

LAMPIRAN

SURAT KETERANGAN TUGAS AKHIR

Sesuai dengan persetujuan dari ketua jurusan Teknik Sipil, Fakultas Teknik, Universitas Kristen Maranatha, melalui surat No. 1295/TA/FTS/UKM/II/2012 tanggal 22 Februari 2012, dengan ini saya selaku Pembimbing Tugas Akhir ini memberikan tugas kepada:

Nama : Donald Tri

NRP : 0921056

Untuk membuat Tugas Akhir bidang Geoteknik dengan judul:

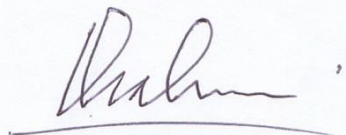
STUDI PERBANDINGAN DESAIN PONDASI RAKIT (MAT FOUNDATION) DENGAN MENGGUNAKAN METODE KEKAKUAN KONVENSIONAL DAN METODE MODULUS REAKSI TANAH DASAR

Pokok pembahasan Tugas Akhir adalah sebagai berikut:

1. Pendahuluan
2. Studi pustaka
3. Analisa Pondasi Rakit Dengan Menggunakan Metode Kekakuan Konvensional dan Menggunakan Metode Modulus reaksi Reaksi Tanah Dasar pada ELPLA 9.2
4. Kesimpulan dan Saran

Hal-hal lain yang dianggap perlu dapat disertakan untuk melengkapi penulisan Tugas Akhir ini.

Bandung, 23 Februari 2012



Ir. Ibrahim Surya, M.Eng.

SURAT KETERANGAN SELESAI TUGAS AKHIR

Yang bertanda tangan di bawah ini selaku Dosen Pembimbing Tugas Akhir dari mahasiswa:

Nama : Donald Tri

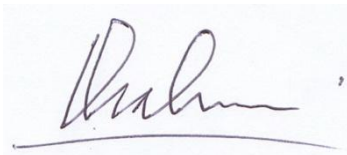
NRP : 0921056

menyatakan bahwa Tugas Akhir dari mahasiswa tersebut diatas dengan judul:

**STUDI PERBANDINGAN DESAIN PONDASI RAKIT (MAT
FOUNDATION) DENGAN MENGGUNAKAN METODE KEKAKUAN
KONVENSIIONAL DAN METODE MODULUS REAKSI TANAH
DASAR**

dinyatakan selesai dan dapat diajukan pada Ujian Sidang Tugas Akhir (USTA).

Bandung, 3 Desember 2012

A handwritten signature in black ink, appearing to read 'Ibrahim', is written over a horizontal line. The signature is cursive and somewhat stylized.

Ir. Ibrahim Surya, M.Eng.

Lampiran L1 tabel penurunan dan tegangan dari ELPLA

Node No. I [-]	Total displacement [ft]	Total contact pressure q[kip/ft ²]
3024	0.020542138	1.0875
4192	0.012454	1.088
3309	0.026542	1.1293
4448	0.024254	1.1605
5971	0.026542	1.1631
6938	0.01894539	1.2085
347	0.005642	1.2116
4577	0.005642	1.2117
1309	0.01894539	1.2472
1006	0.02667	1.2611
2977	0.02418	1.2716
5659	0.02667	1.2811
1858	0.01367	1.3212
7311	0.02137	1.3238
3271	0.0398	1.3263
774	0.0386	1.352
2991	0.0398	1.352
516	0.0219	1.3263
443	0.0356	1.3238
4134	0.0678	1.3212
6002	0.0771	1.2811
1250	0.0378	1.2716
3479	0.0378	1.2611
4128	0.0761	1.2472
4513	0.0861	1.2117
5865	0.0378	1.2116
6001	0.0386	1.2085
1189	0.0386	1.1631
273	0.0386	1.1605
2072	0.007	1.1293
5780	0.0861	1.088
7046	0.0771	1.0875
4412	0.0761	1.25194
4463	0.0678	1.25036
4514	0.0398	1.24973
4581	0.0398	1.24889
4694	0.0386	1.24678
5663	0.0386	1.24630
5670	0.0386	1.24566
5726	0.0386	1.24559

5883	0.0378	1.24507
5934	0.0378	1.24467
5985	0.0378	1.24447
6052	0.0356	1.24376
6165	0.02667	1.24311
6712	0.02667	1.24300
6719	0.026542	1.24190
6775	0.026542	1.23970
6932	0.024254	1.23818
6983	0.02418	1.23693
7034	0.0219	1.23580
7101	0.02137	1.23534
7214	0.020542138	1.23521
4717	0.01894539	1.23392
103	0.01894539	1.23315
956	0.01367	1.23168
2495	0.012454	1.23158
571	0.007	1.23089
836	0.005642	1.22997
1568	0.005642	1.22985
1672	0.005642	1.22914
1735	0.005642	1.22824
6004	0.007	1.22780
2042	0.012454	1.22669
2307	0.01367	1.22625
3039	0.01894539	1.22621
3143	0.01894539	1.22615
3206	0.020542138	1.22611
3260	0.02137	1.22602
3513	0.0219	1.22504
3778	0.02418	1.22444
4510	0.024254	1.22437
4614	0.026542	1.21880
4677	0.026542	1.21788
4731	0.02667	1.21598
4984	0.02667	1.21566
5249	0.0356	1.21518
5981	0.0378	1.21424
6085	0.0378	1.21111
6148	0.0378	1.20940
6202	0.0386	1.20848
7030	0.0386	1.20794
7134	0.0386	1.20754
7197	0.0386	1.20748
7251	0.0398	1.20693
1280	0.0398	1.20593
1709	0.0678	1.20178

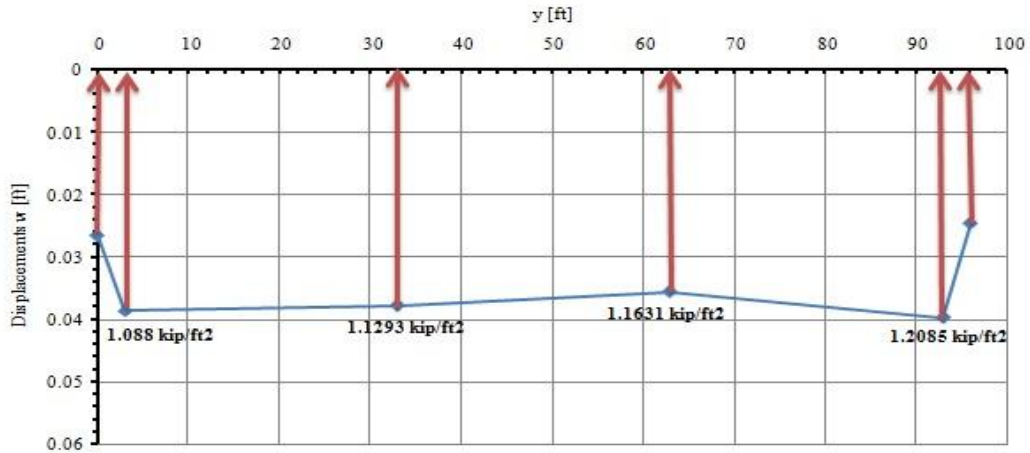
2751	0.0761	1.20173
3180	0.0771	1.20163
4222	0.0861	1.19893
1	0.0861	1.19860
5693	0.0771	1.19843
6122	0.0761	1.19787
6742	0.0678	1.19766
7171	0.0398	1.19745
1364	0.0398	1.19703
1368	0.0386	1.19566
1652	0.0386	1.19538
1656	0.0386	1.19150
2835	0.0386	1.19102
2839	0.0378	1.19002
3123	0.0378	1.18843
3127	0.0378	1.18707
4306	0.0356	1.18693
4310	0.01894539	1.18657
4594	0.02667	1.18619
4598	0.02418	1.18594
5777	0.02667	1.18542
5781	0.01367	1.18515
6065	0.02137	1.18250
6069	0.0398	1.18195
6826	0.0386	1.18177
6830	0.0398	1.18114
7114	0.0219	1.18095
7118	0.0356	1.18074
1439	0.0678	1.18035
1586	0.0771	1.17947
1631	0.0378	1.17920
1641	0.0378	1.17726
2910	0.0761	1.17135
3057	0.0861	1.16704
3102	0.0378	1.16677
3112	0.0386	1.16667
4381	0.0386	1.16631
4528	0.0386	1.16575
4573	0.007	1.16500
4583	0.0861	1.16437
5852	0.0771	1.16399
5999	0.0761	1.16259
6044	0.0678	1.16230
6054	0.0398	1.16218
6901	0.0398	1.16172
7048	0.0386	1.16080
7093	0.01367	1.16013

7103	0.01894539	1.15858
1133	0.02137	1.15785
1228	0.0219	1.15664
1469	0.02418	1.15633
1619	0.02667	1.15579
2604	0.02667	1.15510
2699	0.0356	1.15493
2940	0.0356	1.15215
3090	0.0378	1.15146
4075	0.0378	1.15144
4170	0.0378	1.14601
4411	0.0386	1.14447
4561	0.0386	1.14444
5546	0.0386	1.14432
5641	0.0386	1.14409
5882	0.0386	1.14396
6032	0.0398	1.14305
6595	0.0398	1.14284
6690	0.01367	1.14156
6931	0.01894539	1.14029
7081	0.02137	1.13929
1155	0.0219	1.13874
1269	0.0219	1.13801
1321	0.02418	1.13722
1413	0.02667	1.13544
1550	0.02667	1.13469
2626	0.0356	1.13402
2740	0.0356	1.13369
2792	0.0356	1.13068
2884	0.0378	1.13033
3021	0.0378	1.13018
4097	0.0378	1.12962
4211	0.0378	1.12772
4263	0.0378	1.12763
4355	0.0378	1.12703
4492	0.0386	1.12680
5568	0.0386	1.12525
5682	0.0386	1.12437
5734	0.0386	1.12408
5826	0.0386	1.12220
5963	0.0678	1.12130
6617	0.0761	1.12003
6731	0.0771	1.11880
6783	0.0861	1.11662
6875	0.0356	1.11483
7012	0.02667	1.11445
1200	0.02667	1.11418

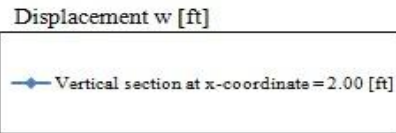
1317	0.026542	1.11341
2671	0.026542	1.11326
2788	0.024254	1.11282
4142	0.02418	1.11241
4259	0.0219	1.11119
5613	0.02137	1.10838
5730	0.020542138	1.10754
6662	0.01894539	1.10604
6779	0.01894539	1.10405
5723	0.01367	1.10294
527	0.012454	1.10290
1182	0.007	1.10236
2653	0.005642	1.10221
4124	0.024254	1.10142
5595	0.026542	1.09979
6644	0.026542	1.09902
1263	0.02667	1.09871
1358	0.02667	1.09768

Lampiran L2 gambar penurunan dan tegangan yang terjadi pada kekakuan konvensional

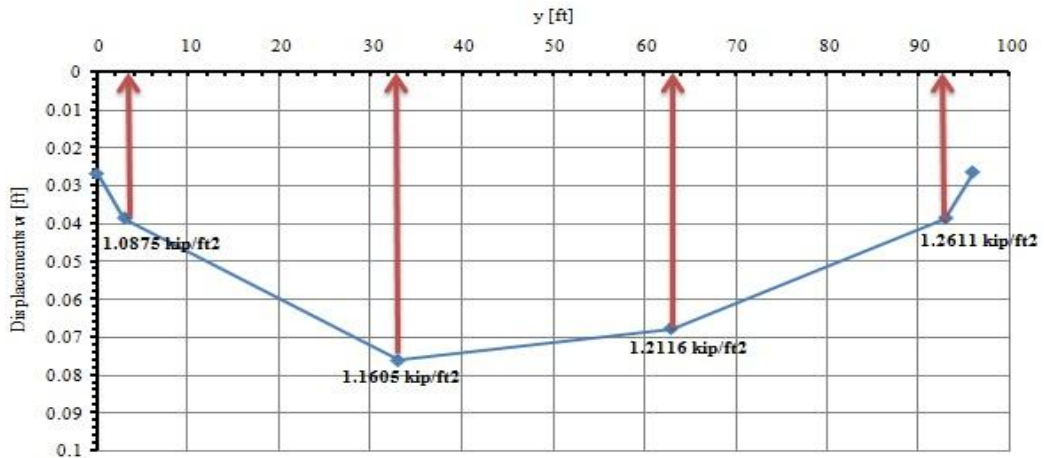
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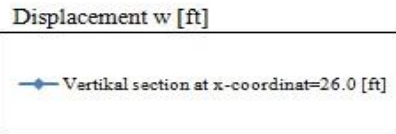
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 Date: Tuesday, November 06, 2012
 Project: 0921056
 File: 0921056
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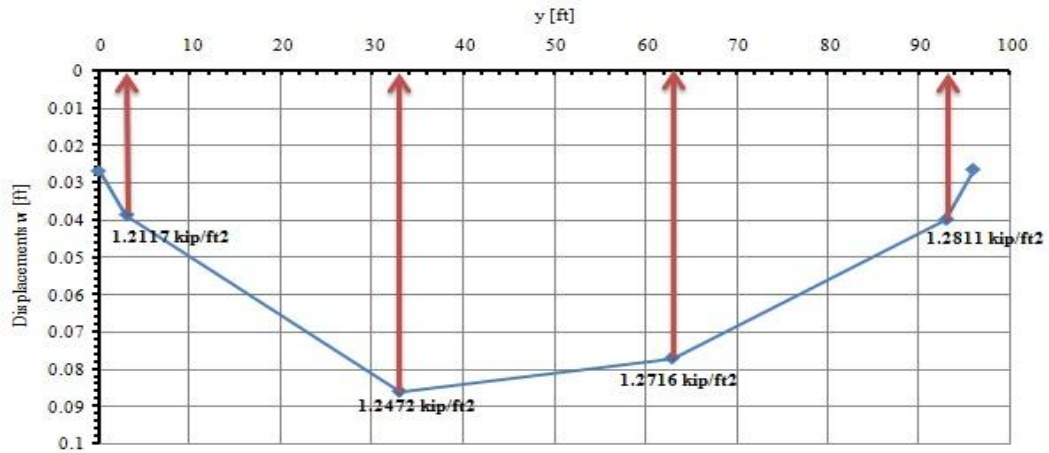
2. Jarak 26 ft



Title: tugas akhir
 Date: Tuesday, November 06, 2012
 Project: 0921056
 File: 0921056
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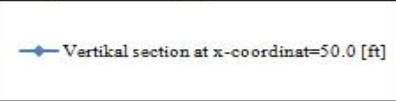
3. Jarak 50 ft



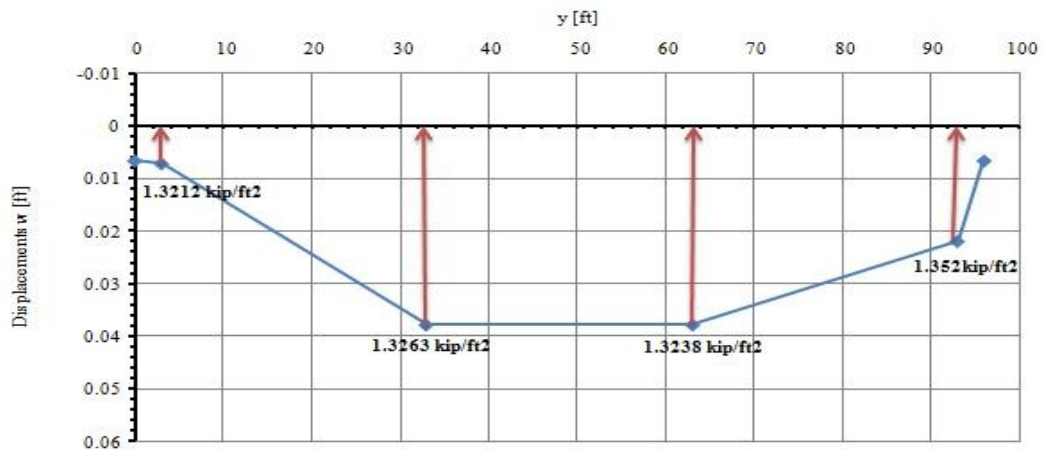
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Displacement w [ft]



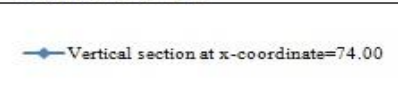
4. Jarak 74 ft



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 Date: Tuesday, November 06, 2012
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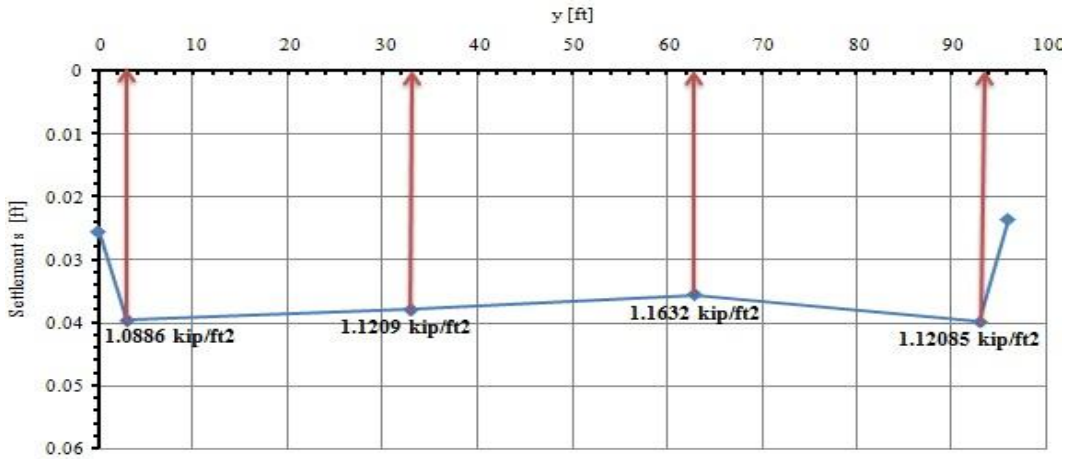
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Displacement w [ft]

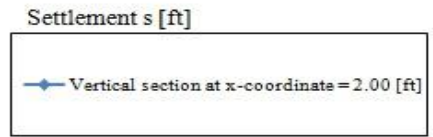


Lampiran L3 gambar penurunan dan tegangan yang terjadi pada metode modulus reaksi tanah dasar

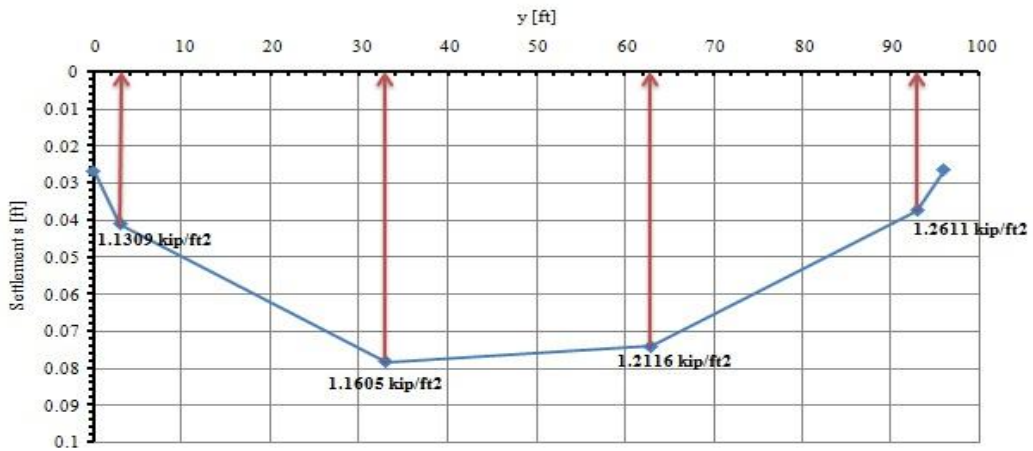
1. Jarak 2 ft



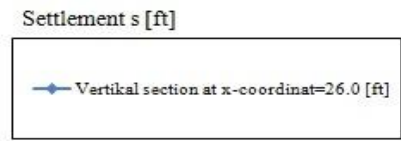
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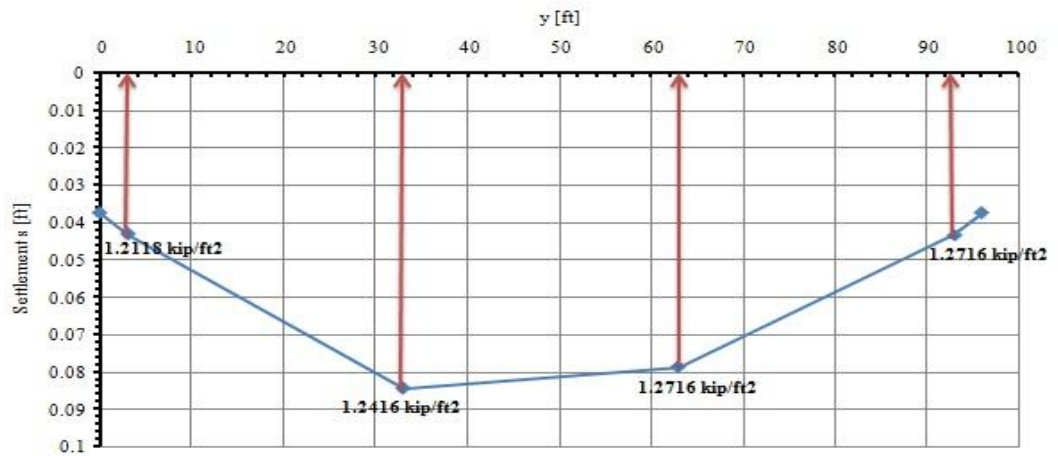
2. Jarak 26 ft



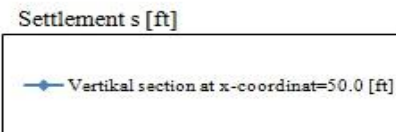
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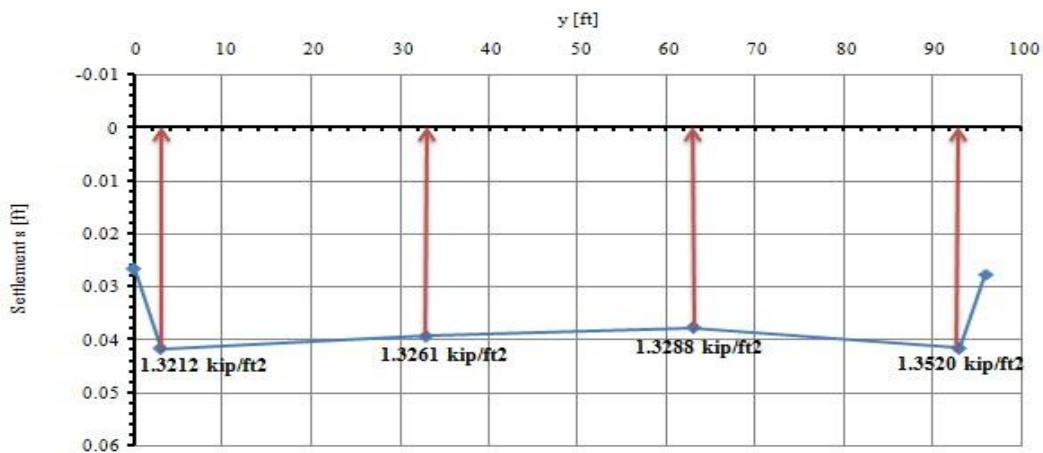
3. Jarak 50 ft



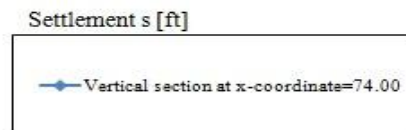
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4. Jarak 74 ft

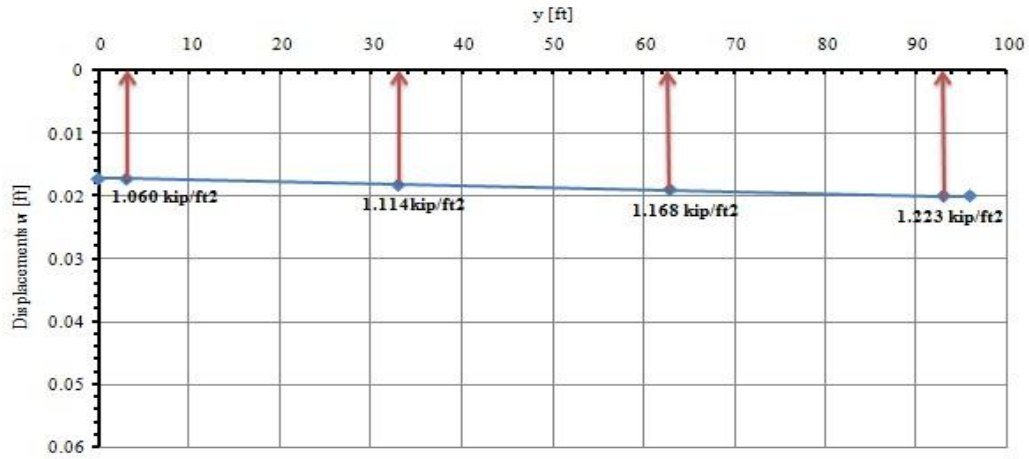


Title: tugas akhir
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Lampiran L4 gambar penurunan dan tegangan dari perhitungan manual

1. Jarak 2 ft

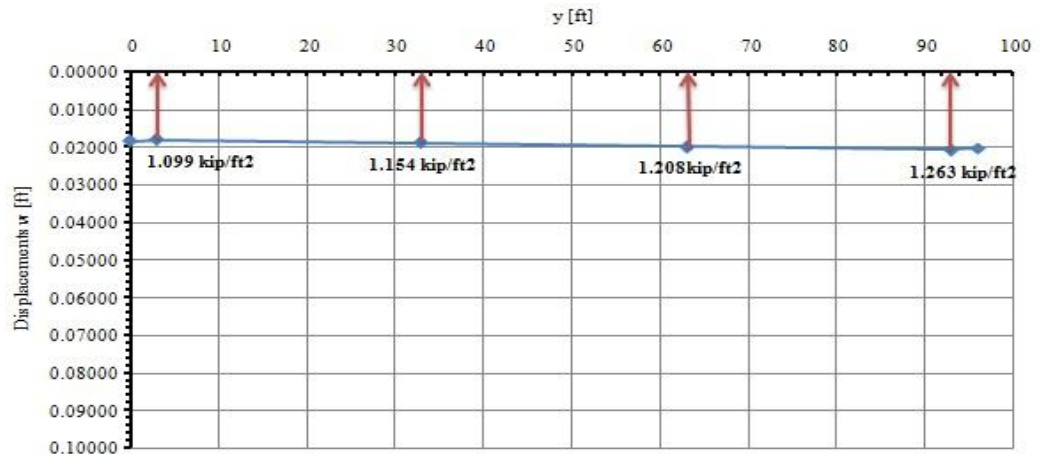


Title: tugas akhir
Date: Tuesday, November 06, 2012
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Displacement w [ft]

Vertical section at x-coordinate = 2.00 [ft]

2. Jarak 26 ft

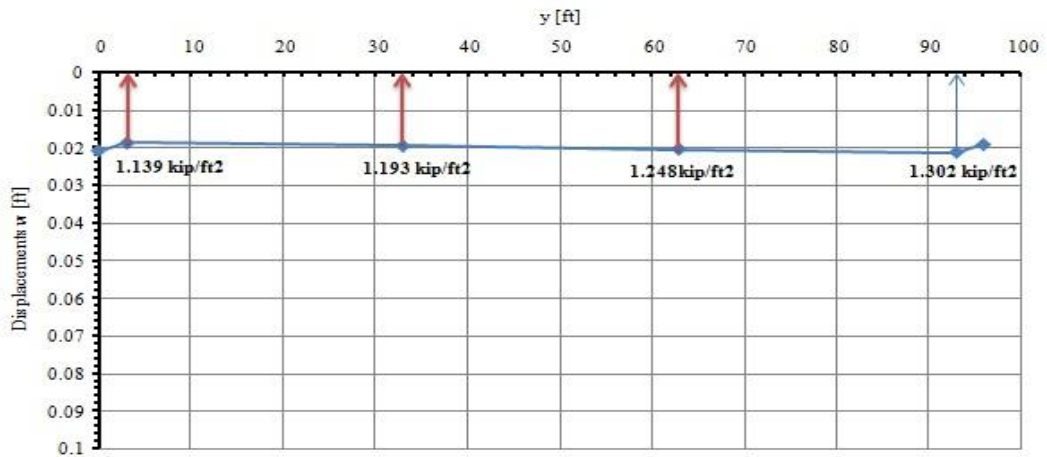


Title: tugas akhir
Date: Tuesday, November 06, 2012
Project: 0921056
File: 0921056
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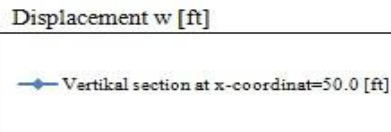
Displacement w [ft]

Vertical section at x-coordinat=26.0 [ft]

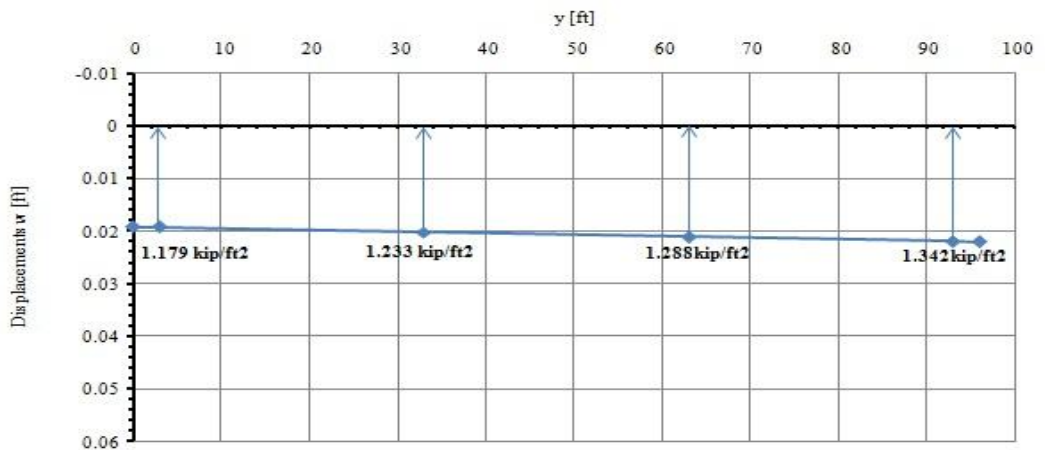
3. Jarak 50 ft



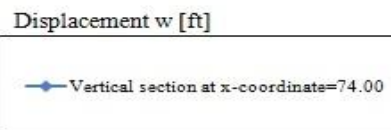
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 Date: Tuesday, November 06, 2012
 Project: 0921056
 File: 0921056
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4. Jarak 74 ft

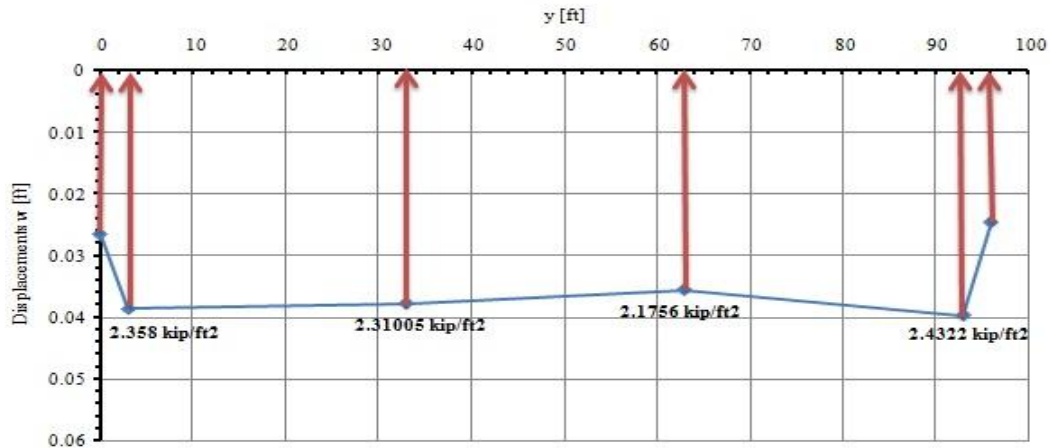


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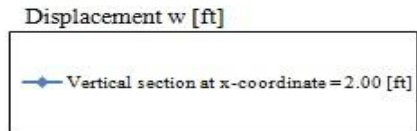


Lampiran L5 gambar penurunan dari metode kekakuan konvensional dan tegangan yang di peroleh dari nilai $k_s = 61.112632 \text{ kip/ft}^3$

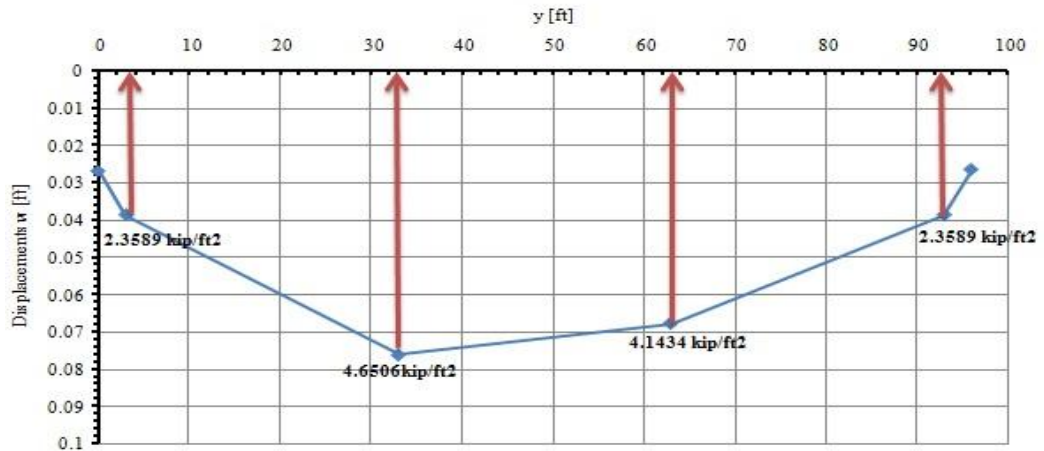
1. Jarak 2 ft



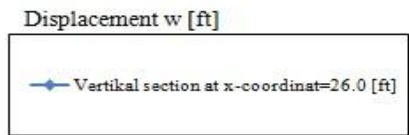
Title: tugas akhir
 Date: Tuesday, November 06, 2012
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 File: 0921056
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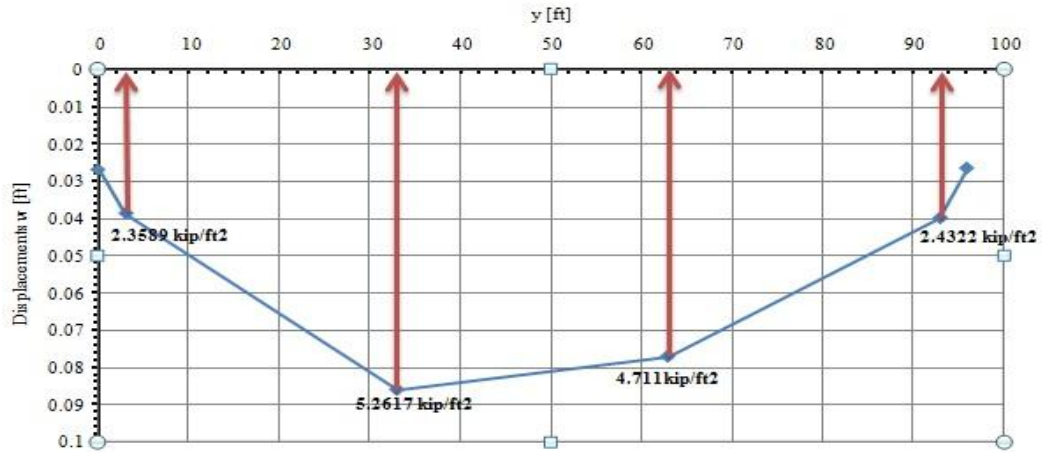
2. Jarak 26 ft



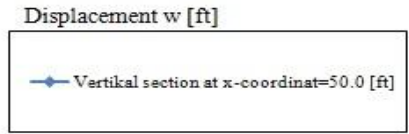
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 Date: Tuesday, November 06, 2012
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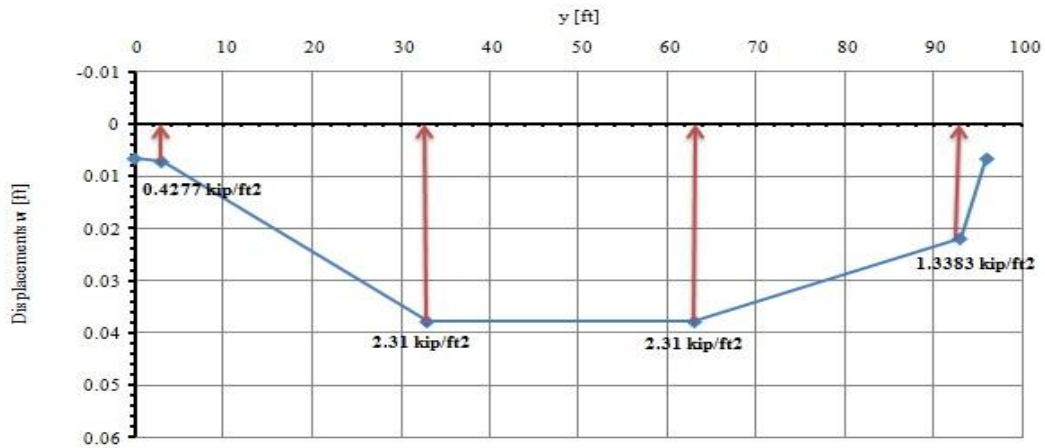
3. Jarak 50 ft



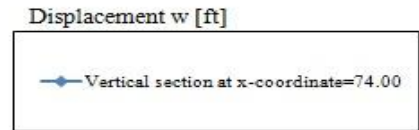
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 Date: Tuesday, November 06, 2012
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4. Jarak 74 ft

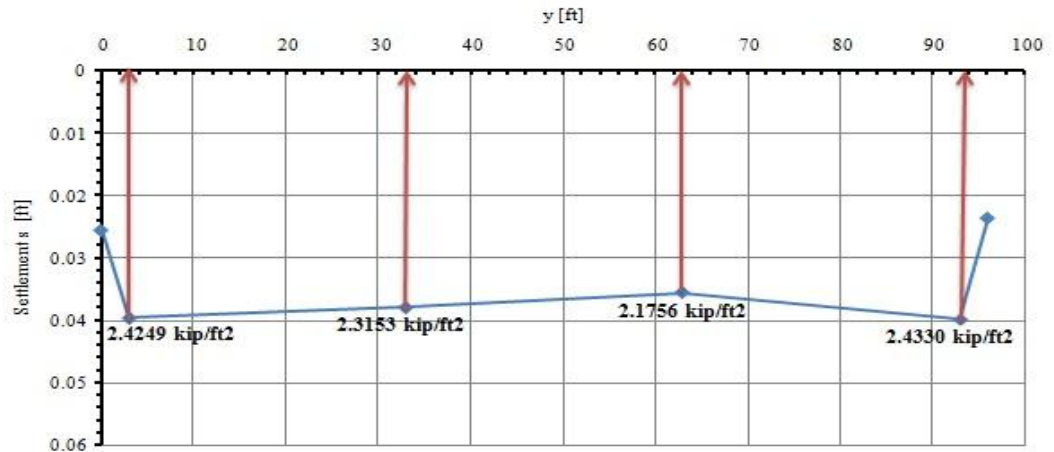


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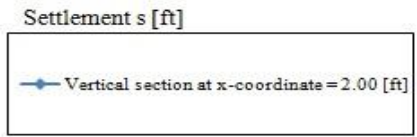


Lampiran L6 gambar penurunan dari metode modulus reaksi tanah dasar dan tegangan yang di peroleh dari nilai $k_s = 61.112632 \text{ kip/ft}^3$

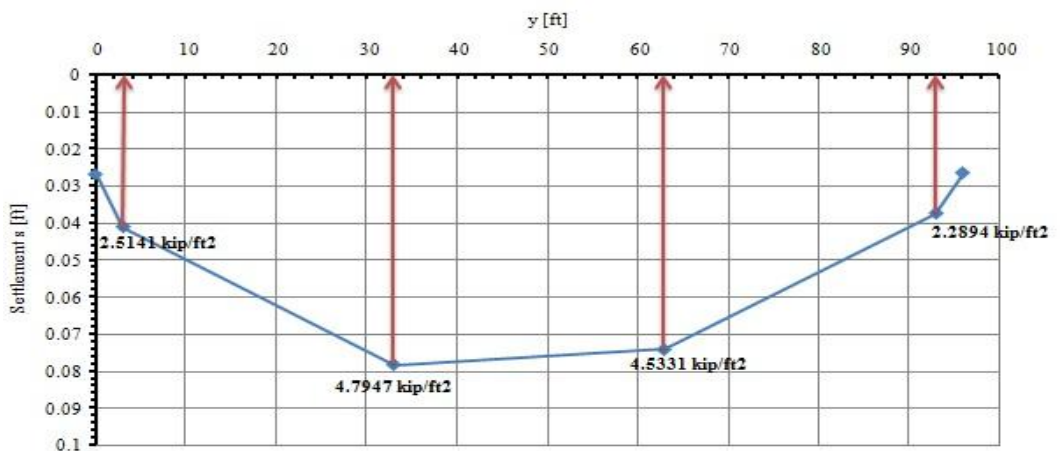
1. Jarak 2 ft



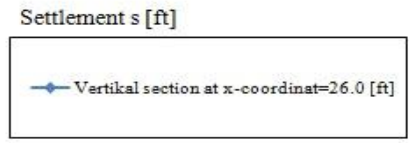
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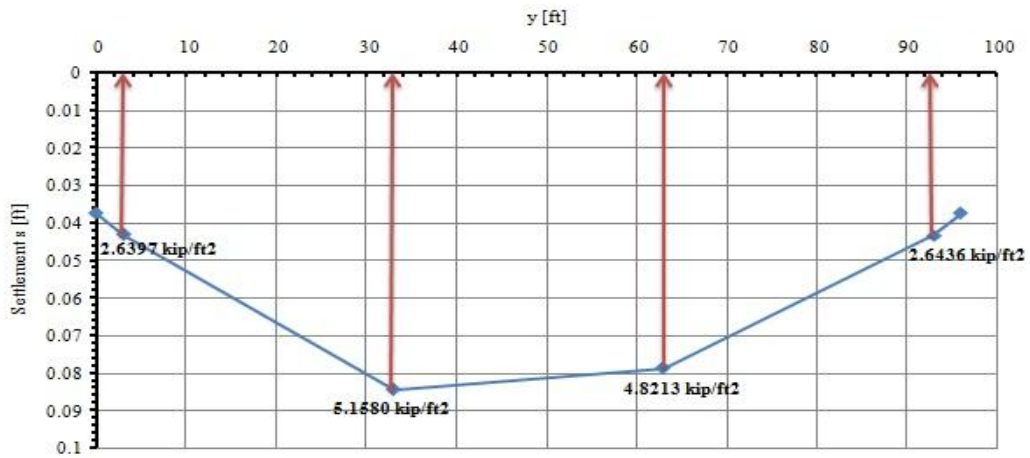
2. Jarak 26 ft



Title: tugas akhir
 Date: Tuesday, November 06, 2012
 Project: 0921056
 File: 0921056
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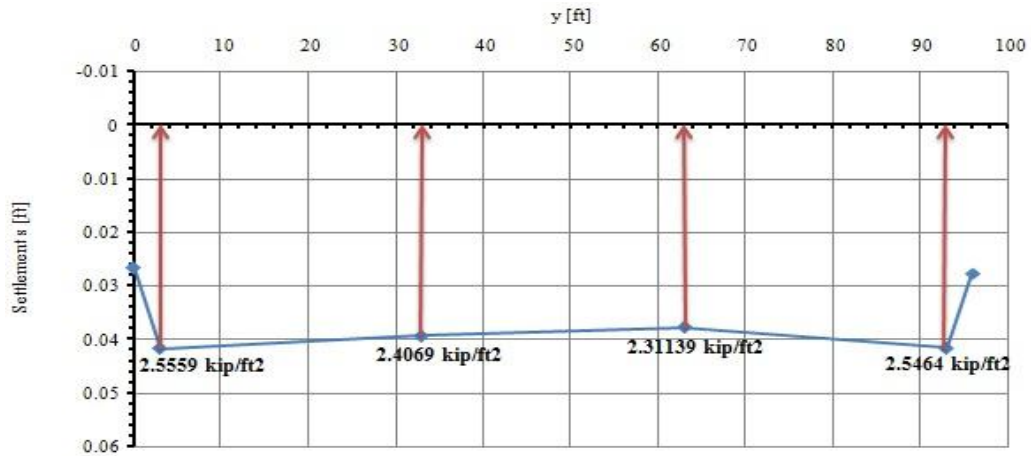
3. Jarak 50 ft



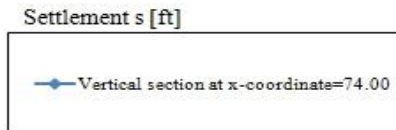
Title: tugas akhir
 Date: Tuesday, November 06, 2012
 Project: 0921056
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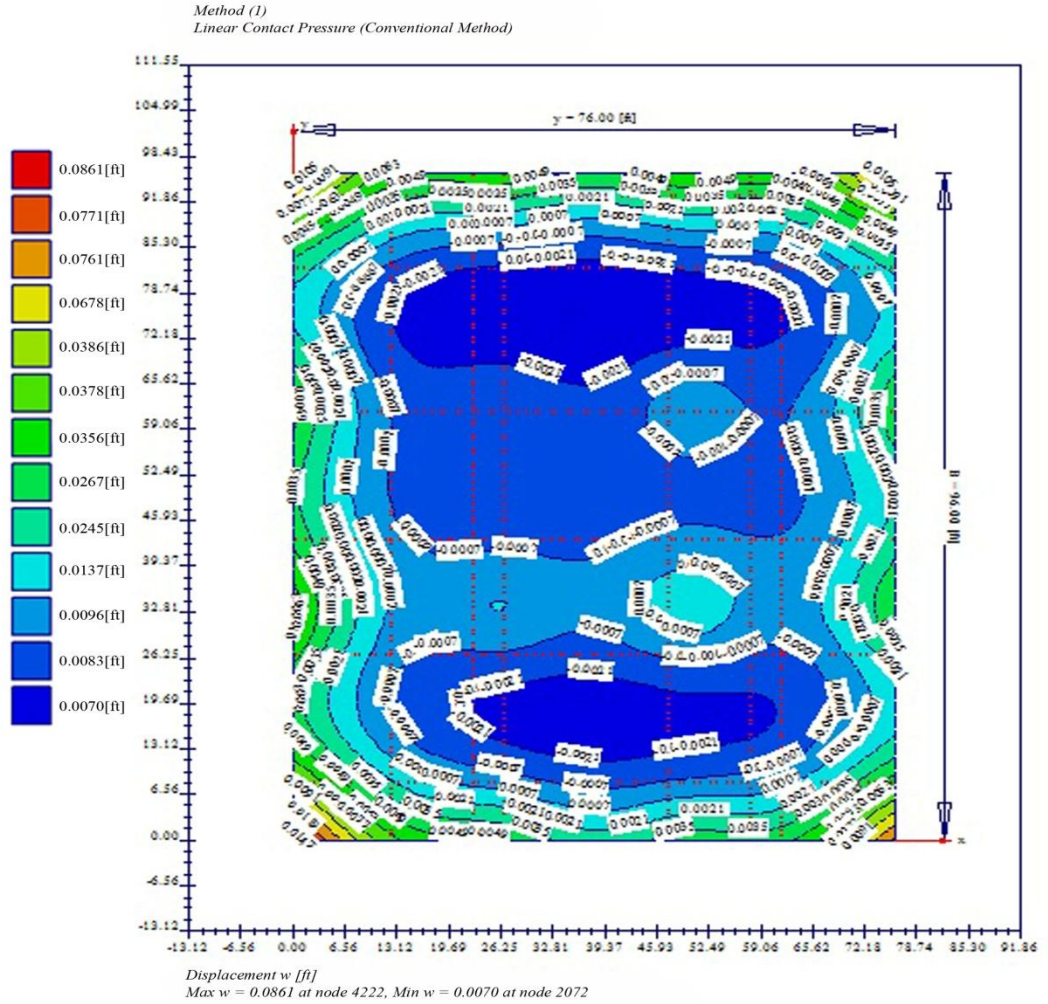
4. Jarak 74 ft



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Lampiran L7 gambar penurunan secara merata pada ELPLA 9.2



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