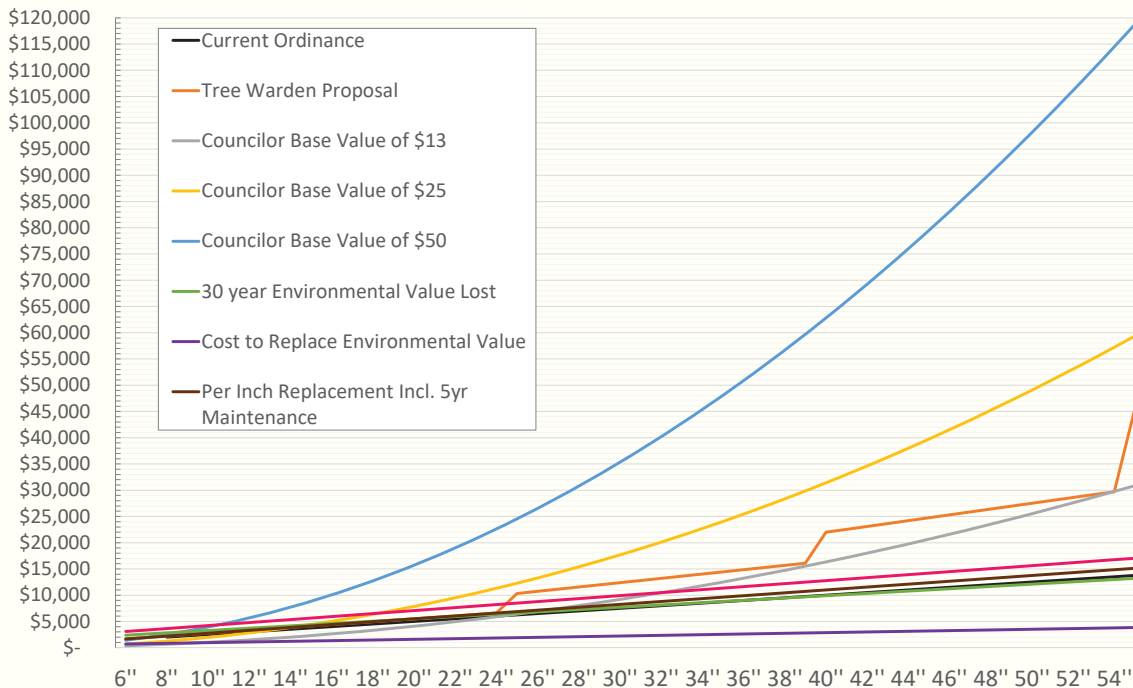


Tree Ordinance Tree Replacement Cost Options, Draft 4-14-2023					Alternatives for discussion				
Tree DBH	Current Ordinance	Tree Warden Proposal	Councilor Base Value of \$13	Councilor Base Value of \$25	Councilor Base Value of \$50	30 year Environmental Value Lost	Cost to Replace Environmental Value	Combined 30 year Enviro value/ Replacement Cost	Per Inch Replacement Incl. Svr Maintenance
6"		\$ 1,650	\$ 367	\$ 707	\$ 1,413	\$ 2,385	\$ 690	\$ 3,075	\$ 1,650
7"		\$ 1,925	\$ 500	\$ 962	\$ 1,923	\$ 2,606	\$ 754	\$ 3,360	\$ 1,925
8"	\$ 2,000	\$ 2,200	\$ 653	\$ 1,256	\$ 2,512	\$ 2,827	\$ 818	\$ 3,645	\$ 2,200
9"	\$ 2,250	\$ 2,475	\$ 827	\$ 1,590	\$ 3,179	\$ 3,048	\$ 882	\$ 3,930	\$ 2,475
10"	\$ 2,500	\$ 2,750	\$ 1,021	\$ 1,963	\$ 3,925	\$ 3,269	\$ 946	\$ 4,215	\$ 2,750
11"	\$ 2,750	\$ 3,025	\$ 1,235	\$ 2,375	\$ 4,749	\$ 3,490	\$ 1,010	\$ 4,500	\$ 3,025
12"	\$ 3,000	\$ 3,300	\$ 1,470	\$ 2,826	\$ 5,652	\$ 3,711	\$ 1,074	\$ 4,785	\$ 3,300
13"	\$ 3,250	\$ 3,575	\$ 1,725	\$ 3,317	\$ 6,633	\$ 3,932	\$ 1,138	\$ 5,071	\$ 3,575
14"	\$ 3,500	\$ 3,850	\$ 2,000	\$ 3,847	\$ 7,693	\$ 4,153	\$ 1,202	\$ 5,356	\$ 3,850
15"	\$ 3,750	\$ 4,125	\$ 2,296	\$ 4,416	\$ 8,831	\$ 4,374	\$ 1,266	\$ 5,641	\$ 4,125
16"	\$ 4,000	\$ 4,400	\$ 2,612	\$ 5,024	\$ 10,048	\$ 4,596	\$ 1,330	\$ 5,926	\$ 4,400
17"	\$ 4,250	\$ 4,675	\$ 2,949	\$ 5,672	\$ 11,343	\$ 4,817	\$ 1,394	\$ 6,211	\$ 4,675
18"	\$ 4,500	\$ 4,950	\$ 3,306	\$ 6,359	\$ 12,717	\$ 5,038	\$ 1,458	\$ 6,496	\$ 4,950
19"	\$ 4,750	\$ 5,225	\$ 3,684	\$ 7,085	\$ 14,169	\$ 5,259	\$ 1,522	\$ 6,781	\$ 5,225
20"	\$ 5,000	\$ 5,500	\$ 4,082	\$ 7,850	\$ 15,700	\$ 5,480	\$ 1,586	\$ 7,066	\$ 5,500
21"	\$ 5,250	\$ 5,775	\$ 4,500	\$ 8,655	\$ 17,309	\$ 5,701	\$ 1,650	\$ 7,351	\$ 5,775
22"	\$ 5,500	\$ 6,050	\$ 4,939	\$ 9,499	\$ 18,997	\$ 5,922	\$ 1,714	\$ 7,636	\$ 6,050
23"	\$ 5,750	\$ 6,325	\$ 5,398	\$ 10,382	\$ 20,763	\$ 6,143	\$ 1,778	\$ 7,922	\$ 6,325
24"	\$ 6,000	\$ 6,600	\$ 5,878	\$ 11,304	\$ 22,608	\$ 6,364	\$ 1,842	\$ 8,207	\$ 6,600
25"	\$ 6,250	\$ 6,937	\$ 6,378	\$ 12,266	\$ 24,531	\$ 6,585	\$ 1,906	\$ 8,492	\$ 6,937
26"	\$ 6,500	\$ 7,275	\$ 6,899	\$ 13,267	\$ 26,533	\$ 6,807	\$ 1,970	\$ 8,777	\$ 7,275
27"	\$ 6,750	\$ 7,613	\$ 7,439	\$ 14,307	\$ 28,613	\$ 7,028	\$ 2,034	\$ 9,062	\$ 7,613
28"	\$ 7,000	\$ 7,950	\$ 8,001	\$ 15,386	\$ 30,772	\$ 7,249	\$ 2,098	\$ 9,347	\$ 7,950
29"	\$ 7,250	\$ 8,288	\$ 8,582	\$ 16,505	\$ 33,009	\$ 7,470	\$ 2,162	\$ 9,632	\$ 8,288
30"	\$ 7,500	\$ 8,625	\$ 9,185	\$ 17,663	\$ 35,325	\$ 7,691	\$ 2,226	\$ 9,917	\$ 8,625
31"	\$ 7,750	\$ 8,963	\$ 9,807	\$ 18,860	\$ 37,719	\$ 7,912	\$ 2,290	\$ 10,202	\$ 8,963
32"	\$ 8,000	\$ 9,300	\$ 10,450	\$ 20,096	\$ 40,192	\$ 8,133	\$ 2,354	\$ 10,488	\$ 9,300
33"	\$ 8,250	\$ 9,638	\$ 11,113	\$ 21,372	\$ 42,743	\$ 8,354	\$ 2,418	\$ 10,773	\$ 9,638
34"	\$ 8,500	\$ 9,975	\$ 11,797	\$ 22,687	\$ 45,373	\$ 8,575	\$ 2,482	\$ 11,058	\$ 9,975
35"	\$ 8,750	\$ 10,313	\$ 12,501	\$ 24,041	\$ 48,081	\$ 8,796	\$ 2,546	\$ 11,343	\$ 10,313
36"	\$ 9,000	\$ 10,650	\$ 13,226	\$ 25,434	\$ 50,868	\$ 9,018	\$ 2,610	\$ 11,628	\$ 10,650
37"	\$ 9,250	\$ 10,988	\$ 13,971	\$ 26,867	\$ 53,733	\$ 9,239	\$ 2,674	\$ 11,913	\$ 10,988
38"	\$ 9,500	\$ 11,325	\$ 14,736	\$ 28,339	\$ 56,677	\$ 9,460	\$ 2,738	\$ 12,198	\$ 11,325
39"	\$ 9,750	\$ 11,663	\$ 15,522	\$ 29,850	\$ 59,699	\$ 9,681	\$ 2,802	\$ 12,483	\$ 11,663
40"	\$ 10,000	\$ 12,000	\$ 16,328	\$ 31,400	\$ 62,800	\$ 9,902	\$ 2,866	\$ 12,768	\$ 12,000
41"	\$ 10,250	\$ 12,338	\$ 17,155	\$ 32,990	\$ 65,979	\$ 10,123	\$ 2,930	\$ 13,053	\$ 12,338
42"	\$ 10,500	\$ 12,675	\$ 18,002	\$ 34,619	\$ 69,237	\$ 10,344	\$ 2,994	\$ 13,338	\$ 12,675
43"	\$ 10,750	\$ 13,013	\$ 18,869	\$ 36,287	\$ 72,573	\$ 10,565	\$ 3,058	\$ 13,623	\$ 13,013
44"	\$ 11,000	\$ 13,350	\$ 19,757	\$ 37,994	\$ 75,988	\$ 10,786	\$ 3,122	\$ 13,908	\$ 13,350
45"	\$ 11,250	\$ 13,688	\$ 20,665	\$ 39,741	\$ 79,481	\$ 11,007	\$ 3,186	\$ 14,193	\$ 13,688
46"	\$ 11,500	\$ 14,025	\$ 21,594	\$ 41,527	\$ 83,053	\$ 11,229	\$ 3,250	\$ 14,478	\$ 14,025
47"	\$ 11,750	\$ 14,363	\$ 22,543	\$ 43,352	\$ 86,703	\$ 11,450	\$ 3,314	\$ 14,763	\$ 14,363
48"	\$ 12,000	\$ 14,700	\$ 23,512	\$ 45,216	\$ 90,432	\$ 11,671	\$ 3,378	\$ 15,048	\$ 14,700
49"	\$ 12,250	\$ 15,038	\$ 24,502	\$ 47,120	\$ 94,239	\$ 11,892	\$ 3,442	\$ 15,333	\$ 15,038
50"	\$ 12,500	\$ 15,375	\$ 25,513	\$ 49,063	\$ 98,125	\$ 12,113	\$ 3,506	\$ 15,618	\$ 15,375
51"	\$ 12,750	\$ 15,713	\$ 26,543	\$ 51,045	\$ 102,089	\$ 12,334	\$ 3,570	\$ 15,903	\$ 15,713
52"	\$ 13,000	\$ 16,050	\$ 27,594	\$ 53,066	\$ 106,132	\$ 12,555	\$ 3,634	\$ 16,188	\$ 16,050
53"	\$ 13,250	\$ 16,388	\$ 28,666	\$ 55,127	\$ 110,253	\$ 12,776	\$ 3,698	\$ 16,473	\$ 16,388
54"	\$ 13,500	\$ 16,725	\$ 29,758	\$ 57,227	\$ 114,453	\$ 12,997	\$ 3,762	\$ 16,758	\$ 16,725
55"	\$ 13,750	\$ 17,063	\$ 30,870	\$ 59,366	\$ 118,731	\$ 13,218	\$ 3,826	\$ 17,043	\$ 17,063



Current Method for assessing payment in lieu of planting:

of inches not replaced
Multiplied by Current City Cost

Current City Cost \$250/inch
Includes:
purchase cost
staff costs
watering cost

Tree DBH	Current Ordinance
6"	na
7"	na
8"	\$ 2,000
9"	\$ 2,250
10"	\$ 2,500
11"	\$ 2,750
12"	\$ 3,000
13"	\$ 3,250
14"	\$ 3,500
15"	\$ 3,750
16"	\$ 4,000
17"	\$ 4,250
18"	\$ 4,500
19"	\$ 4,750
20"	\$ 5,000
21"	\$ 5,250
22"	\$ 5,500
23"	\$ 5,750
24"	\$ 6,000
25"	\$ 6,250
26"	\$ 6,500
27"	\$ 6,750
28"	\$ 7,000
29"	\$ 7,250
30"	\$ 7,500
31"	\$ 7,750
32"	\$ 8,000
33"	\$ 8,250
34"	\$ 8,500
35"	\$ 8,750
36"	\$ 9,000
37"	\$ 9,250
38"	\$ 9,500
39"	\$ 9,750
40"	\$ 10,000
41"	\$ 10,250
42"	\$ 10,500
43"	\$ 10,750
44"	\$ 11,000
45"	\$ 11,250
46"	\$ 11,500
47"	\$ 11,750
48"	\$ 12,000
49"	\$ 12,250
50"	\$ 12,500
51"	\$ 12,750
52"	\$ 13,000
53"	\$ 13,250
54"	\$ 13,500
55"	\$ 13,750

Current Method for assessing payment in lieu of planting:

of inches not replaced
Multiplied by Current City Cost

Current City Cost \$250/inch
Includes:
purchase cost
staff costs
watering cost

Tree DBH	Current Ordinance	Tree Warden Proposal
6"	na	\$ 1,650
7"	na	\$ 1,925
8"	\$ 2,000	\$ 2,200
9"	\$ 2,250	\$ 2,475
10"	\$ 2,500	\$ 2,750
11"	\$ 2,750	\$ 3,025
12"	\$ 3,000	\$ 3,300
13"	\$ 3,250	\$ 3,575
14"	\$ 3,500	\$ 3,850
15"	\$ 3,750	\$ 4,125
16"	\$ 4,000	\$ 4,400
17"	\$ 4,250	\$ 4,675
18"	\$ 4,500	\$ 4,950
19"	\$ 4,750	\$ 5,225
20"	\$ 5,000	\$ 5,500
21"	\$ 5,250	\$ 5,775
22"	\$ 5,500	\$ 6,050
23"	\$ 5,750	\$ 6,325
24"	\$ 6,000	\$ 6,600
25"	\$ 6,250	\$ 10,313
26"	\$ 6,500	\$ 10,725
27"	\$ 6,750	\$ 11,138
28"	\$ 7,000	\$ 11,550
29"	\$ 7,250	\$ 11,963
30"	\$ 7,500	\$ 12,375
31"	\$ 7,750	\$ 12,788
32"	\$ 8,000	\$ 13,200
33"	\$ 8,250	\$ 13,613
34"	\$ 8,500	\$ 14,025
35"	\$ 8,750	\$ 14,438
36"	\$ 9,000	\$ 14,850
37"	\$ 9,250	\$ 15,263
38"	\$ 9,500	\$ 15,675
39"	\$ 9,750	\$ 16,088
40"	\$ 10,000	\$ 22,000
41"	\$ 10,250	\$ 22,550
42"	\$ 10,500	\$ 23,100
43"	\$ 10,750	\$ 23,650
44"	\$ 11,000	\$ 24,200
45"	\$ 11,250	\$ 24,750
46"	\$ 11,500	\$ 25,300
47"	\$ 11,750	\$ 25,850
48"	\$ 12,000	\$ 26,400
49"	\$ 12,250	\$ 26,950
50"	\$ 12,500	\$ 27,500
51"	\$ 12,750	\$ 28,050
52"	\$ 13,000	\$ 28,600
53"	\$ 13,250	\$ 29,150
54"	\$ 13,500	\$ 29,700
55"	\$ 13,750	\$ 45,375

Tree Warden Proposal for assessing payment in lieu of planting:

of inches not replaced
Multiplied by Current City Cost+ 5yr maintenance

City Cost \$275/inch
Includes:
purchase cost
staff costs
watering cost
pruning cost

National Tree Benefit Calculator

You've Chosen

Zip Code: 02450
City: NEWTON, MA
Climate Zone: Northeast

[Change](#)

Trees in urban areas provide a number of important benefits. They help to clean the air, curb stormwater runoff, raise property values, sequester carbon, and reduce energy costs. Enter information about a street-side tree and learn

Enter Your Tree Info

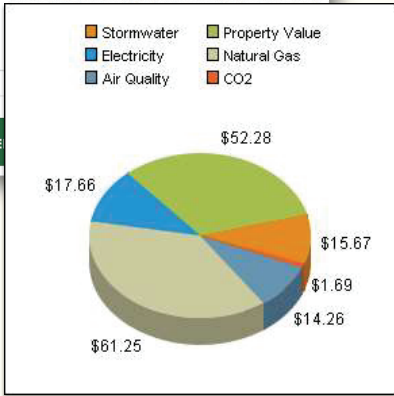
Tree Species
 Oak, Northern red
If you're looking for a Willow Oak, it's listed as "Oak, Willow". If your tree isn't listed, use the general "Other" listings.

Tree Diameter
 2
In inches. Width of your tree 4.5 feet from the ground. Must be no larger than 45 inches. For new trees, enter 1 inch.

What land-use type is this tree nearest?

- Single family residential
- Single family residential**
- Multi-family residential
- Small commercial business
- Industrial or large commercial business
- Park or other vacant land

CALCULATE TREE



National Tree Benefit Calculator

You've Chosen

Zip Code: 02459
City: NEWTON, MA
Climate Zone: Northeast

[Change](#)

Trees in urban areas provide a number of important benefits. They help to clean the air, curb stormwater runoff, raise property values, sequester carbon, and reduce energy costs. Enter information about a street-side tree and learn

Enter Your Tree Info

Tree Species
 Oak, Northern red
If you're looking for a Willow Oak, it's listed as "Oak, Willow". If your tree isn't listed, use the general "Other" listings.

Tree Diameter
 15

What land-use type is this tree nearest?

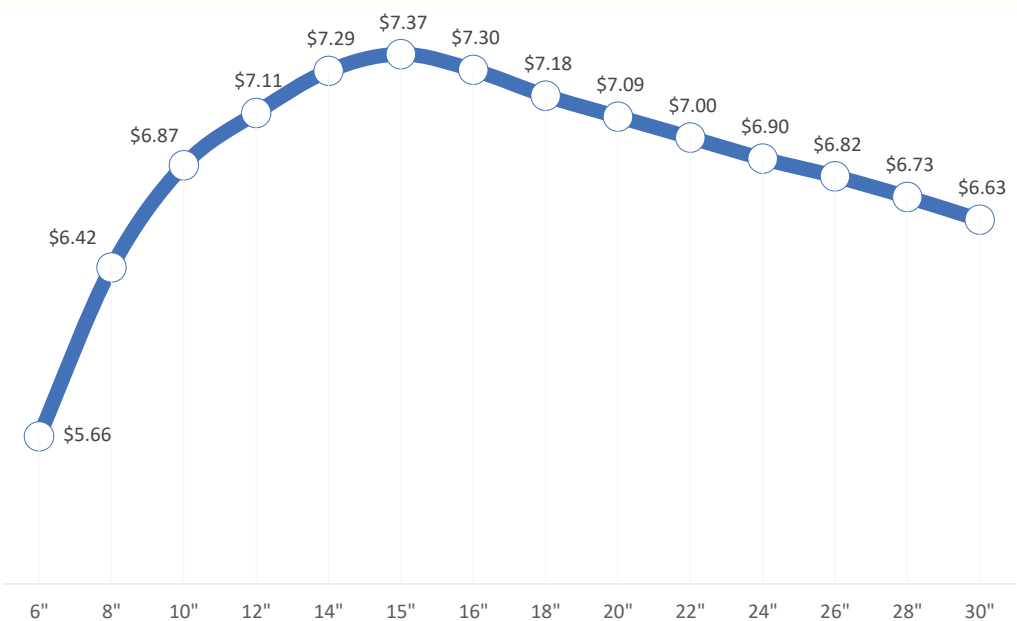
- Single family residential

CALCULATE TREE

Annual Environmental Dollar Value

Tree DBH	Stormwater	Electricity	Air Quality	Natural Gas	CO2	Total	Per Inch
6	4.77	4.61	3.89	20.22	0.47	\$ 33.96	\$ 5.66
8	6.96	7.08	6.02	30.54	0.72	\$ 51.32	\$ 6.42
10	9.32	9.87	8.59	39.96	0.98	\$ 68.72	\$ 6.87
12	11.86	12.99	10.68	48.48	1.26	\$ 85.27	\$ 7.11
14	14.4	16.11	13.07	57	1.54	\$ 102.12	\$ 7.29
15	15.67	17.66	14.26	61.25	1.69	\$ 110.53	\$ 7.37
16	17.08	18.33	15.1	64.44	1.83	\$ 116.78	\$ 7.30
18	19.92	19.67	16.77	70.8	2.13	\$ 129.29	\$ 7.18
20	22.75	21.01	18.44	77.17	2.42	\$ 141.79	\$ 7.09
22	25.71	22.64	20.16	82.7	2.7	\$ 153.91	\$ 7.00
24	28.79	24.56	21.92	87.4	2.98	\$ 165.65	\$ 6.90
26	31.87	26.49	23.69	92.09	3.25	\$ 177.39	\$ 6.82
28	35.05	28.32	25.37	96.19	3.52	\$ 188.45	\$ 6.73
30	38.34	30.06	26.97	99.7	3.79	\$ 198.86	\$ 6.63

Tree DBH	Per Inch
6"	\$ 5.66
8"	\$ 6.42
10"	\$ 6.87
12"	\$ 7.11
14"	\$ 7.29
15"	\$ 7.37
16"	\$ 7.30
18"	\$ 7.18
20"	\$ 7.09
22"	\$ 7.00
24"	\$ 6.90
26"	\$ 6.82
28"	\$ 6.73
30"	\$ 6.63



Tree DBH	30 year Environmental Value Lost	Cost to Replace Environmental Value	Combined 30 year Enviro value/ Replacement Cost	Per Inch Replacement Incl. 5yr Maintenance
6"	\$ 2,385	\$ 690	\$ 3,075	\$ 1,650
7"	\$ 2,606	\$ 754	\$ 3,360	\$ 1,925
8"	\$ 2,827	\$ 818	\$ 3,645	\$ 2,200
9"	\$ 3,048	\$ 882	\$ 3,930	\$ 2,475
10"	\$ 3,269	\$ 946	\$ 4,215	\$ 2,750
11"	\$ 3,490	\$ 1,010	\$ 4,500	\$ 3,025
12"	\$ 3,711	\$ 1,074	\$ 4,785	\$ 3,300
13"	\$ 3,932	\$ 1,138	\$ 5,071	\$ 3,575
14"	\$ 4,153	\$ 1,202	\$ 5,356	\$ 3,850
15"	\$ 4,374	\$ 1,266	\$ 5,641	\$ 4,125
16"	\$ 4,596	\$ 1,330	\$ 5,926	\$ 4,400
17"	\$ 4,817	\$ 1,394	\$ 6,211	\$ 4,675
18"	\$ 5,038	\$ 1,458	\$ 6,496	\$ 4,950
19"	\$ 5,259	\$ 1,522	\$ 6,781	\$ 5,225
20"	\$ 5,480	\$ 1,586	\$ 7,066	\$ 5,500
21"	\$ 5,701	\$ 1,650	\$ 7,351	\$ 5,775
22"	\$ 5,922	\$ 1,714	\$ 7,636	\$ 6,050
23"	\$ 6,143	\$ 1,778	\$ 7,922	\$ 6,325
24"	\$ 6,364	\$ 1,842	\$ 8,207	\$ 6,600
25"	\$ 6,585	\$ 1,906	\$ 8,492	\$ 6,875
26"	\$ 6,807	\$ 1,970	\$ 8,777	\$ 7,150
27"	\$ 7,028	\$ 2,034	\$ 9,062	\$ 7,425
28"	\$ 7,249	\$ 2,098	\$ 9,347	\$ 7,700
29"	\$ 7,470	\$ 2,162	\$ 9,632	\$ 7,975
30"	\$ 7,691	\$ 2,226	\$ 9,917	\$ 8,250
31"	\$ 7,912	\$ 2,290	\$ 10,202	\$ 8,525
32"	\$ 8,133	\$ 2,354	\$ 10,488	\$ 8,800
33"	\$ 8,354	\$ 2,418	\$ 10,773	\$ 9,075
34"	\$ 8,575	\$ 2,482	\$ 11,058	\$ 9,350
35"	\$ 8,796	\$ 2,546	\$ 11,343	\$ 9,625
36"	\$ 9,018	\$ 2,610	\$ 11,628	\$ 9,900
37"	\$ 9,239	\$ 2,674	\$ 11,913	\$ 10,175
38"	\$ 9,460	\$ 2,738	\$ 12,198	\$ 10,450
39"	\$ 9,681	\$ 2,802	\$ 12,483	\$ 10,725
40"	\$ 9,902	\$ 2,866	\$ 12,768	\$ 11,000
41"	\$ 10,123	\$ 2,930	\$ 13,053	\$ 11,275
42"	\$ 10,344	\$ 2,994	\$ 13,339	\$ 11,550
43"	\$ 10,565	\$ 3,058	\$ 13,624	\$ 11,825
44"	\$ 10,786	\$ 3,122	\$ 13,909	\$ 12,100
45"	\$ 11,007	\$ 3,186	\$ 14,194	\$ 12,375
46"	\$ 11,229	\$ 3,250	\$ 14,479	\$ 12,650
47"	\$ 11,450	\$ 3,314	\$ 14,764	\$ 12,925
48"	\$ 11,671	\$ 3,378	\$ 15,049	\$ 13,200
49"	\$ 11,892	\$ 3,442	\$ 15,334	\$ 13,475
50"	\$ 12,113	\$ 3,506	\$ 15,619	\$ 13,750
51"	\$ 12,334	\$ 3,570	\$ 15,904	\$ 14,025
52"	\$ 12,555	\$ 3,634	\$ 16,190	\$ 14,300
53"	\$ 12,776	\$ 3,698	\$ 16,475	\$ 14,575
54"	\$ 12,997	\$ 3,762	\$ 16,760	\$ 14,850
55"	\$ 13,218	\$ 3,826	\$ 17,045	\$ 15,125

30 Year Environmental Value Lost

Assumes average annual growth \$7.37 per inch annual Environmental value Sum of 30 years of per inch Environmental value

Cost to Replace Environmental Value

Based on the number of new trees that would need to be planted to replace the 30 year Environmental value.

Combined 30 Year Enviro value & Replacement Cost

Combined cost of 30 Year Environmental Value and Cost to Replace Environmental Value

Per Inch Replacement Cost Incl. 5yrs Maintenance

Simple per inch removed replacement cost including 5 year maintenance. Similar to current ordinance but with maintenance added on.

