

Attachment D

Landfill Capacity Documentation

**KING COUNTY SOLID WASTE DIVISION
CEDAR HILLS REGIONAL LANDFILL CAPACITY**

Disposal Areas		Area 7 ¹	Area 8 ²	Areas 5 & 6	Total System Capacity
Area Capacity (CY)		--	6,632,616	3,030,000	9,662,616
Area Capacity (tons) @ 1600 lbs/CY		--	5,306,093	2,424,000	7,730,093
Date	Monthly Tonnage ³	Area 7 Remaining Capacity (tons)	Area 8 Remaining Capacity (tons)	Areas 5 & 6 Remaining Capacity (tons)	Total Remaining Capacity (tons)
November, 2020	70,348	--	5,235,745	2,424,000	7,659,745
December, 2020	75,373	--	5,160,372	2,424,000	7,584,372
January, 2021	75,858	--	5,084,513	2,424,000	7,508,513
February, 2021	75,858	--	5,008,655	2,424,000	7,432,655
March, 2021	75,858	--	4,932,797	2,424,000	7,356,797
April, 2021	75,858	--	4,856,938	2,424,000	7,280,938
May, 2021	75,858	--	4,781,080	2,424,000	7,205,080
June, 2021	75,858	--	4,705,222	2,424,000	7,129,222
July, 2021	75,858	--	4,629,363	2,424,000	7,053,363
August, 2021	75,858	--	4,553,505	2,424,000	6,977,505
September, 2021	75,858	--	4,477,647	2,424,000	6,901,647
October, 2021	75,858	--	4,401,788	2,424,000	6,825,788
November, 2021	75,858	--	4,325,930	2,424,000	6,749,930
December, 2021	75,858	--	4,250,072	2,424,000	6,674,072
January, 2022	77,142	--	4,172,930	2,424,000	6,596,930
February, 2022	77,142	--	4,095,789	2,424,000	6,519,789
March, 2022	77,142	--	4,018,647	2,424,000	6,442,647
April, 2022	77,142	--	3,941,505	2,424,000	6,365,505
May, 2022	77,142	--	3,864,364	2,424,000	6,288,364
June, 2022	77,142	--	3,787,222	2,424,000	6,211,222
July, 2022	77,142	--	3,710,081	2,424,000	6,134,081
August, 2022	77,142	--	3,632,939	2,424,000	6,056,939
September, 2022	77,142	--	3,555,797	2,424,000	5,979,797
October, 2022	77,142	--	3,478,656	2,424,000	5,902,656
November, 2022	77,142	--	3,401,514	2,424,000	5,825,514
December, 2022	77,142	--	3,324,373	2,424,000	5,748,373
January, 2023	77,412	--	3,246,961	2,424,000	5,670,961
February, 2023	77,412	--	3,169,550	2,424,000	5,593,550
March, 2023	77,412	--	3,092,138	2,424,000	5,516,138

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CEDAR HILLS REGIONAL LANDFILL CAPACITY**

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Area Capacity (tons) @ 1600 lbs/CY		--	5,306,093	2,424,000	7,730,093
Date	Monthly Tonnage ³	Area 7 Remaining Capacity (tons)	Area 8 Remaining Capacity (tons)	Areas 5 & 6 Remaining Capacity (tons)	Total Remaining Capacity (tons)
April, 2023	77,412	--	3,014,726	2,424,000	5,438,726
May, 2023	77,412	--	2,937,315	2,424,000	5,361,315
June, 2023	77,412	--	2,859,903	2,424,000	5,283,903
July, 2023	77,412	--	2,782,492	2,424,000	5,206,492
August, 2023	77,412	--	2,705,080	2,424,000	5,129,080
September, 2023	77,412	--	2,627,668	2,424,000	5,051,668
October, 2023	77,412	--	2,550,257	2,424,000	4,974,257
November, 2023	77,412	--	2,472,845	2,424,000	4,896,845
December, 2023	77,412	--	2,395,434	2,424,000	4,819,434
January, 2024	77,682	--	2,317,752	2,424,000	4,741,752
February, 2024	77,682	--	2,240,071	2,424,000	4,664,071
March, 2024	77,682	--	2,162,389	2,424,000	4,586,389
April, 2024	77,682	--	2,084,707	2,424,000	4,508,707
May, 2024	77,682	--	2,007,026	2,424,000	4,431,026
June, 2024	77,682	--	1,929,344	2,424,000	4,353,344
July, 2024	77,682	--	1,851,663	2,424,000	4,275,663
August, 2024	77,682	--	1,773,981	2,424,000	4,197,981
September, 2024	77,682	--	1,696,299	2,424,000	4,120,299
October, 2024	77,682	--	1,618,618	2,424,000	4,042,618
November, 2024	77,682	--	1,540,936	2,424,000	3,964,936
December, 2024	77,682	--	1,463,255	2,424,000	3,887,255
January, 2025	77,739	--	1,385,516	2,424,000	3,809,516
February, 2025	77,739	--	1,307,777	2,424,000	3,731,777
March, 2025	77,739	--	1,230,038	2,424,000	3,654,038
April, 2025	77,739	--	1,152,300	2,424,000	3,576,300
May, 2025	77,739	--	1,074,561	2,424,000	3,498,561
June, 2025	77,739	--	996,822	2,424,000	3,420,822
July, 2025	77,739	--	919,083	2,424,000	3,343,083
August, 2025	77,739	--	841,345	2,424,000	3,265,345

**KING COUNTY SOLID WASTE DIVISION
CEDAR HILLS REGIONAL LANDFILL CAPACITY**

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Area Capacity (tons) @ 1600 lbs/CY		--	5,306,093	2,424,000	7,730,093
Date	Monthly Tonnage ³	Area 7 Remaining Capacity (tons)	Area 8 Remaining Capacity (tons)	Areas 5 & 6 Remaining Capacity (tons)	Total Remaining Capacity (tons)
September, 2025	77,739	--	763,606	2,424,000	3,187,606
October, 2025	77,739	--	685,867	2,424,000	3,109,867
November, 2025	77,739	--	608,128	2,424,000	3,032,128
December, 2025	77,739	--	530,390	2,424,000	2,954,390
January, 2026	77,796	--	452,594	2,424,000	2,876,594
February, 2026	77,796	--	374,798	2,424,000	2,798,798
March, 2026	77,796	--	297,002	2,424,000	2,721,002
April, 2026	77,796	--	219,206	2,424,000	2,643,206
May, 2026	77,796	--	141,410	2,424,000	2,565,410
June, 2026	77,796	--	63,614	2,424,000	2,487,614
July, 2026	77,796	--	--	2,409,818	2,409,818
August, 2026	77,796	--	--	2,332,022	2,332,022
September, 2026	77,796	--	--	2,254,226	2,254,226
October, 2026	77,796	--	--	2,176,431	2,176,431
November, 2026	77,796	--	--	2,098,635	2,098,635
December, 2026	77,796	--	--	2,020,839	2,020,839
January, 2027	78,273	--	--	1,942,565	1,942,565
February, 2027	78,273	--	--	1,864,292	1,864,292
March, 2027	78,273	--	--	1,786,019	1,786,019
April, 2027	78,273	--	--	1,707,746	1,707,746
May, 2027	78,273	--	--	1,629,472	1,629,472
June, 2027	78,273	--	--	1,551,199	1,551,199
July, 2027	78,273	--	--	1,472,926	1,472,926
August, 2027	78,273	--	--	1,394,653	1,394,653
September, 2027	78,273	--	--	1,316,379	1,316,379
October, 2027	78,273	--	--	1,238,106	1,238,106
November, 2027	78,273	--	--	1,159,833	1,159,833
December, 2027	78,273	--	--	1,081,560	1,081,560
January, 2028	79,053	--	--	1,002,507	1,002,507

**KING COUNTY SOLID WASTE DIVISION
CEDAR HILLS REGIONAL LANDFILL CAPACITY**

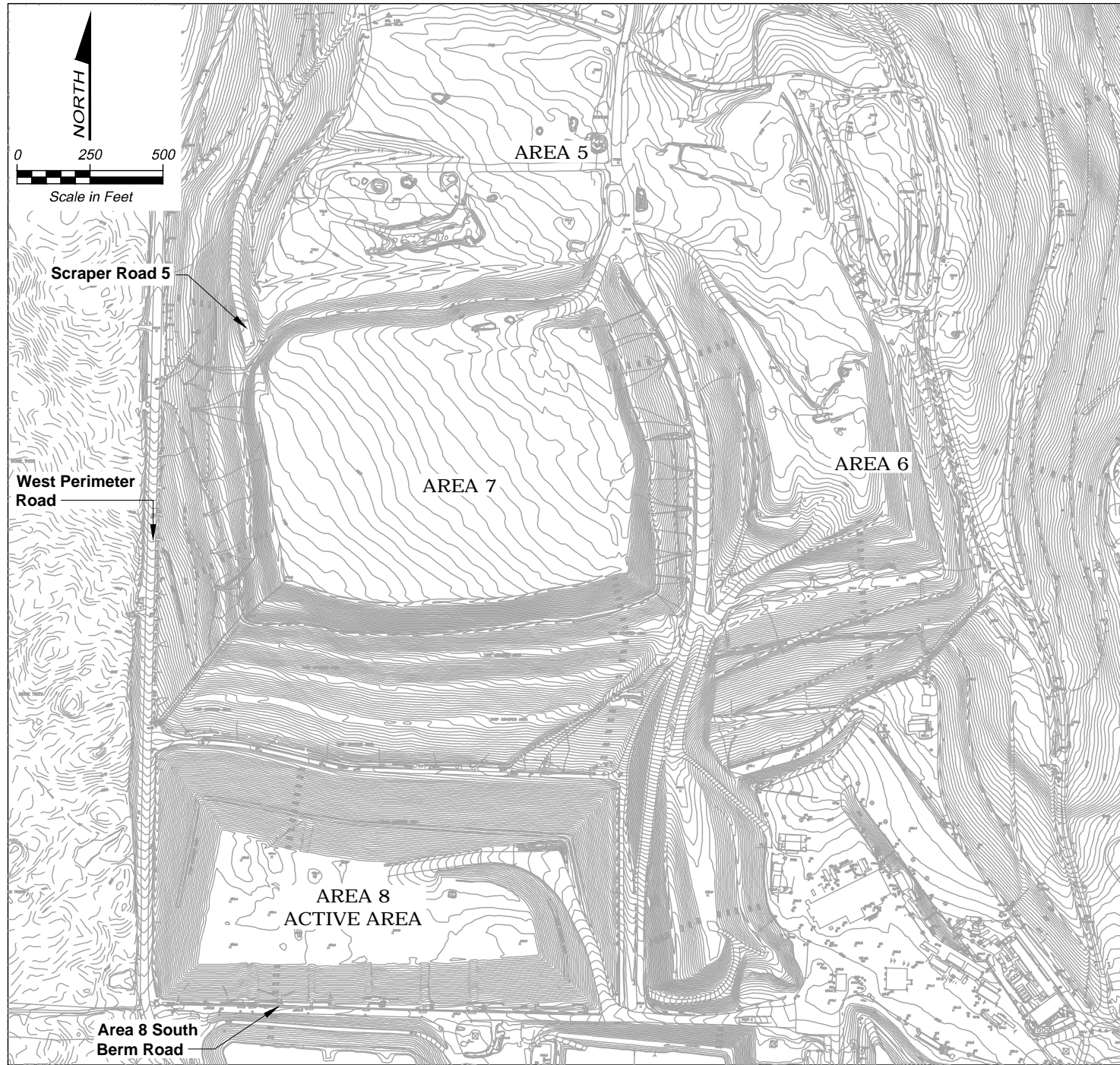
Disposal Areas		Area 7 ¹	Area 8 ²	Areas 5 & 6	Total System Capacity
Area Capacity (CY)		--	6,632,616	3,030,000	9,662,616
Area Capacity (tons) @ 1600 lbs/CY		--	5,306,093	2,424,000	7,730,093
Date	Monthly Tonnage ³	Area 7 Remaining Capacity (tons)	Area 8 Remaining Capacity (tons)	Areas 5 & 6 Remaining Capacity (tons)	Total Remaining Capacity (tons)
February, 2028	79,053	--	--	923,455	923,455
March, 2028	79,053	--	--	844,402	844,402
April, 2028	79,053	--	--	765,350	765,350
May, 2028	79,053	--	--	686,297	686,297
June, 2028	79,053	--	--	607,245	607,245
July, 2028	79,053	--	--	528,192	528,192
August, 2028	79,053	--	--	449,140	449,140
September, 2028	79,053	--	--	370,087	370,087
October, 2028	79,053	--	--	291,035	291,035
November, 2028	79,053	--	--	211,982	211,982
December, 2028	79,053	--	--	132,930	132,930
January, 2029	83,390	--	--	49,539	49,539
February, 2029	83,390	--	--	--	--

¹ Area 7 stopped receiving waste as of summer of 2019.

² Area 8 Capacity: 7,621,000 CY remaining as calculated from October 29th, 2019 aerial. 7,308,417 CY remaining as calculated from February 25th, 2020 aerial. 6,632,616 CY remaining as calculated from November 2nd, 2020 aerial.

³ Monthly tonnage either actual amounts (Cell B46 in Tonnage Report for each month), or based on February 2020 forecast into future months.

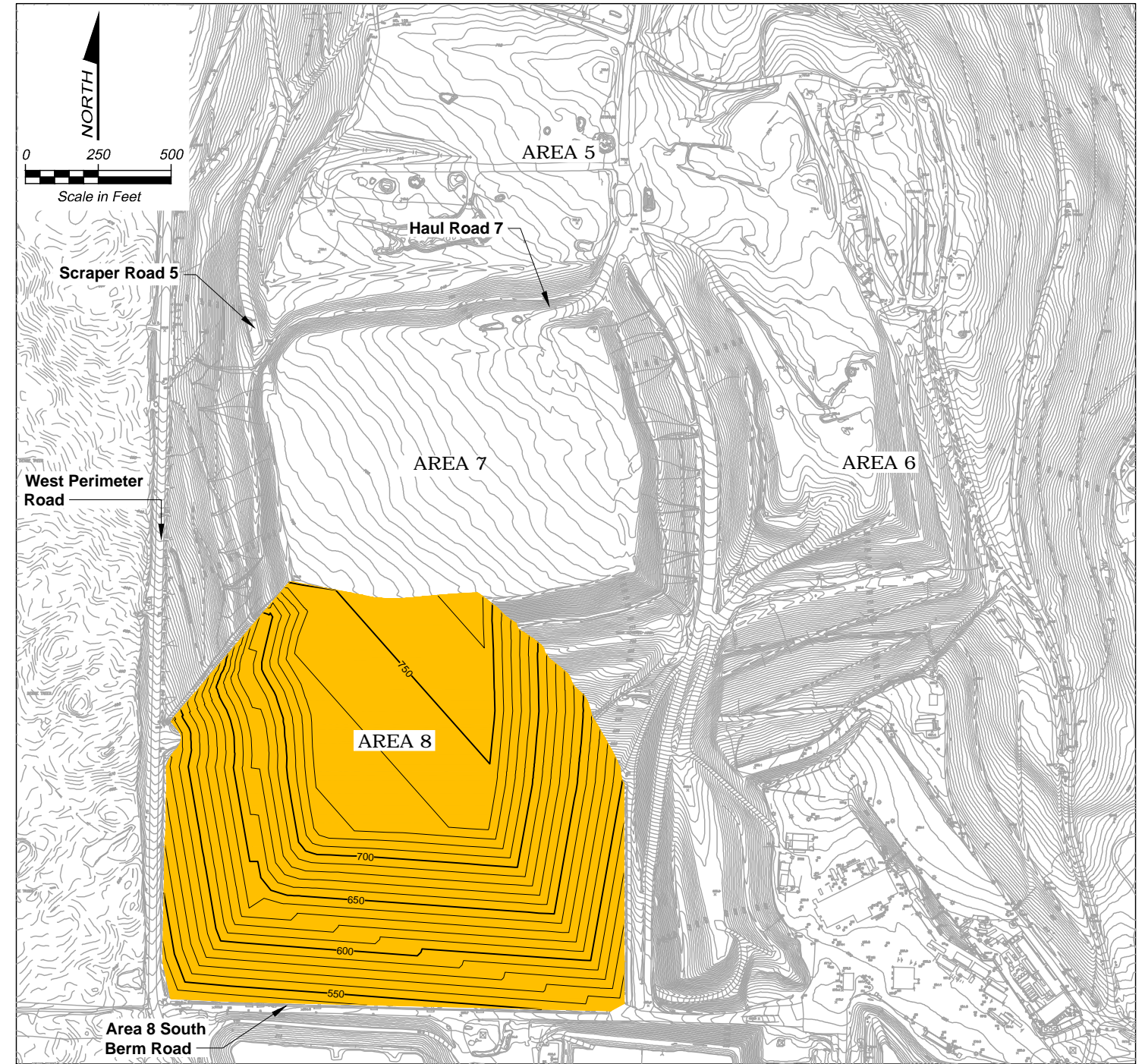
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EXISTING CONDITIONS

THE EXISTING CONDITIONS INCLUDES THE FOLLOWING ELEMENTS:

- AREA 8 ACTIVE FILLING; 219,000 CY
- FALL 2019 AERIAL, FLOWN OCTOBER 29, 2019

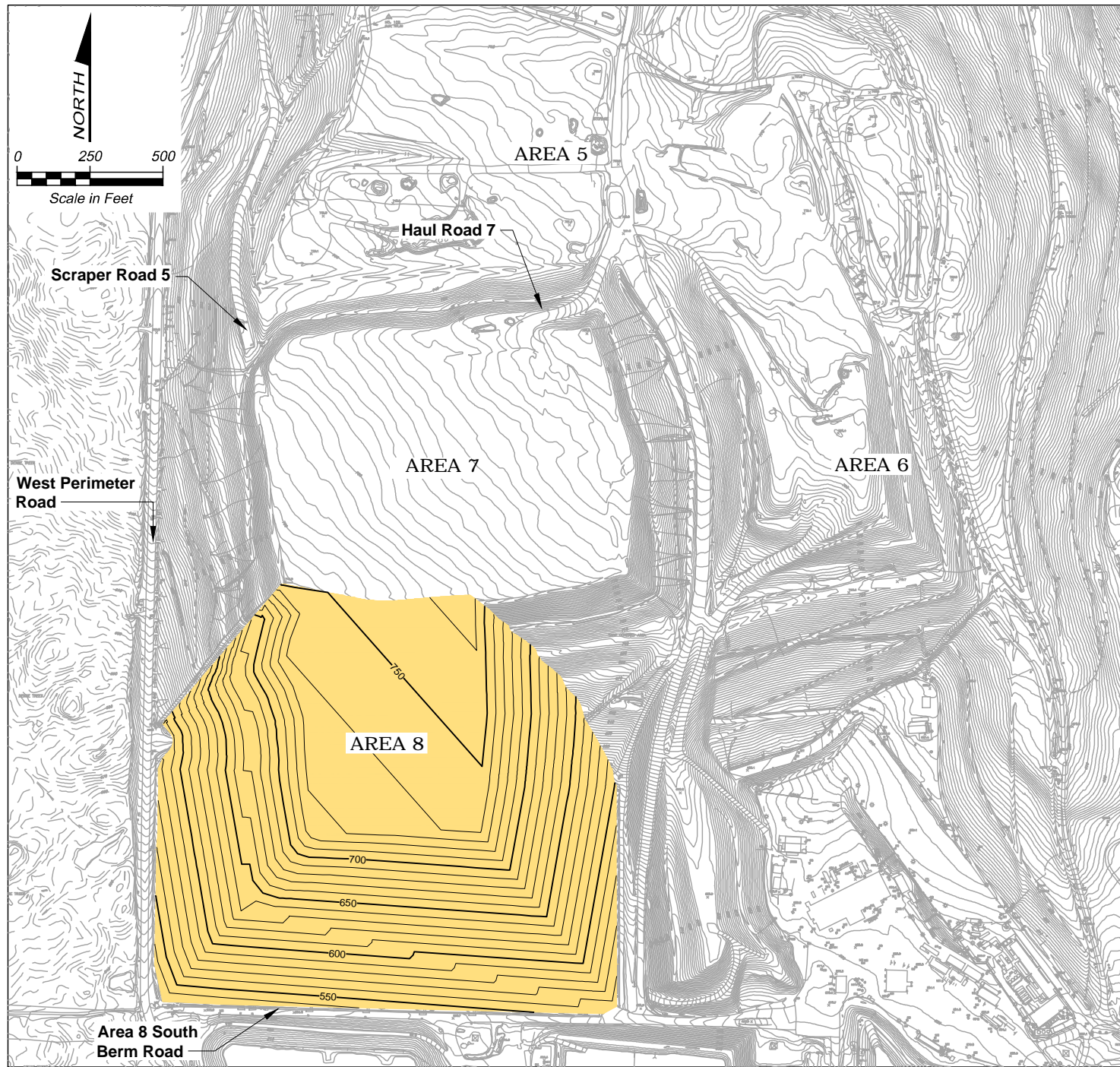


PROPOSED CONDITIONS

AREA 8 TOP DECK WITH CONSTANT 4% SLOPE FROM NE CORNER TO SW CORNER

VOLUME:
7.84 MCY

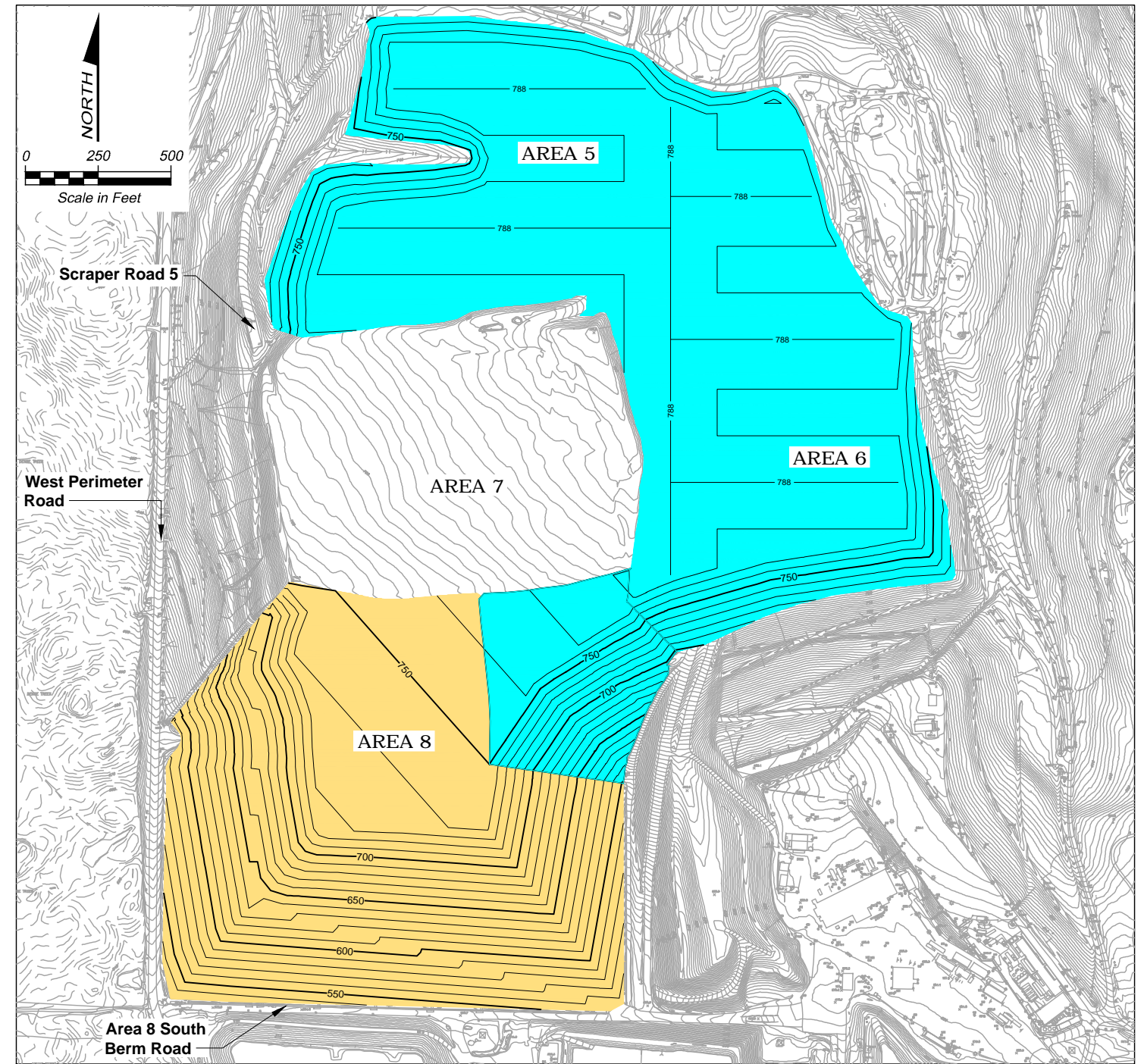
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EXISTING CONDITIONS

THE EXISTING CONDITIONS INCLUDES THE FOLLOWING ELEMENTS:

- AREA 8 PROPOSED FULL; 7.84 MCY
- FALL 2019 AERIAL, FLOWN OCTOBER 29, 2019



PROPOSED CONDITIONS

AREA 8 TOP DECK WITH WITH CONSTANT 4% SLOPE FROM NE CORNER TO SW CORNER; AREA 5 & 6 TOP DECK

VOLUME:

AREA 8: 7.84 MCY
 AREA 5 & 6: 3.03 MCY

NET VOLUME:

10,870,000 CY

Volume Report

Cedar Hills Landfill Maple Valley, WA

Presented to:

King County Department of Natural Resources
Solid Waste Division
201 South Jackson Street #701
Seattle, WA 98104

Submitted by:



860 McKinley Street
Eugene, OR 97402

March 30, 2020

Cedar Hills Landfill
 Job # 200056
 (Volumes Computed TIN surface to TIN surface)
 Photo Dates: 29 Oct 2019 to 25 Feb 2020

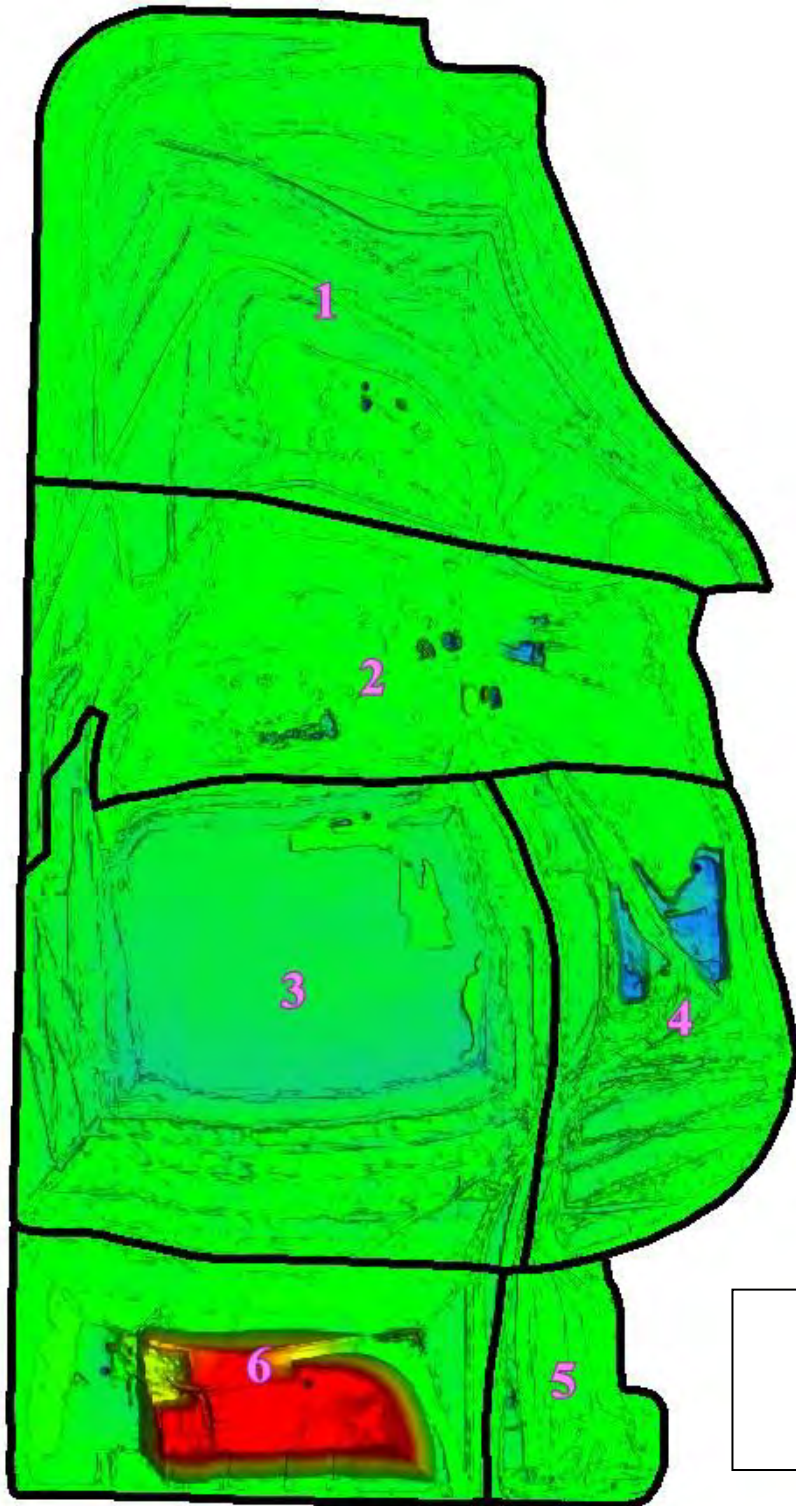
Zone Name	Area (ft ²)	Volume (ft ³)			Volume (yd ³)		
		Cut(-)	Fill(+)	Net	Cut(-)	Fill(+)	Net
1	3,419,429	699,099	96,967	-602,132	25,893	3,591	-22,301
2	2,081,940	1,732,582	114,467	-1,618,115	64,170	4,240	-59,930
3	2,956,353	1,826,432	5,981,183	4,154,752	67,646	221,525	153,880
4	1,276,760	1,832,583	74,341	-1,758,242	67,873	2,753	-65,120
5	421,727	3,025	13,619	10,595	112	504	392
6	1,423,185	15,381	8,455,125	8,439,744	570	313,153	312,583

Approved by:  CP #1252

REGISTERED
 PROFESSIONAL
 PHOTOGRAMMETRIST

OREGON
 NOVEMBER 13, 2007
 GORDON P. PEET
 80291RPP

Cedar Hills Landfill
Volume Comparison from Fall 2019 to Spring 2020
Isopach Surface



Green = no change
Yellow-Red = material added
Blue = material removed

Perspective view (Hill shade): Fall 2019 surface



Perspective view (Hill shade): Spring 2020 surface



Volume Report

Cedar Hills Landfill Maple Valley, WA

Presented to:

King County Department of Natural Resources
Solid Waste Division
201 South Jackson Street #701
Seattle, WA 98104

Submitted by:



860 McKinley Street
Eugene, OR 97402

December 8, 2020

Cedar Hills Landfill
 Job # 200332
 (Volumes Computed TIN surface to TIN surface)
 Photo Dates: 17 Apr 2020 to 2 Nov 2020

Zone Name	Area (ft ²)	Volume (ft ³)			Volume (yd ³)		
		Cut(-)	Fill(+)	Net	Cut(-)	Fill(+)	Net
1	3,419,429	16,788	23,222	6,434	622	860	238
2	2,081,940	443,209	339,106	-104,103	16,415	12,559	-3,856
3	2,956,353	4,284,449	39,062	-4,245,387	158,683	1,447	-157,237
4	1,276,760	1,116,895	212,314	-904,581	41,366	7,863	-33,503
5	421,727	170,417	48,411	-122,006	6,312	1,793	-4,519
6	1,423,185	137,164	18,383,797	18,246,633	5,080	680,881	675,801

Approved by:  CP #1252



Cedar Hills Landfill
Volume Comparison from Fall 2019 to Spring 2020
Isopach Surface



Perspective view (Hill shade): Fall 2020 surface



Perspective view (Hill shade): Spring 2020 surface

