

Colusa County Public Works
Memorandum

DOCKET
06-AFC
DATE JAN 10 2008
RECD. JAN 7 0 2008

Date: January 10, 2008
To: Jack Caswell – Proj. Mangr., CEC
From: Loren Clifton
cc: Kim Dolbow Vann, Gary Evans, Jon Maring

Subject: CPW Road Mitigation – Colusa Generating Station

The following items require the attention of stakeholders before an encroachment permit on County roads can be issued for the above project. Formal discussions and meetings with the project developer and other stakeholders should begin as soon as practical. Some of the items listed below such as plans and specifications require reasonable lead times for design review, comment and requested revisions. It is our understanding that site work is scheduled to begin May 1st, 2008. Any plan review process should begin to occur no less than 90 days prior to the requested date for issuance of the encroachment permit.

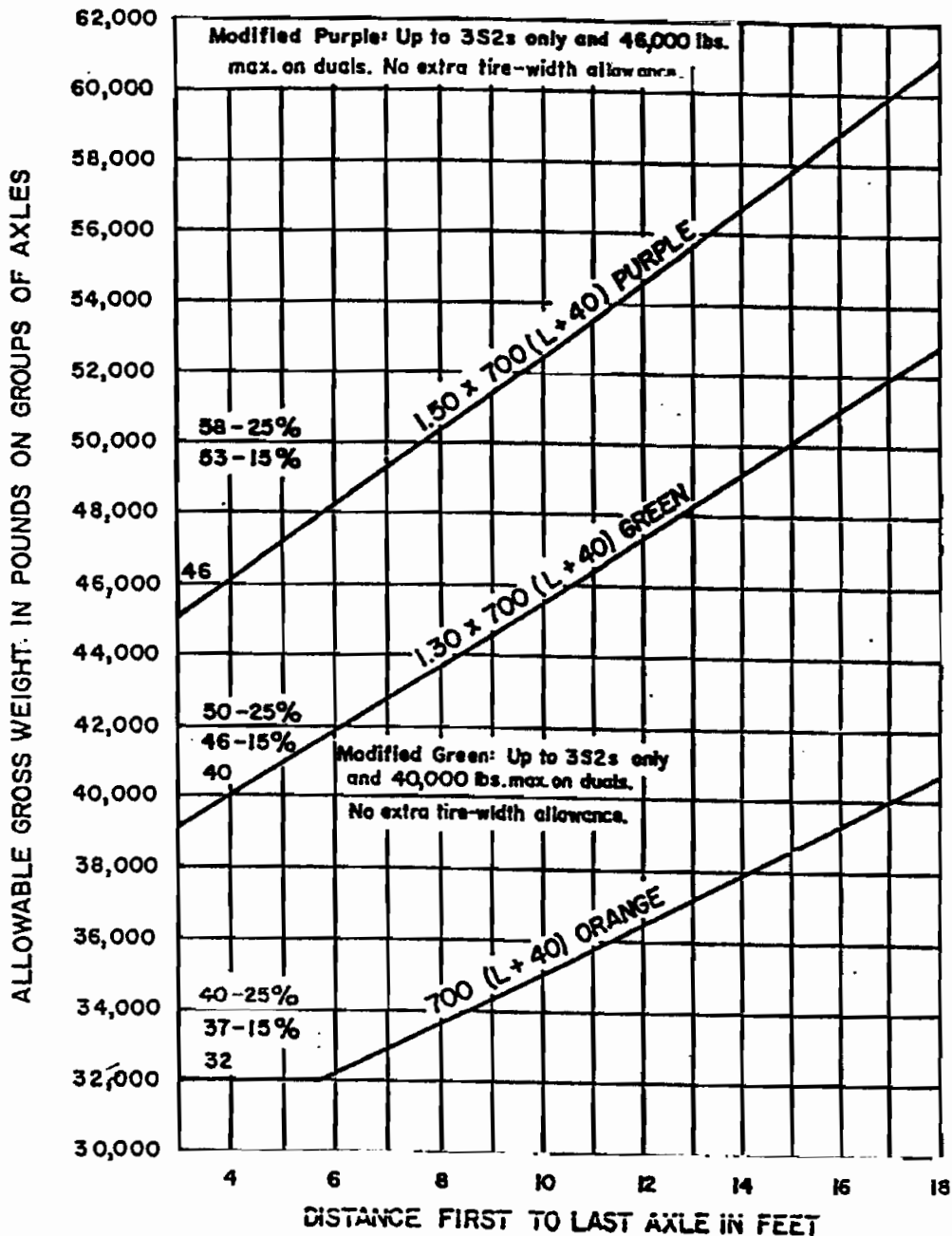
1. Formal discussions via face meeting(s) or teleconference with the project manager and stakeholders involved with road improvements and transport in the County Right of Way (ROW) to facilitate moving of materials and equipment (i.e. design engineers, construction manager and contractor) and Colusa County Public Works (CPW) staff should begin as soon as the CEC has issued its permits. The meetings will include discussions with the Developer and their project engineers regarding CPW design requirements and specifications for bridge engineering, temporary road and shoulder repairs, SWPPP documents and BMP requirements and road resurfacing and other mitigation measures.
2. Submittal to CPW of the Project Managers current project schedule and preliminary construction schedule.
3. A route circulation plan prepared by the project developer to and from the Williams rail siding and other points of entry into the County on County roads showing all possible roads that may be impacted by the movement of equipment and materials. The route circulation plan shall include the maximum axle loading expected of transport of materials and equipment upon each route.
4. Identification of all bridges and structures in the County road system requiring upgrades or replacement to facilitate construction of the project.

5. Discussion of coordinating two separate contracts of work to be done at the Theresa bridge site in partnership. One regarding the bridge replacement to be performed by the Project Developer and a separate order of work for stream erosion repairs to be designed **and** paid for by CPW.
6. An agreed upon schedule by stakeholders of timeframe of the **plan** review submittal process (60% **and** 95% review) of Plans Specifications and Estimates (PSE) regarding road and bridge improvements in the County ROW.
7. The role of County Public Works dept. in oversight of work done in the County Right of Way (ROW).

These are the major milestones to be completed. Other issues may be identified by stakeholders in subsequent meetings that will require action to be completed prior to issuance of the encroachment permit(s).

APPENDIX 20 WEIGHT CHART (PLATE 25-1)

The maximum weight permitted on a tire shall be 800 pounds per linear inch of tread width. The width shall be the maximum inflated width as specified on the tire by the manufacturer, or as measured, if less.



- For vehicles with 8 tires per axle:
1. If gage is 8' ----- Add 15%
 2. If gage is 10' or more -- Add 25%

Single Axle	
Purple	28,000
Green	24,000
Orange	20,000

**APPENDIX 20
WEIGHT CHART (PLATE 25-2)**

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

NO LONGER USED

APPENDIX 20 WEIGHT CHART (PLATE 25-3)

ORANGE AND BONUS OVERLOADS*

MAXIMUM PERMIT WEIGHT ON TANDEM AXLES = 42,800 POUNDS

Example: 8' - 0" Distance Between First and Last Axle in Feet

33,600
38,640
42,000

4 tires, 8' - 0" Wide
8 tires, 8' - 0" Wide
8 tires, 10' - 0" Wide

Orange Load = 700 (L + 40) [Min. = 32,000]
Orange Load (+ 15%) = 1.15 x 700 (L + 40) [Min. = 36,800]
Orange Load (+ 25%) = 1.25 x 700 (L + 40) [Min. = 40,000]

IN. FT.	0	1	2	3	4	5	6	7	8	9	10	11
2	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
3	20,000	20,000	20,000	20,000	20,000	20,000	20,000	32,000	32,000	32,000	32,000	32,000
4	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000
5	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,025	32,083	32,142
6	32,200	32,258	32,317	32,375	32,433	32,492	32,550	32,608	32,667	32,725	32,783	32,842
7	32,900	32,958	33,017	33,075	33,133	33,192	33,250	33,308	33,367	33,425	33,483	33,542
8	33,600	33,658	33,717	33,775	33,833	33,892	33,950	34,008	34,067	34,125	34,183	34,242
9	34,300	34,358	34,417	34,475	34,533	34,592	34,650	34,708	34,767	34,825	34,883	34,942
10	35,000	35,058	35,117	35,175	35,233	35,292	35,350	35,408	35,467	35,525	35,583	35,642
11	35,700	35,758	35,817	35,875	35,933	35,992	36,050	36,108	36,167	36,225	36,283	36,342
12	36,400	36,458	36,517	36,575	36,633	36,692	36,750	36,808	36,867	36,925	36,983	37,042
13	37,100	37,158	37,217	37,275	37,333	37,392	37,450	37,508	37,567	37,625	37,683	37,742
14	37,800	37,858	37,917	37,975	38,033	38,092	38,150	38,208	38,267	38,325	38,383	38,442
15	38,500	38,558	38,617	38,675	38,733	38,792	38,850	38,908	38,967	39,025	39,083	39,142
16	39,200	39,258	39,317	39,375	39,433	39,492	39,550	39,608	39,667	39,725	39,783	39,842
17	39,900	39,958	40,017	40,075	40,133	40,192	40,250	40,308	40,367	40,425	40,483	40,542
18	40,600	40,658	40,717	40,775	40,833	40,892	40,950	41,008	41,067	41,125	41,183	41,242

* A set of tandem axles with spacing between axles of less than 3' - 6" is considered as a single axle.

APPENDIX 20 WEIGHT CHART (PLATE 25-4)

GREEN AND BONUS OVERLOADS*

MAXIMUM PERMIT WEIGHT ON TANDEM AXLES = 52,000 POUNDS

Example: 8' - 0" Distance Between First and Last Axle in Feet

43,680
50,232
54,600

4 tires, 8' - 0" Wide
8 tires, 8' - 0" Wide
8 tires, 10' - 0" Wide

Green Load = 1.3 x 700 (L + 40)
Green Load (+ 15%) = 1.15 x 1.3 x 700 (L + 40)
Green Load (+ 25%) = 1.25 x 1.3 x 700 (L + 40)

IN. FT.	0	1	2	3	4	5	6	7	8	9	10	11
2	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
3	27,600	27,600	27,600	27,600	27,600	27,600	27,600	27,600	27,600	27,600	27,600	27,600
4	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
5	24,000	24,000	24,000	24,000	24,000	24,000	39,585	39,661	39,737	39,813	39,888	39,964
6	27,600	27,600	27,600	27,600	27,600	27,600	45,523	45,610	45,697	45,784	45,872	45,959
7	30,000	30,000	30,000	30,000	30,000	30,000	49,481	49,576	49,671	49,766	49,860	49,955
8	40,040	40,116	40,192	40,268	40,343	40,419	40,495	40,571	40,647	40,723	40,798	40,874
9	46,046	46,133	46,220	46,308	46,395	46,482	46,569	46,656	46,744	46,831	46,918	47,005
10	50,050	50,145	50,240	50,334	50,429	50,524	50,619	50,714	50,808	50,903	50,998	51,093
11	40,950	41,026	41,102	41,178	41,253	41,329	41,405	41,481	41,557	41,633	41,708	41,784
12	47,093	47,180	47,267	47,354	47,441	47,529	47,616	47,703	47,790	47,877	47,965	48,052
13	51,188	51,282	51,377	51,472	51,567	51,661	51,756	51,851	51,946	52,041	52,135	52,230
14	41,860	41,936	42,012	42,088	42,163	42,239	42,315	42,391	42,467	42,543	42,618	42,694
15	48,139	48,226	48,313	48,401	48,488	48,575	48,662	48,749	48,837	48,924	49,011	49,098
16	52,325	52,420	52,515	52,609	52,704	52,799	52,894	52,989	53,083	53,178	53,273	53,368
17	42,770	42,846	42,922	42,998	43,073	43,149	43,225	43,301	43,377	43,453	43,528	43,604
18	49,186	49,273	49,360	49,447	49,534	49,622	49,709	49,796	49,883	49,970	50,058	50,145
19	53,463	53,557	53,652	53,747	53,842	53,936	54,031	54,126	54,221	54,316	54,410	54,505
20	43,680	43,756	43,832	43,908	43,983	44,059	44,135	44,211	44,287	44,363	44,438	44,514
21	50,232	50,319	50,406	50,494	50,581	50,668	50,755	50,842	50,930	51,017	51,104	51,191
22	54,600	54,695	54,790	54,884	54,979	55,074	55,169	55,264	55,358	55,453	55,548	55,643
23	44,590	44,666	44,742	44,818	44,893	44,969	45,045	45,121	45,197	45,273	45,348	45,424
24	51,279	51,366	51,453	51,540	51,627	51,715	51,802	51,889	51,976	52,063	52,151	52,238
25	55,738	55,832	55,927	56,022	56,117	56,211	56,306	56,401	56,496	56,591	56,685	56,780
26	45,500	45,576	45,652	45,728	45,803	45,879	45,955	46,031	46,107	46,183	46,258	46,334
27	52,325	52,412	52,499	52,587	52,674	52,761	52,848	52,935	53,023	53,110	53,197	53,284
28	56,875	56,970	57,065	57,159	57,254	57,349	57,444	57,539	57,633	57,728	57,823	57,918
29	46,410	46,486	46,562	46,638	46,713	46,789	46,865	46,941	47,017	47,093	47,168	47,244
30	53,372	53,459	53,546	53,633	53,720	53,808	53,895	53,982	54,069	54,156	54,244	54,331
31	58,013	58,107	58,202	58,297	58,392	58,486	58,581	58,676	58,771	58,866	58,960	59,055
32	47,320	47,396	47,472	47,548	47,623	47,699	47,775	47,851	47,927	48,003	48,078	48,154
33	54,418	54,505	54,592	54,680	54,767	54,854	54,941	55,028	55,116	55,203	55,290	55,377
34	59,150	59,245	59,340	59,434	59,529	59,624	59,719	59,814	59,908	60,003	60,098	60,193
35	48,230	48,306	48,382	48,458	48,533	48,609	48,685	48,761	48,837	48,913	48,988	49,064
36	55,465	55,552	55,639	55,726	55,813	55,901	55,988	56,075	56,162	56,249	56,337	56,424
37	60,288	60,382	60,477	60,572	60,667	60,761	60,856	60,951	61,046	61,141	61,235	61,330
38	49,140	49,216	49,292	49,368	49,443	49,519	49,595	49,671	49,747	49,823	49,898	49,974
39	56,511	56,598	56,685	56,773	56,860	56,947	57,034	57,121	57,209	57,296	57,383	57,470
40	61,425	61,520	61,615	61,709	61,804	61,899	61,994	62,089	62,183	62,278	62,373	62,468
41	50,050	50,126	50,202	50,278	50,353	50,429	50,505	50,581	50,657	50,733	50,808	50,884
42	57,558	57,645	57,732	57,819	57,906	57,994	58,081	58,168	58,255	58,342	58,430	58,517
43	62,563	62,657	62,752	62,847	62,942	63,036	63,131	63,226	63,321	63,416	63,510	63,605
44	50,960	51,036	51,112	51,188	51,263	51,339	51,415	51,491	51,567	51,643	51,718	51,794
45	58,604	58,691	58,778	58,866	58,953	59,040	59,127	59,214	59,302	59,389	59,476	59,563
46	63,700	63,795	63,890	63,984	64,079	64,174	64,269	64,364	64,458	64,553	64,648	64,743
47	51,870	51,946	52,022	52,098	52,173	52,249	52,325	52,401	52,477	52,553	52,628	52,704
48	59,651	59,738	59,825	59,912	59,999	60,087	60,174	60,261	60,348	60,435	60,523	60,610
49	64,838	64,932	65,027	65,122	65,217	65,311	65,406	65,501	65,596	65,691	65,785	65,880
50	52,780											
51	60,697											
52	65,975											

* A set of tandem axles with spacing between axles of less than 3' - 6" is considered as a single axle.

APPENDIX 20 WEIGHT CHART (PLATE 25-5)

PURPLE AND BONUS OVERLOADS*

MAXIMUM PERMIT WEIGHT ON TANDEM AXLES = 60,000 POUNDS

Example: 8' - 0" Distance Between First and Last Axle in Feet

50,400
57,960
63,000

4 tires, 8' - 0" Wide
8 tires, 8' - 0" Wide
8 tires, 10' - 0" Wide

Purple Load = 1.5 x 700 (L + 40)
Purple Load (+ 15%) = 1.15 x 1.5 x 700 (L + 40)
Purple Load (+ 25%) = 1.25 x 1.5 x 700 (L + 40)

IN. FT.	0	1	2	3	4	5	6	7	8	9	10	11
2	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000
3	28,000	28,000	28,000	28,000	28,000	28,000	45,675	45,763	45,850	45,938	46,025	46,113
4	28,000	28,000	28,000	28,000	28,000	28,000	52,526	52,627	52,728	52,828	52,929	53,029
5	28,000	28,000	28,000	28,000	28,000	28,000	57,094	57,203	57,313	57,422	57,531	57,641
6	46,200	46,288	46,375	46,463	46,550	46,638	46,725	46,813	46,900	46,988	47,075	47,163
7	47,250	47,338	47,425	47,513	47,600	47,688	47,775	47,863	47,950	48,038	48,125	48,213
8	48,300	48,388	48,475	48,563	48,650	48,738	48,825	48,913	49,000	49,088	49,175	49,263
9	49,350	49,438	49,525	49,613	49,700	49,788	49,875	49,963	50,050	50,138	50,225	50,313
10	50,400	50,488	50,575	50,663	50,750	50,838	50,925	51,013	51,100	51,188	51,275	51,363
11	51,450	51,538	51,625	51,713	51,800	51,888	51,975	52,063	52,150	52,238	52,325	52,413
12	52,500	52,588	52,675	52,763	52,850	52,938	53,025	53,113	53,200	53,288	53,375	53,463
13	53,550	53,638	53,725	53,813	53,900	53,988	54,075	54,163	54,250	54,338	54,425	54,513
14	54,600	54,688	54,775	54,863	54,950	55,038	55,125	55,213	55,300	55,388	55,475	55,563
15	55,650	55,738	55,825	55,913	56,000	56,088	56,175	56,263	56,350	56,438	56,525	56,613
16	56,700	56,788	56,875	56,963	57,050	57,138	57,225	57,313	57,400	57,488	57,575	57,663
17	57,750	57,838	57,925	58,013	58,100	58,188	58,275	58,363	58,450	58,538	58,625	58,713
18	58,800	58,888	58,975	59,063	59,150	59,238	59,325	59,413	59,500	59,588	59,675	59,763
19	59,850	59,938	60,025	60,113	60,200	60,288	60,375	60,463	60,550	60,638	60,725	60,813
20	60,900	60,988	61,075	61,163	61,250	61,338	61,425	61,513	61,600	61,688	61,775	61,863
21	61,950	62,038	62,125	62,213	62,300	62,388	62,475	62,563	62,650	62,738	62,825	62,913
22	63,000	63,088	63,175	63,263	63,350	63,438	63,525	63,613	63,700	63,788	63,875	63,963
23	64,050	64,138	64,225	64,313	64,400	64,488	64,575	64,663	64,750	64,838	64,925	65,013
24	65,100	65,188	65,275	65,363	65,450	65,538	65,625	65,713	65,800	65,888	65,975	66,063
25	66,150	66,238	66,325	66,413	66,500	66,588	66,675	66,763	66,850	66,938	67,025	67,113
26	67,200	67,288	67,375	67,463	67,550	67,638	67,725	67,813	67,900	67,988	68,075	68,163
27	68,250	68,338	68,425	68,513	68,600	68,688	68,775	68,863	68,950	69,038	69,125	69,213
28	69,300	69,388	69,475	69,563	69,650	69,738	69,825	69,913	70,000	70,088	70,175	70,263
29	70,350	70,438	70,525	70,613	70,700	70,788	70,875	70,963	71,050	71,138	71,225	71,313
30	71,400	71,488	71,575	71,663	71,750	71,838	71,925	72,013	72,100	72,188	72,275	72,363
31	72,450	72,538	72,625	72,713	72,800	72,888	72,975	73,063	73,150	73,238	73,325	73,413
32	73,500	73,588	73,675	73,763	73,850	73,938	74,025	74,113	74,200	74,288	74,375	74,463
33	74,550	74,638	74,725	74,813	74,900	74,988	75,075	75,163	75,250	75,338	75,425	75,513
34	75,600	75,688	75,775	75,863	75,950	76,038	76,125	76,213	76,300	76,388	76,475	76,563
35	76,650	76,738	76,825	76,913	77,000	77,088	77,175	77,263	77,350	77,438	77,525	77,613
36	77,700	77,788	77,875	77,963	78,050	78,138	78,225	78,313	78,400	78,488	78,575	78,663
37	78,750	78,838	78,925	79,013	79,100	79,188	79,275	79,363	79,450	79,538	79,625	79,713
38	79,800	79,888	79,975	80,063	80,150	80,238	80,325	80,413	80,500	80,588	80,675	80,763
39	80,850	80,938	81,025	81,113	81,200	81,288	81,375	81,463	81,550	81,638	81,725	81,813
40	81,900	81,988	82,075	82,163	82,250	82,338	82,425	82,513	82,600	82,688	82,775	82,863
41	82,950	83,038	83,125	83,213	83,300	83,388	83,475	83,563	83,650	83,738	83,825	83,913
42	84,000	84,088	84,175	84,263	84,350	84,438	84,525	84,613	84,700	84,788	84,875	84,963
43	85,050	85,138	85,225	85,313	85,400	85,488	85,575	85,663	85,750	85,838	85,925	86,013
44	86,100	86,188	86,275	86,363	86,450	86,538	86,625	86,713	86,800	86,888	86,975	87,063
45	87,150	87,238	87,325	87,413	87,500	87,588	87,675	87,763	87,850	87,938	88,025	88,113
46	88,200	88,288	88,375	88,463	88,550	88,638	88,725	88,813	88,900	88,988	89,075	89,163
47	89,250	89,338	89,425	89,513	89,600	89,688	89,775	89,863	89,950	90,038	90,125	90,213
48	90,300	90,388	90,475	90,563	90,650	90,738	90,825	90,913	91,000	91,088	91,175	91,263
49	91,350	91,438	91,525	91,613	91,700	91,788	91,875	91,963	92,050	92,138	92,225	92,313
50	92,400	92,488	92,575	92,663	92,750	92,838	92,925	93,013	93,100	93,188	93,275	93,363
51	93,450	93,538	93,625	93,713	93,800	93,888	93,975	94,063	94,150	94,238	94,325	94,413
52	94,500	94,588	94,675	94,763	94,850	94,938	95,025	95,113	95,200	95,288	95,375	95,463
53	95,550	95,638	95,725	95,813	95,900	95,988	96,075	96,163	96,250	96,338	96,425	96,513
54	96,600	96,688	96,775	96,863	96,950	97,038	97,125	97,213	97,300	97,388	97,475	97,563
55	97,650	97,738	97,825	97,913	98,000	98,088	98,175	98,263	98,350	98,438	98,525	98,613
56	98,700	98,788	98,875	98,963	99,050	99,138	99,225	99,313	99,400	99,488	99,575	99,663
57	99,750	99,838	99,925	100,013	100,100	100,188	100,275	100,363	100,450	100,538	100,625	100,713
58	100,800	100,888	100,975	101,063	101,150	101,238	101,325	101,413	101,500	101,588	101,675	101,763
59	101,850	101,938	102,025	102,113	102,200	102,288	102,375	102,463	102,550	102,638	102,725	102,813
60	102,900	102,988	103,075	103,163	103,250	103,338	103,425	103,513	103,600	103,688	103,775	103,863
61	103,950	104,038	104,125	104,213	104,300	104,388	104,475	104,563	104,650	104,738	104,825	104,913
62	105,000	105,088	105,175	105,263	105,350	105,438	105,525	105,613	105,700	105,788	105,875	105,963
63	106,050	106,138	106,225	106,313	106,400	106,488	106,575	106,663	106,750	106,838	106,925	107,013
64	107,100	107,188	107,275	107,363	107,450	107,538	107,625	107,713	107,800	107,888	107,975	108,063
65	108,150	108,238	108,325	108,413	108,500	108,588	108,675	108,763	108,850	108,938	109,025	109,113
66	109,200	109,288	109,375	109,463	109,550	109,638	109,725	109,813	109,900	109,988	110,075	110,163
67	110,250	110,338	110,425	110,513	110,600	110,688	110,775	110,863	110,950	111,038	111,125	111,213
68	111,300	111,388	111,475	111,563	111,650	111,738	111,825	111,913	112,000	112,088	112,175	112,263
69	112,350	112,438	112,525	112,613	112,700	112,788	112,875	112,963	113,050	113,138	113,225	113,313
70	113,400	113,488	113,575	113,663	113,750	113,838	113,925	114,013	114,100	114,188	114,275	114,363
71	114,450	114,538	114,625	114,713	114,800	114,888	114,975	115,063	115,150	115,238	115,325	115,413
72	115,500	115,588	115,675	115,763	115,850	115,938	116,025	116,113	116,200	116,288	116,375	116,463
73	116,550	116,638	116,725	116,813	116,900	116,988	117,075	117,163	117,250	117,338	117,425	117,513
74	117,600	117,688	117,775	117,863	117,950	118,038	118,125	118,213	118,300	118,388	118,475	118,563
75	118,650	118,738	118,825	118,913	119,000	119,088	119,175	119,263	119,350	119,438	119,525	119,613
76	119,700	119,788	119,875	119,963	120,050	120,138	120,225	120,313	120,400	120,488	120,575	120,663
77	120,750	120,838	120,925	121,013	121,100	121,188	121,275	121,363	121,450	121,538	121,625	121,713
78	121,800	121,888	121,975	122,063	122,150	122,238	122,325	122,413	122,500	122,588	122,675	122,763
79	122,850	122,938	123,025	123,113	123,200	123,288	123,375	123,463	123,550	123,638	123,725	123,813
80	123,900	123,988	124,075	124,163	124,250	124,338	124,425	124,513	124,600	124,688	124,775	