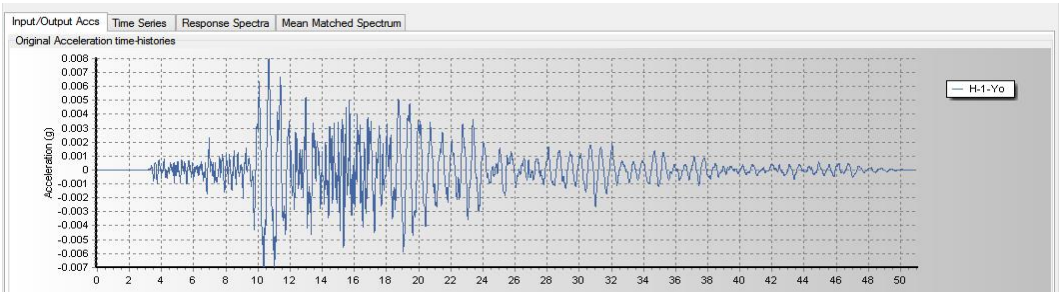


4) Respons Spekta Imperial Valley (07)

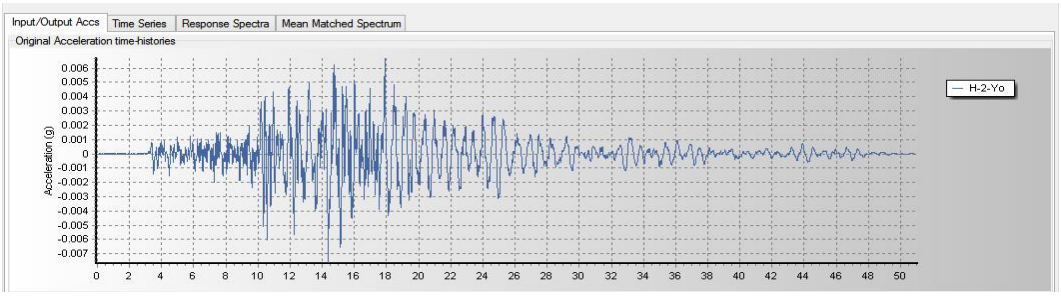


c. Yountville-2000-Larkspur Ferry Terminal

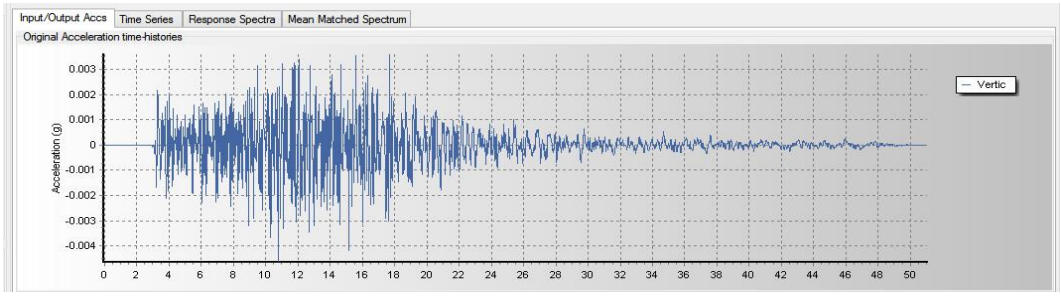
1) H-1-YountvilleLKS



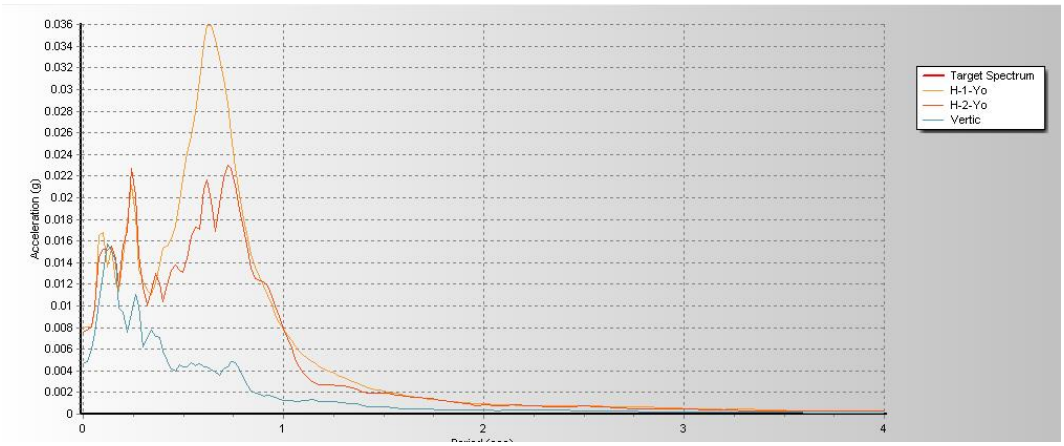
2) H-2-YountvilleLKS



3) Vertical-YountvilleLKS

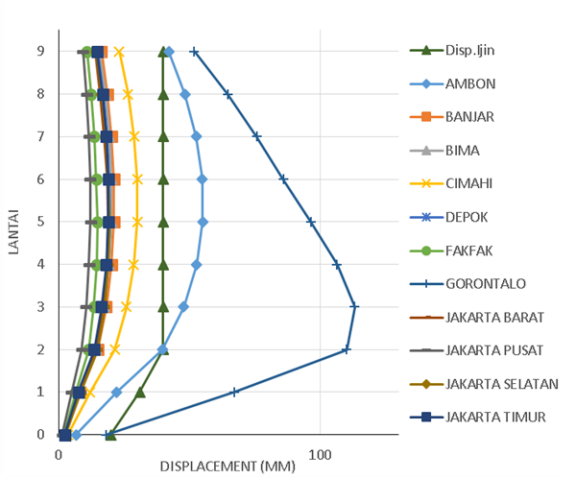


4) Respons Spektra YountvilleLKS

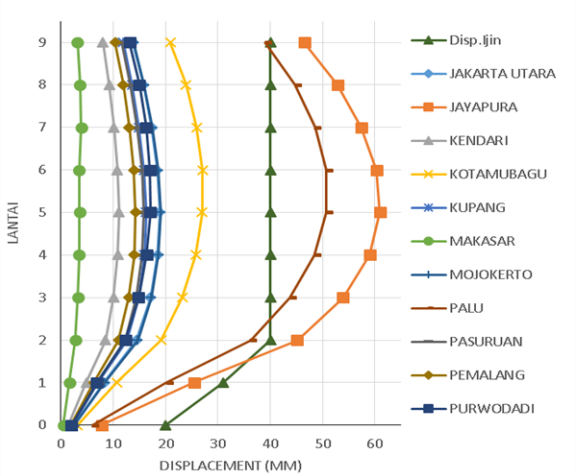


Lampiran 4. Grafik Hubungan antara Displacement dengan Jumlah Lantai pada Klasifikasi Situs Tanah

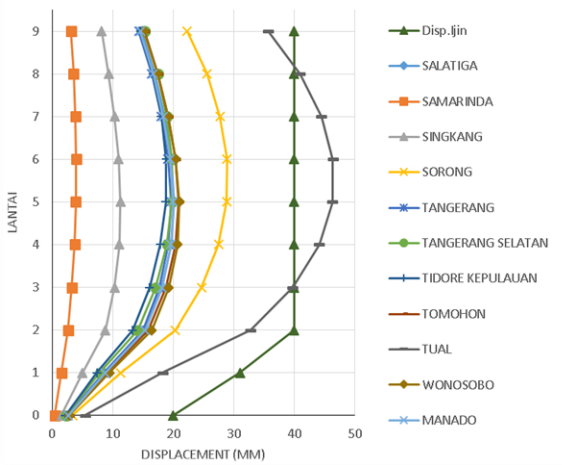
1. Grafik hubungan antara *displacement* dengan jumlah lantai pada klasifikasi situs tanah keras (*SC*) arah X.



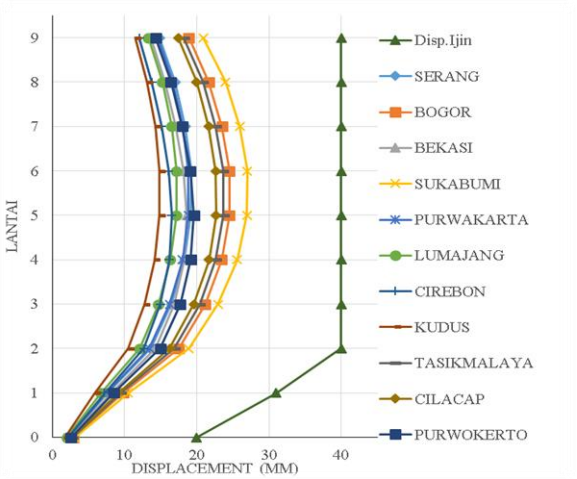
Gambar 1 Grafik *displacement* kelas situs *SC* arah *X*



Gambar 2 Grafik *displacement* kelas situs *SC* arah *X*

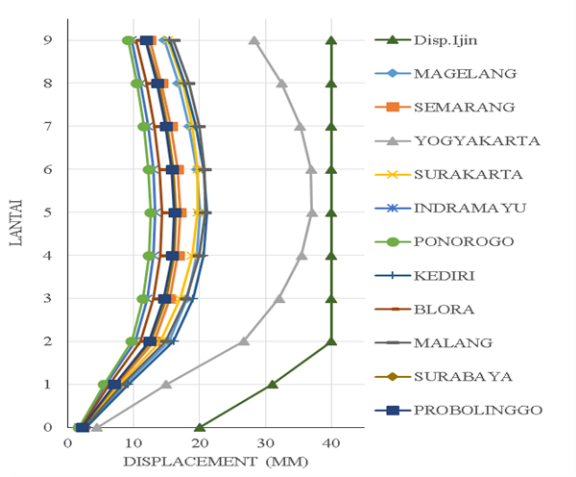


Gambar 3 Grafik *displacement* kelas situs *SC* arah *X*

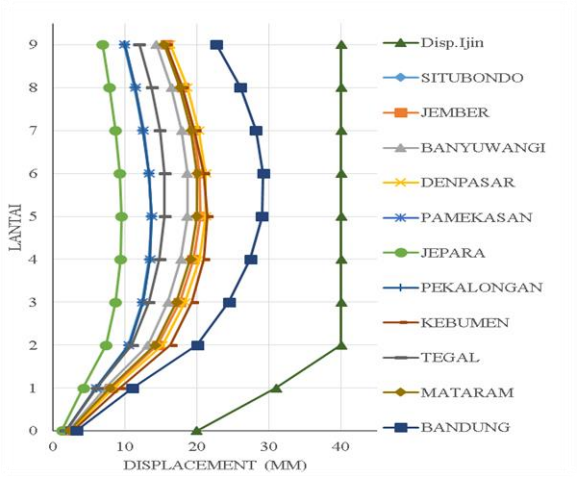


Gambar 4 Grafik *displacement* kelas situs *SC* arah *X*

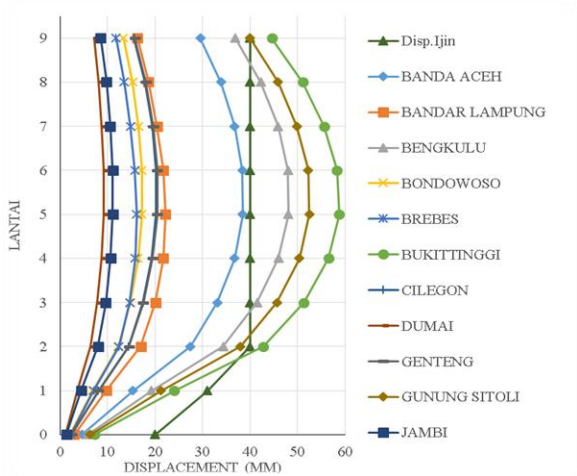
/



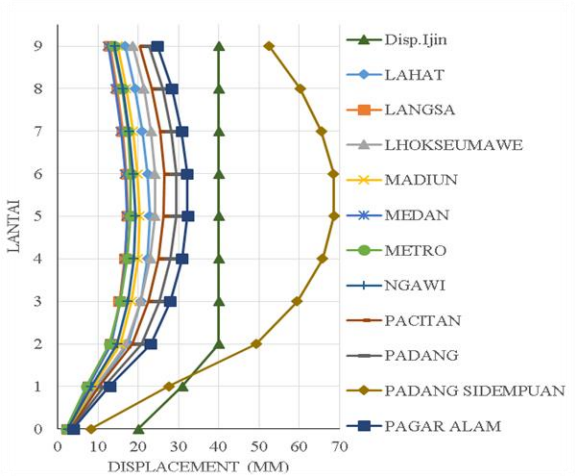
Gambar 5 Grafik *displacement* kelas situs *SC* arah *X*



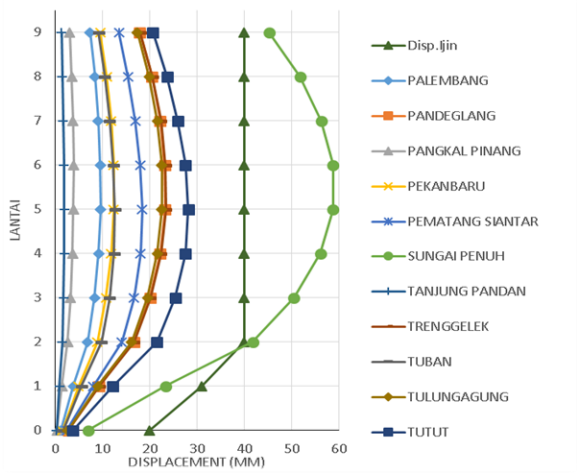
Gambar 6 Grafik *displacement* kelas situs *SC* arah *X*



Gambar 7 Grafik *displacement* kelas situs *SC* arah *X*

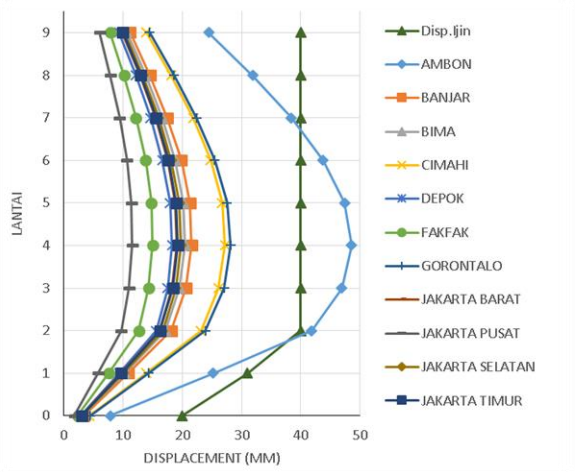


Gambar 8 Grafik *displacement* kelas situs *SC* arah *X*

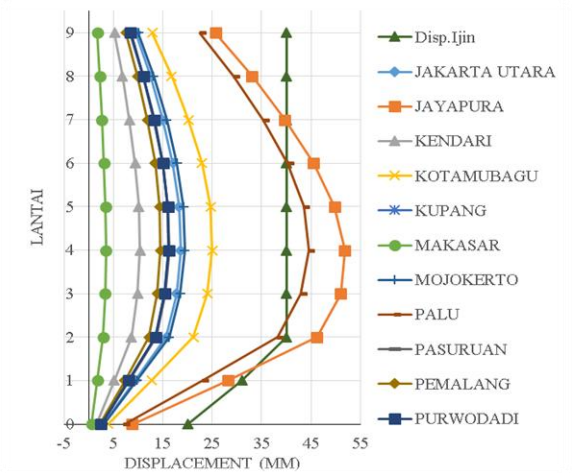


Gambar 9 Grafik *displacement* kelas situs *SC* arah *X*

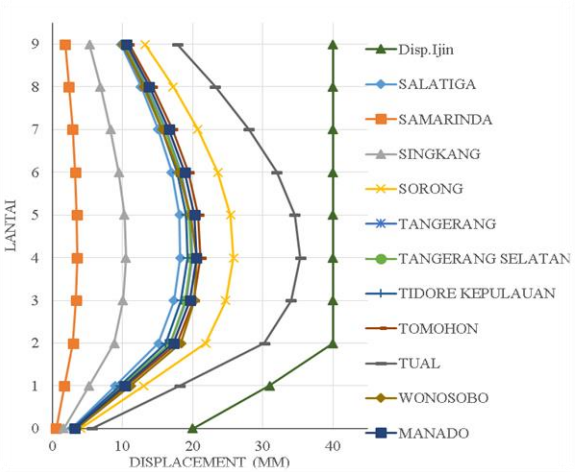
2. hubungan antara jumlah lantai dengan *displacement* pada klasifikasi situs tanah keras (*SC*) arah *Y*.



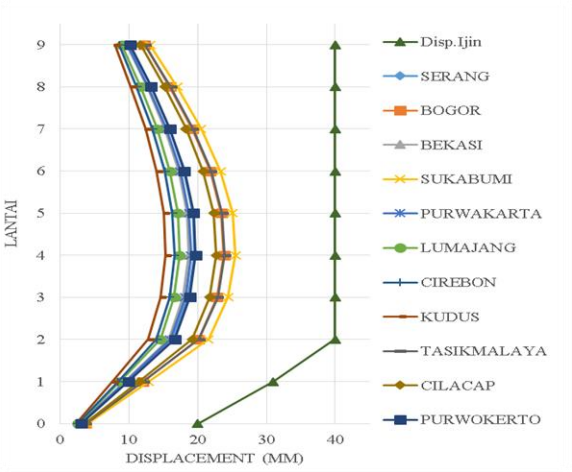
Gambar 1 Grafik *displacement* kelas situs *SC* arah *Y*



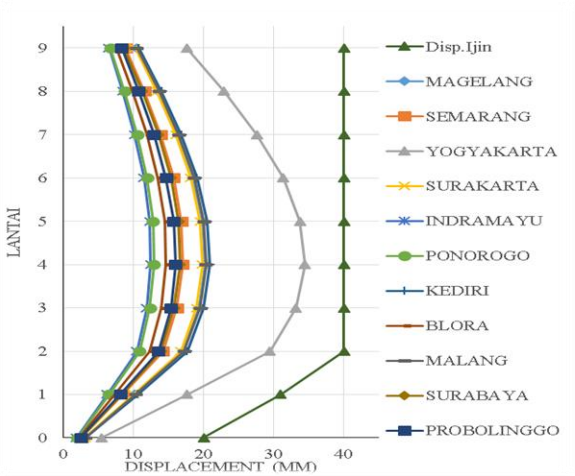
Gambar 2 Grafik *displacement* kelas situs *SC* arah *Y*



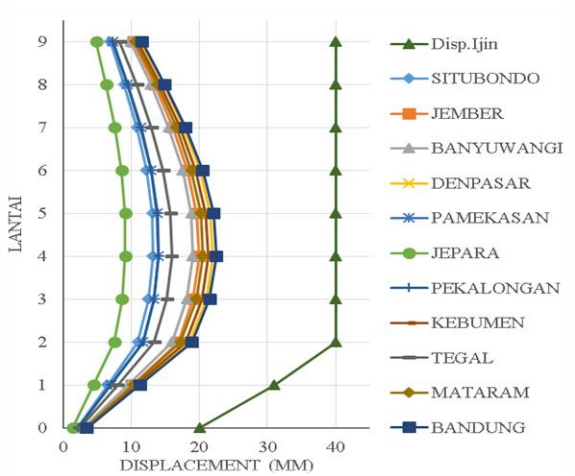
Gambar 3 Grafik *displacement* kelas situs *SC* arah *Y*



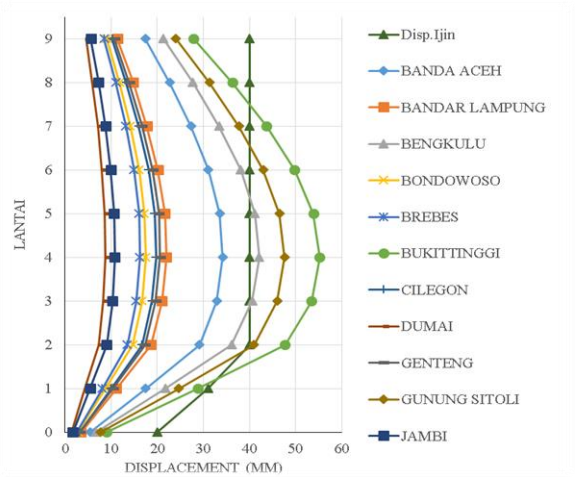
Gambar 4 Grafik *displacement* kelas situs *SC* arah *Y*



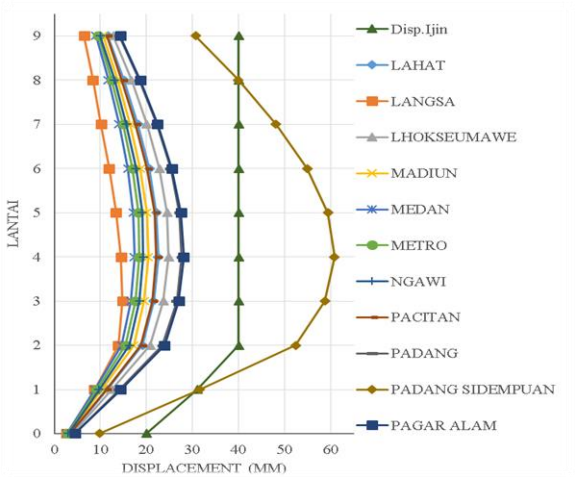
Gambar 5 Grafik *displacement* kelas situs *SC* arah *Y*



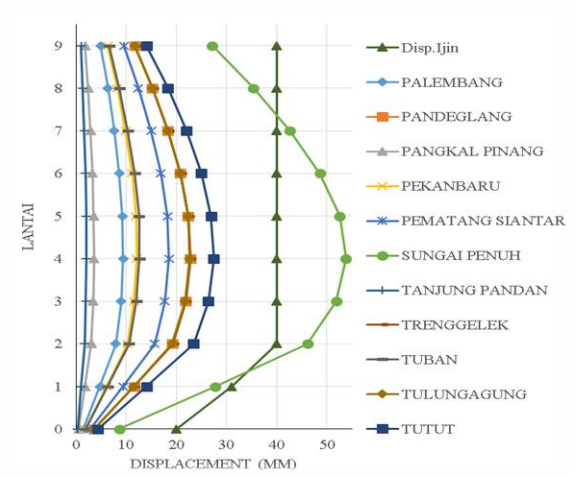
Gambar 6 Grafik *displacement* kelas situs *SC* arah *Y*



Gambar 7 Grafik *displacement* kelas situs *SC* arah *Y*

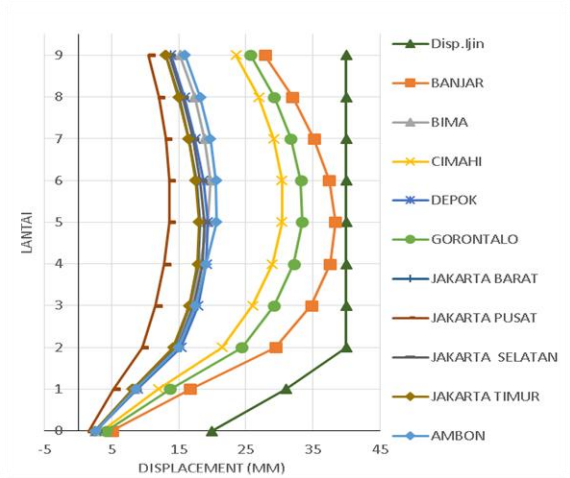


Gambar 8 Grafik *displacement* kelas situs *SC* arah *Y*

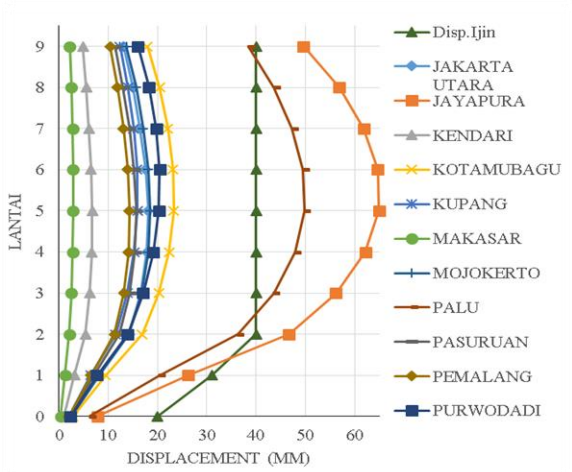


Gambar 9 Grafik *displacement* kelas situs *SC* arah *Y*

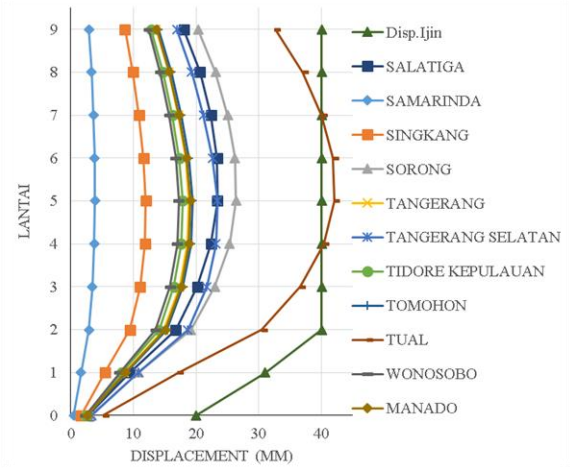
3. Grafik hubungan antara jumlah lantai dengan *displacement* pada klasifikasi situs tanah keras (*SD*) arah *X*.



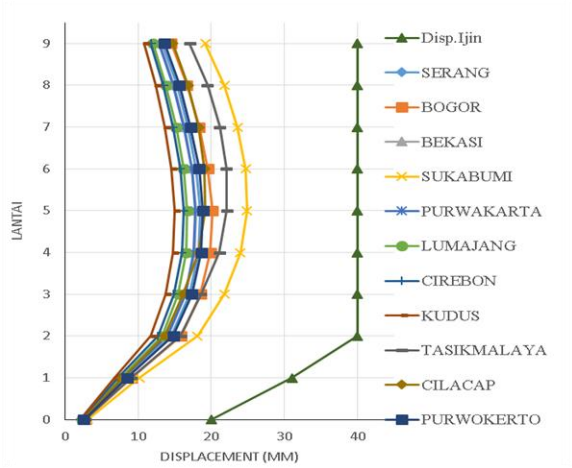
Gambar 10 Grafik *displacement* kelas situs *SD* arah *X*



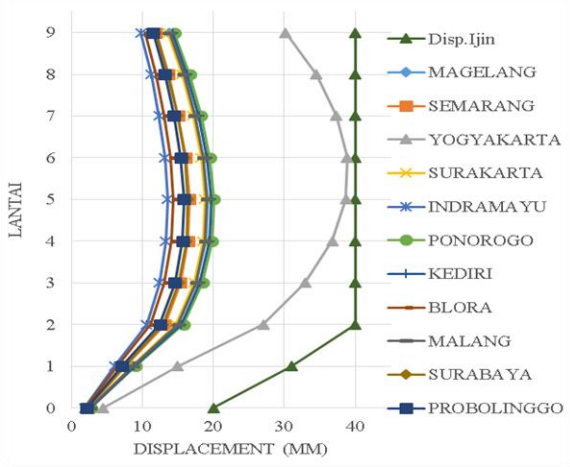
Gambar 11 Grafik *displacement* kelas situs *SD* arah *X*



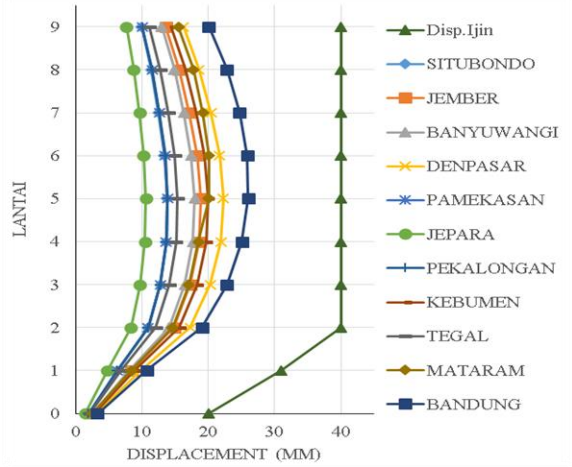
Gambar 12 Grafik *displacement* kelas situs *SD* arah *X*



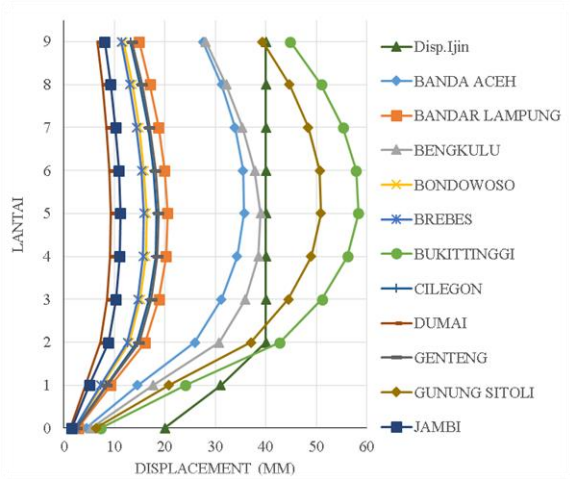
Gambar 13 Grafik *displacement* kelas situs *SD* arah *X*



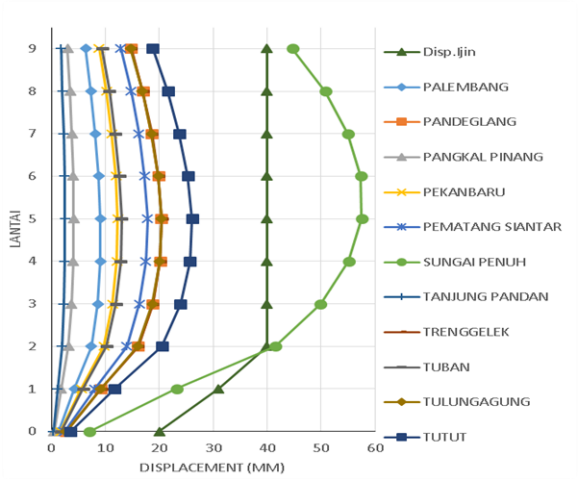
Gambar 14 Grafik *displacement* kelas situs *SD* arah *X*



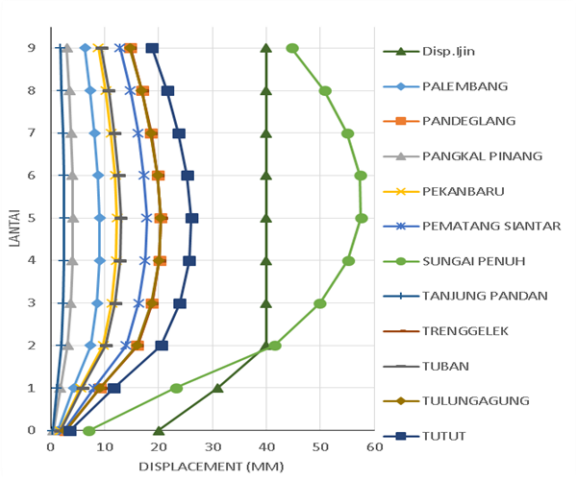
Gambar 15 Grafik *displacement* kelas situs *SD* arah *X*



Gambar 16 Grafik *displacement* kelas situs *SD* arah *X*

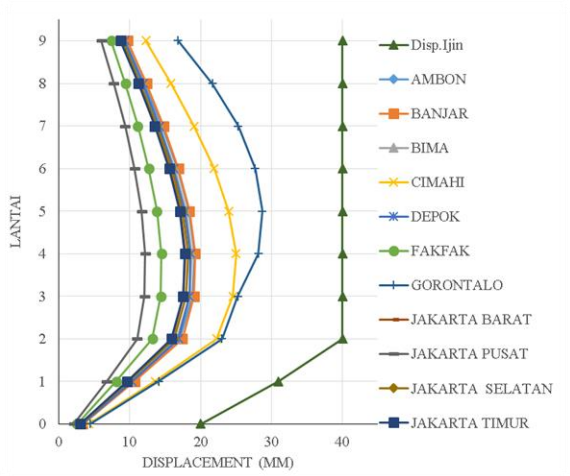


Gambar 17 Grafik *displacement* kelas situs *SD* arah *X*

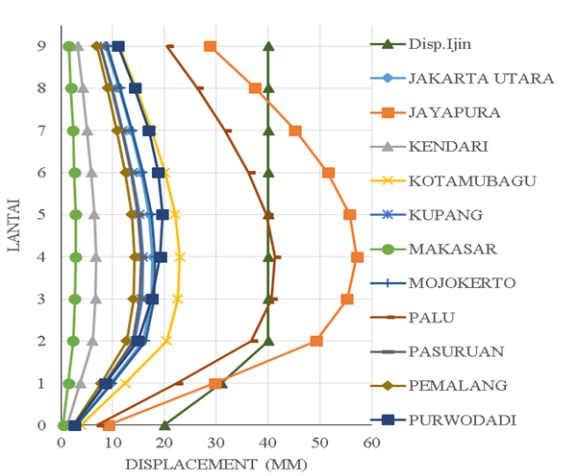


Gambar 18 Grafik *displacement* kelas situs *SD* arah *X*

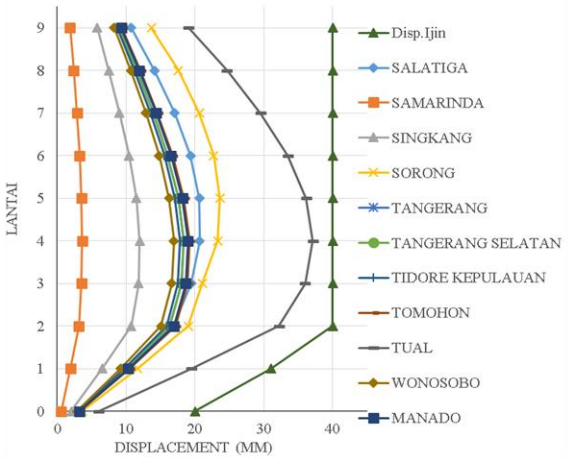
4. Grafik hubungan antara jumlah lantai dengan *displacement* pada klasifikasi situs tanah keras (*SD*) arah *Y.*



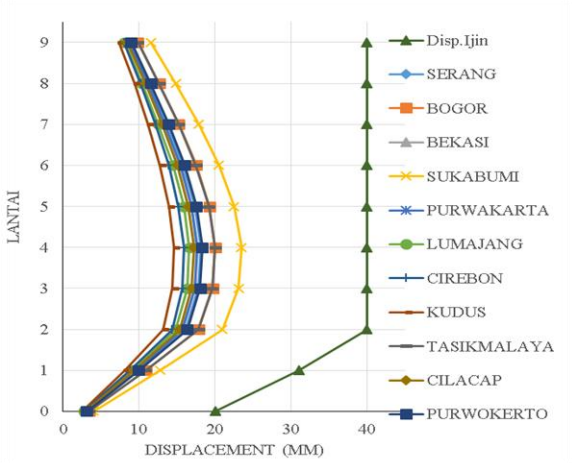
Gambar 19 Grafik *displacement* kelas situs *SD* arah *Y*



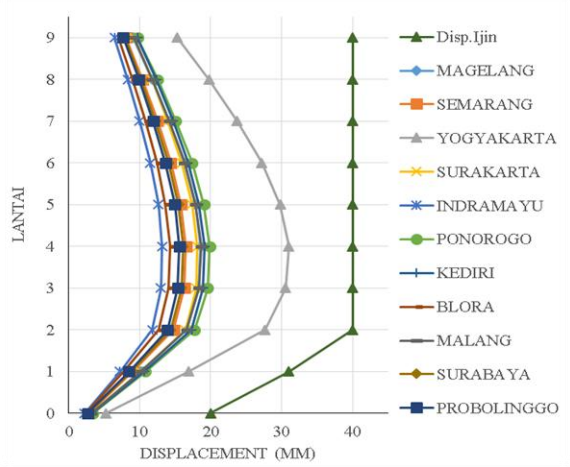
Gambar 20 Grafik *displacement* kelas situs *SD* arah *Y*



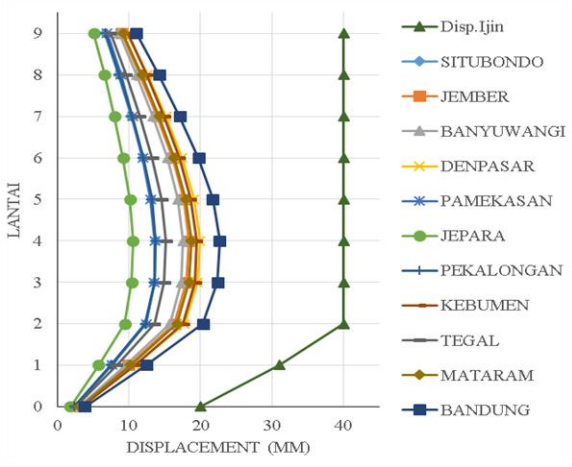
Gambar 21 Grafik *displacement* kelas situs *SD* arah *Y*



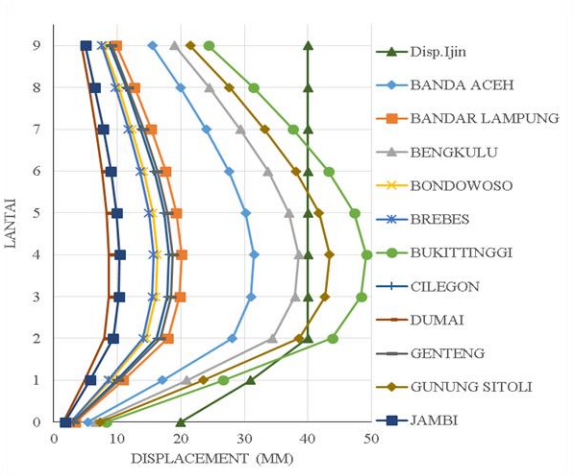
Gambar 22 Grafik *displacement* kelas situs *SD* arah *Y*



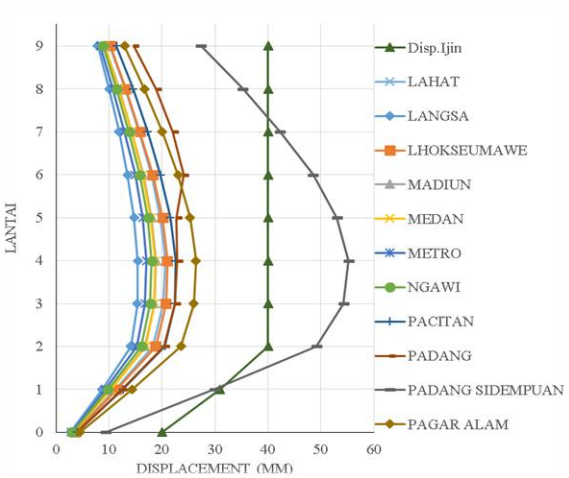
Gambar 23 Grafik *displacement* kelas situs *SD* arah *Y*



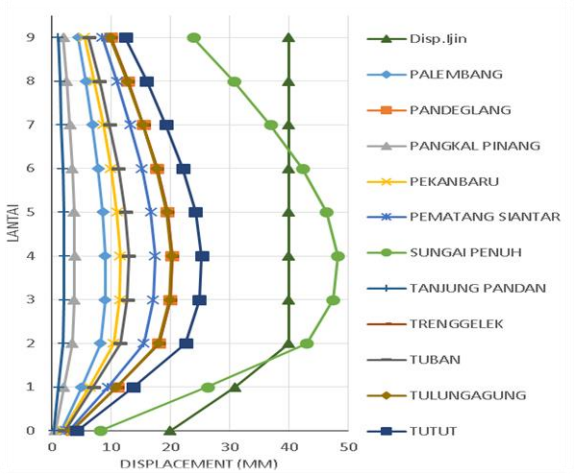
Gambar 24 Grafik *displacement* kelas situs *SD* arah *Y*



Gambar 25 Grafik *displacement* kelas situs *SD* arah *Y*

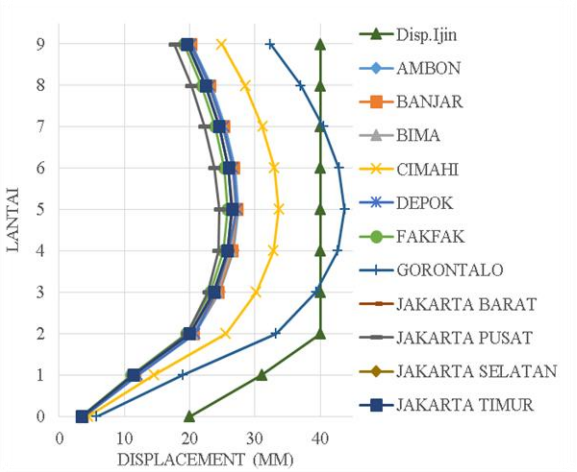


Gambar 26 Grafik *displacement* kelas situs *SD* arah *Y*

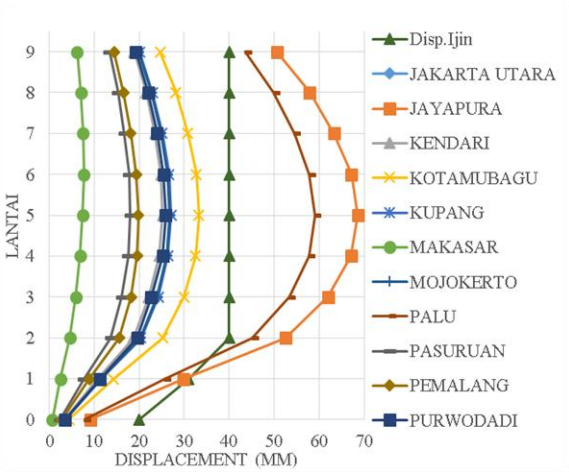


Gambar 27 Grafik *displacement* kelas situs *SD* arah *Y*

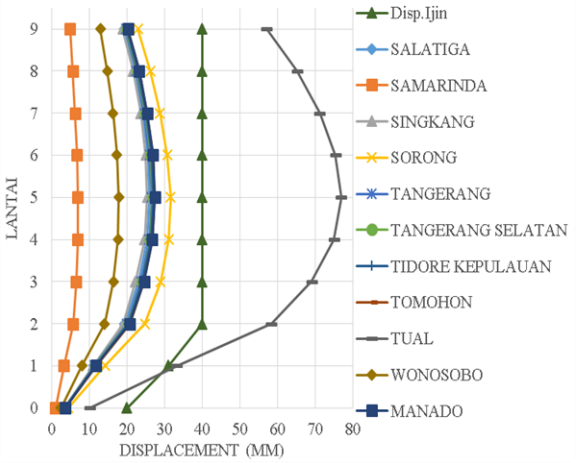
5. Grafik hubungan antara jumlah lantai dengan *displacement* pada klasifikasi situs tanah keras (*SE*) arah *X*.



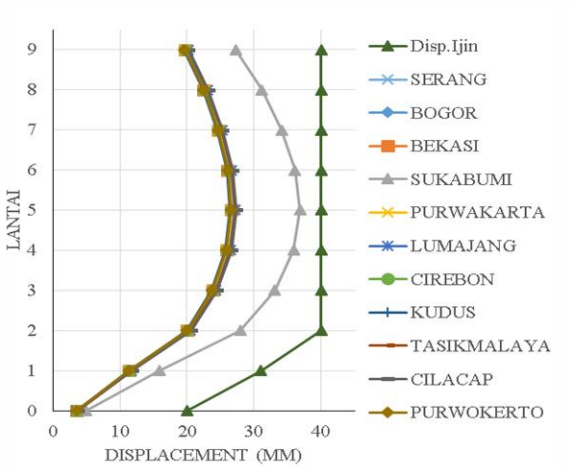
Gambar 28 Grafik *displacement* kelas situs *SE* arah *X*



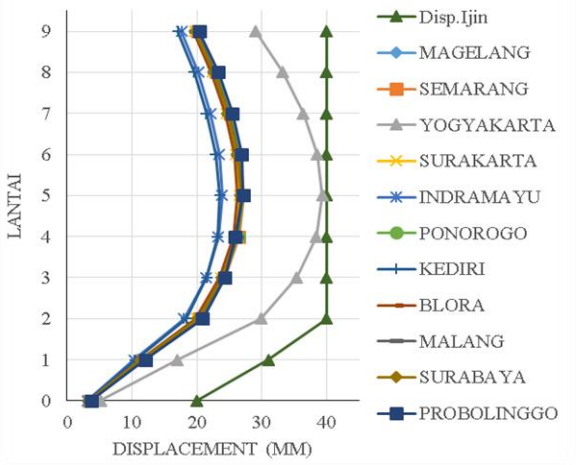
Gambar 29 Grafik *displacement* kelas situs *SE* arah *X*



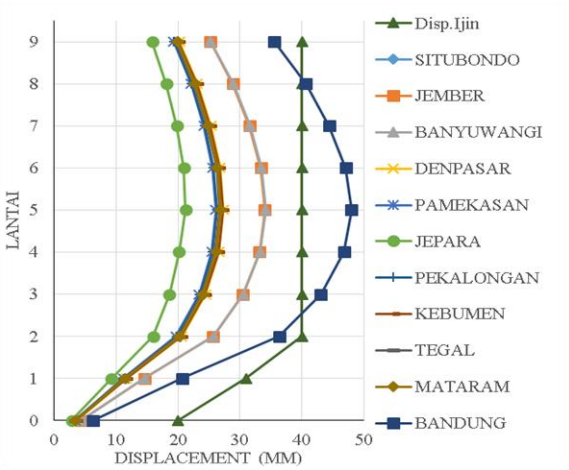
Gambar 30 Grafik *displacement* kelas situs *SE* arah *X*



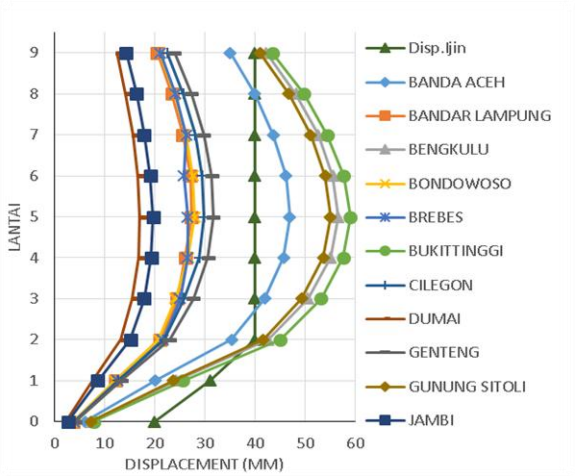
Gambar 31 Grafik *displacement* kelas situs *SE* arah *X*



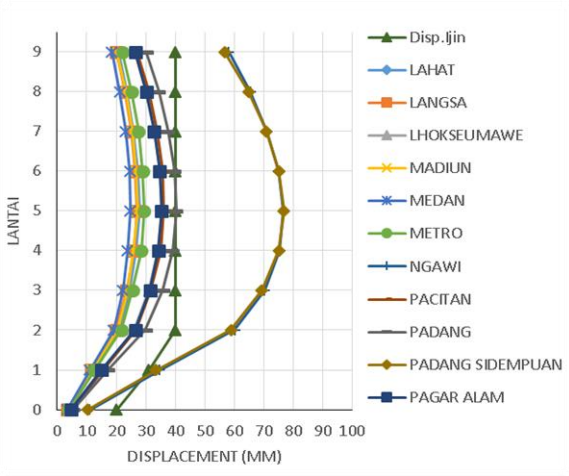
Gambar 32 Grafik *displacement* kelas situs *SE* arah *X*



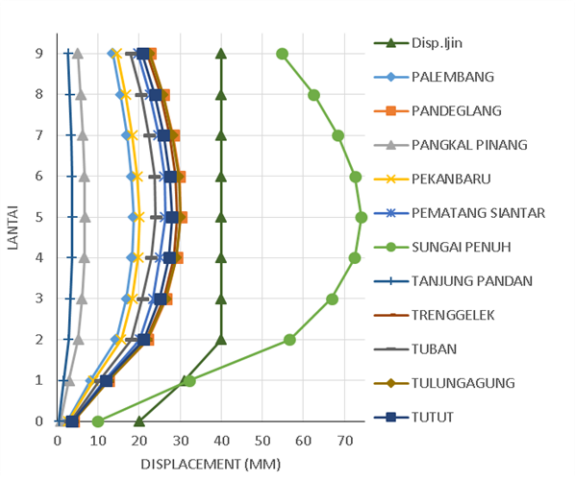
Gambar 33 Grafik *displacement* kelas situs *SE* arah *X*



Gambar 34 Grafik *displacement* kelas situs *SE* arah *X*

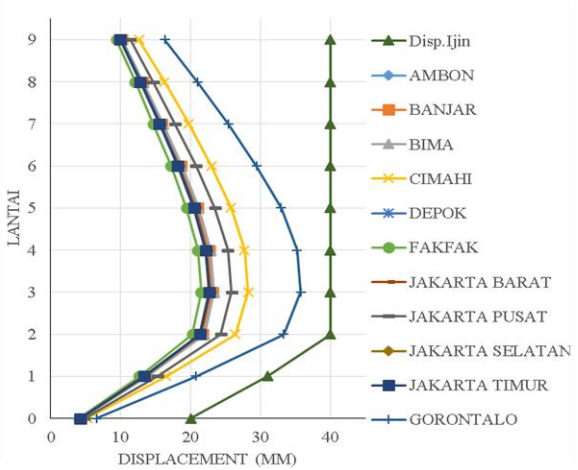


Gambar 35 Grafik *displacement* kelas situs *SE* arah *X*

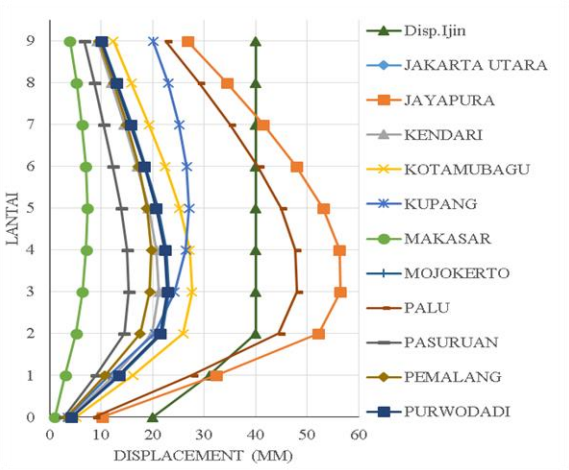


Gambar 36 Grafik *displacement* kelas situs *SE* arah *X*

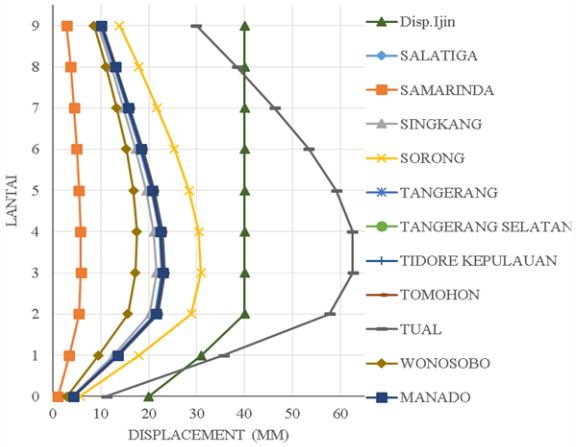
6. Grafik hubungan antara jumlah lantai dengan *displacement* pada klasifikasi situs tanah keras (*SE*) arah *Y.*



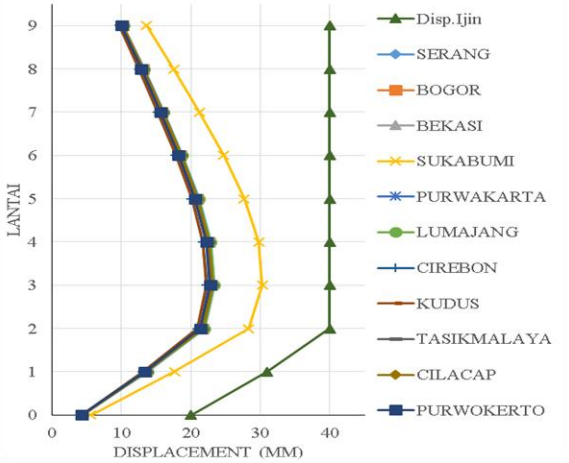
Gambar 37 Grafik *displacement* kelas situs *SE* arah *Y*



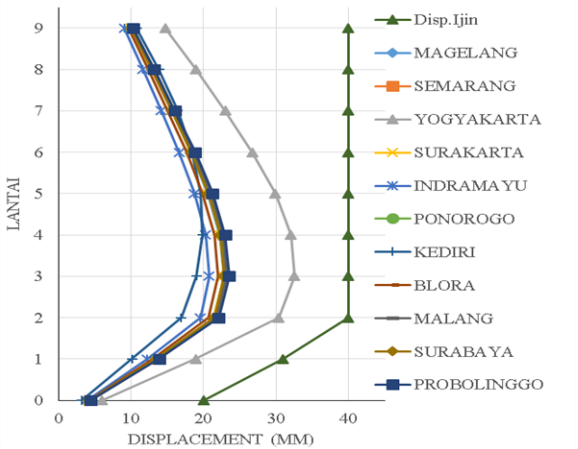
Gambar 38 Grafik *displacement* kelas situs *SE* arah *Y*



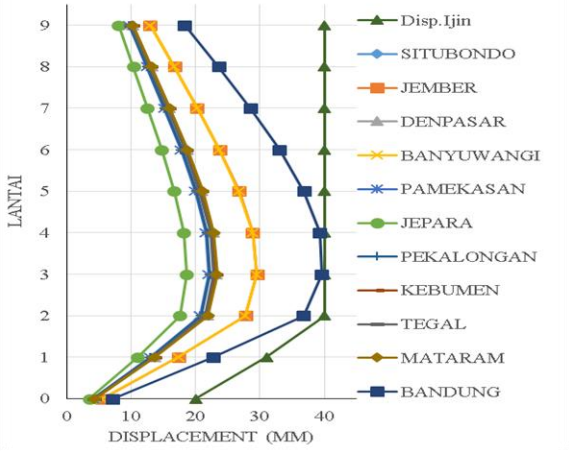
Gambar 39 Grafik *displacement* kelas situs *SE* arah *Y*



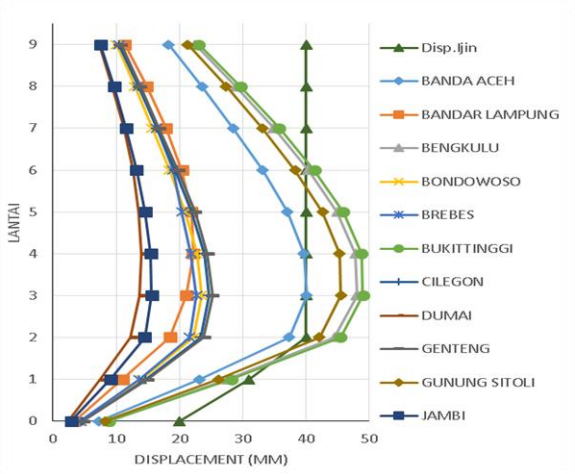
Gambar 40 Grafik *displacement* kelas situs *SE* arah *Y*



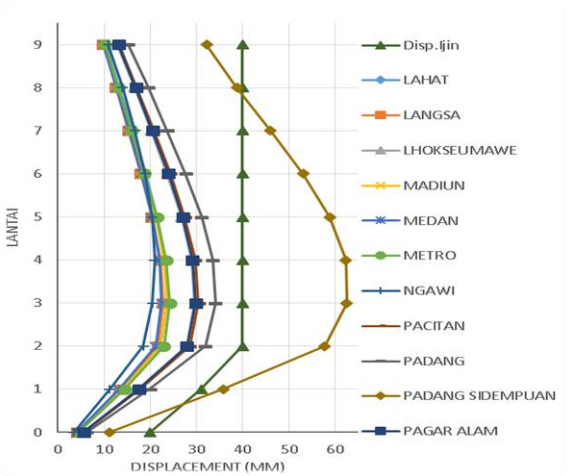
Gambar 41 Grafik *displacement* kelas situs *SE* arah *Y*



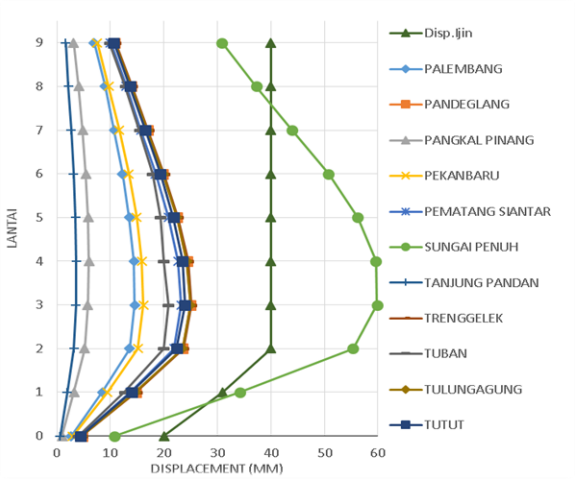
Gambar 42 Grafik *displacement* kelas situs *SE* arah *Y*



Gambar 43 Grafik *displacement* kelas situs *SE* arah *Y*

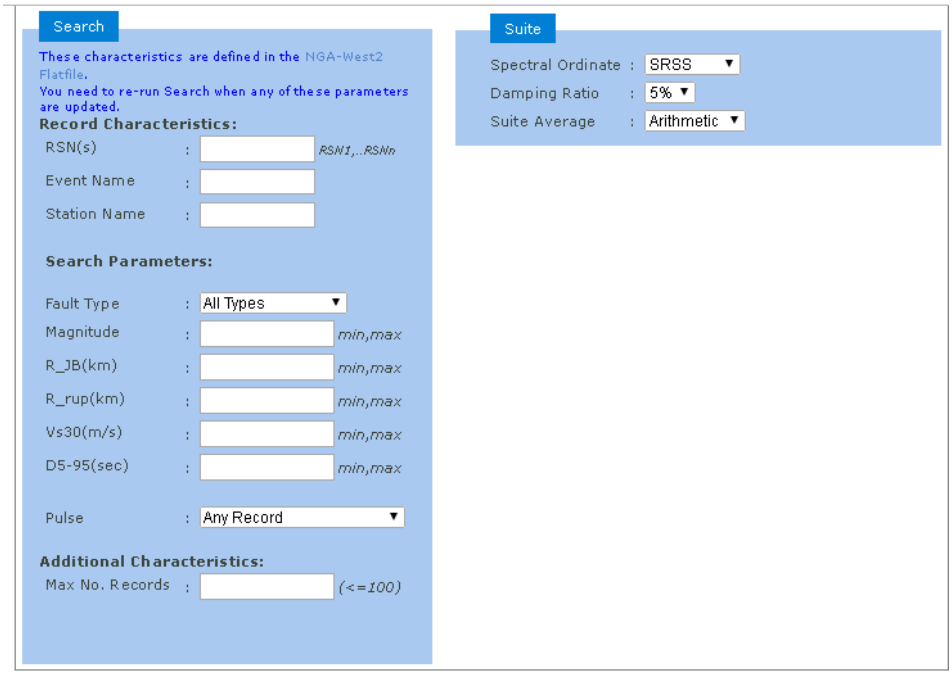


Gambar 44 Grafik *displacement* kelas situs *SC* arah *Y*



Gambar 45 Grafik *displacement* kelas situs *SC* arah *X*

Lampiran 5. PEER (Pacific Earthquake Engineering ResearchCenter) dengan Website https://ngawest2.berkeley.edu



Keterangan :

1. *Fault Type*

   Tipe patahan yang rata-rata banyak terjadi pada 99 kota terpilih di Indonesia.

2. *Magnitude*

   Kekuatan gempa yang berdasarkan pada nilai *magnitude* terkecil dan terbesar pada 99 kota di Indonesia.

3. *R_JB*

   Jarak dari titik pusat koordinat kota menuju titik pusat kedalaman gempa. (dicari jarak terdekat dan terjauh)

4. *R_rup*

   Jarak dari titik koordinat kota menuju titik permukaan pusat gempa yang terjadi. (dicari jarak terdekat dan terjauh)

5. Vs30

   Percepatan yang didapat dari setiap kelas situs (SC, SD, dan SE) berdasarkan SNI 1726:2012

6. D5-95

   Durasi gempa tercepat dan terlama dari data gempa yang terjadi pada 99 kota terpilih di Indonesia.

7. *Max No. Records*

   Jumlah gempa terdekat yang akan di *output* oleh *website* tersebut.