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**Attachments:** [Master Working Document Subcommittee A1 Report v1.docx](#)

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Ginger:

I pulled together as much material as I could, with the goal of getting it out for review by end of week. A few notes:

1. I have deviated slightly from the outline we had been working with, primarily by embedding "history" in the individual sections (physical footprint, capacity, volume). This seemed to me to flow better.
2. Some sections are simply stubbed out for now. The Physical Real Estate Footprint clearly needs more information.
3. I haven't yet filled in the Projections data Ian supplied earlier this week, simply because I ran short on time. However, the "Events and Factors" section needs discussion in order to get agreement on what should be included here.

I am providing this in raw Word format so you can edit with tracked changes.

Paul

**Benton County Solid Waste Process Workgroup**

Subcommittee A.1 Landfill Size/Capacity/Longevity

Subcommittee Report to Workgroup

Revision 1 – DRAFT

DRAFT

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## Section 0: Background

### A. Charge

#### i. Workgroup charter and bylaws 8-23-2022

From the [Benton County Talks Trash" Workgroup Charter and Bylaws](#) document, Topic A:

##### **A. Develop Common Understandings to form the basis of the work.**

##### 1) A chronological history of key Coffin Butte Landfill topics:

- a. Size;
- b. Specific locations;
- c. Conditions of past land use approvals;
- d. Compliance with prior land use approvals and SWMP;
- e. Reporting requirements;
- f. Assumptions (e.g. when will the landfill close;)
- g. Economics (i.e. Benefit – Cost, etc.;;) and
- h. Examples from other jurisdictions hosting landfills, e.g.:
  - i. Typical land use conditions of approval; and
  - ii. Issue sequencing, (e.g. in what order are landfill versus hauling approvals done, etc.

#### ii. Subcommittee A.1 charge

The A.1 subcommittee was charged with a subset of the tasks listed above. Specifically, per the [A.1 Subcommittee web page](#):

##### **Charge A: Common Understandings Tasks**

##### 1) A chronological history of key Coffin Butte Landfill topics:

1. Size;
2. Specific locations;
3. Assumptions (e.g. when will the landfill close;)

Thus the A.1 subcommittee addresses components 1(a), 1(b) and 1(f) of the workgroup charter Topic A tasks.

Charge 3 “Assumptions” is interpreted to mean estimation of the landfill operational lifetime including the assumptions behind this estimation.

Note that for the A.1 subcommittee, “chronological history” is limited specifically to these three topics; a more general history of the landfill will be addressed by another body.

## B. Membership Composition

The A.1 Subcommittee membership is composed of four primary representative groups:

1. Franchisee: 3 members (Ian Macnab, Ginger Rough, Bill Bromann, all of Republic Services)
2. Benton County SWAC: 3 members (Chuck Gilbert, Mark Yeager, Ken Eklund)
3. County governments: 3 members (Daniel Redick (Benton County), Brian May (Marion County), Shane Sanderson (Linn County))
4. Private citizens: 1 member (Paul Nietfeld)

Daniel Redick, a Benton County Community Development Department staff member, acts as Chair of this subcommittee.

Sam Imperati, the workgroup facilitator, normally attends subcommittee meetings and provides guidance in regard to aligning with workgroup objectives.

## C. Document Organization

This document is organized into sections that correspond to the “Charge” items assigned to the A.1 Subcommittee (i.e. Sections 1, 2, 3 correspond to Charges 1, 2, 3).

References to specific sections in this document are in the format <Section #>.<Subsection Letter>.<Subpart Designation>. Thus this location would be referenced as 0.C, and the A.1 Subcommittee Charge may be found in 0.A.ii.

# Section 1: Landfill Size

## A. Physical Real Estate Footprint

*Other topics required in addition to those noted below?*

### i. History

Per the 2002 MOU [Benton County & Valley Landfills MOU Relating to Land Use Issues \(2002\)](#):

- 1974 CUP approved landfill activities on 184 acres north of Coffin Butte Road.
- 1983 rezoning added 10 acres for landfill activities north of Coffin Butte Road, for a total of 194 acres.
- Franchisee (VLI) agrees that the approximately 56-acre parcel south of Coffin Butte Road, while zoned LS, would not be used for disposal.
- Total acreage owned by landfill franchisee unstated.

*Include: snapshots of footprint over time and a table of landfill property area over time.*

**DANIEL:** *Do you have any historical data on this?*

### ii. Current footprint

*Summary of current configuration (total footprint and breakdown by zoning type (acres), specific taxlots with zoning designations, working area of active landfill (“working face” area) to address historic limitations on this parameter (e.g. 1983 CUP: “not exceed 2 acres during the periods of October 15 to June 1 and to not exceed 3/4 of an acre during all other periods.”).*

## B. Permitted Disposal Capacity

### i. Historical permitted capacity benchmarks

Date	Capacity (yd <sup>3</sup> )	Notes
1995	18,000,000	1995 Annual Report, estimated total capacity of Cells 1-5
2003	35,531,000	2003 Site Development Plan, based on October 1999 cell volumes and adding West and East triangles, with Cell 6 estimated at 13,397,000 yd <sup>3</sup>
2021	38,997,848	2021 Coffin Butte Annual Report

*Table 1*

*Discuss at this point theoretical Cell 6 volume vs. currently available vs. likely scenario? Ian provided guidance recently; is this still valid?*

**DANIEL:** *Do you have other datapoints that should be included in the table above?*

ii. Capacity utilization TBD – 2021

*A plot of available/used capacity over time may be a useful reference. See Daniel’s Reported Airspace (2014-2021) plot as an example:*

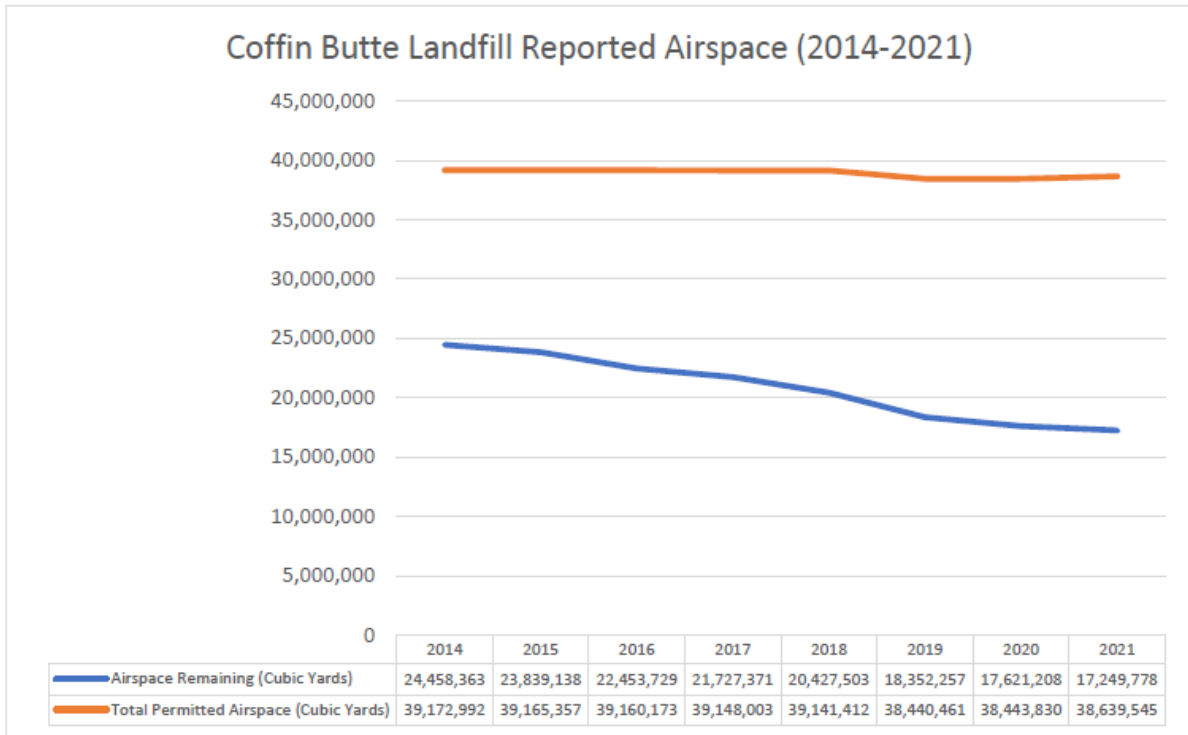


Figure 1

*Note that as of end 2021 approximately 44% of permitted capacity remained unused.*

iii. Near-term (circa 2025) capacity issue: the “Quarry Problem”

*Provide simple overview of Cell 5 -> Cell 6 transition issue in terms that can be understood by the general public. State that as of the time of this report (Q4 2022) potential solutions are being explored? Note this as the driving factor in LU21-047?*

**REPUBLIC SERVICES:** *guidance/input on phrasing and/or extent to which this should be flagged as an issue.*

C. Intake Volume

Coffin Butte intake volume is documented in the annual reports produced by the landfill franchisee. Benton County has annual reports on file for years 1993 – 2021 (inclusive) with the exception of year 2000; intake data for 2000 is available in the 2021 report. Note that with older (pre-2008) reports, the annual intake volume figure is sometimes difficult to determine precisely due to inconsistent values stated within a given annual report (e.g. narrative summary vs. intake volume table) and/or discrepancies in values referenced in subsequent annual reports (e.g. historical

comparisons). Where discrepancies exist within a given annual report, the figure documented in the intake volume table is used. See Appendix A for a detailed listing of the annual intake volumes used in this document.

i. Recent intake volume: 1993 – 2021

Annual intake volume for 1993 – 2021 is shown below.

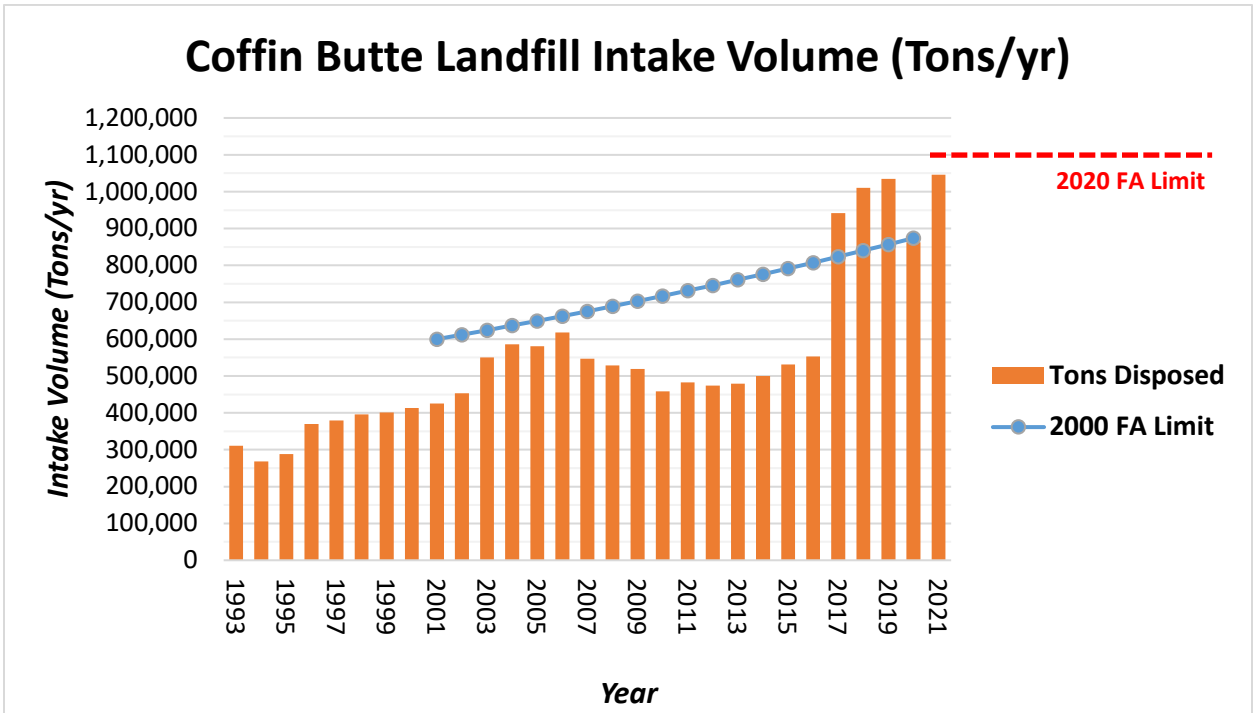


Figure 2

Comments/discussion:

1. The 2000 Landfill Franchise Agreement imposed a ramping intake limit (cap) to be applied during the term of the agreement (CY2001-2019), denoted in the chart by the blue line ("2000 FA Limit").
2. Due to an expected additional influx of volume in 2017 resulting from the waste flow disruption into Riverbend landfill in Yamhill County, in December 2016 the franchisee and Benton County executed a MOU agreeing to an expected increase in Coffin Butte intake volume "for a term of 1-2 years."
3. In documents provided to the A.1 Subcommittee, representatives of the franchisee have indicated that the approximately 70% year-over-year increase in CY2016-2017 was due to redirected flow from Riverbend to Coffin Butte.
4. The 2020 Landfill Franchise Agreement defined a flat intake limit (cap) of 1.1M Tons/yr. unless expansion was fully permitted onto the "expansion parcel" (i.e. the lot south of Coffin Butte Road zoned LS in 1983 but at that time restricted to non-disposal activities); upon this expansion approval the intake limit would be eliminated. The 2020 intake limit is denoted in the chart by the dashed red line ("2020 FA Limit").



5. The slow downward trend in intake volume in the 2017-2012 period is explained by the franchisee as resulting from the economic downturn of 2008.
6. The decreased intake volume in 2020 is attributed to the Covid-19 outbreak.

## ii. Intake volume by source 2016 – 2021

*A stacked bar chart may be helpful for a) analyzing the source flow changes that occurred in 2016-2017, and b) addressing questions regarding the extent to which the disruption of inflow to Riverbend accounts for the 2016-2017 increase.*

*DANIEL or REPUBLIC SERVICES: can you supply this chart? Alternatively, data could be extracted from the annual reports.*

## iii. Long-term intake volume TBD – 2021

*A long-term intake volume plot (from circa early 1980s to present) may be useful, in keeping with the “chronological history” aspect of the A.1 charge, and this could provide useful perspective for all concerned. For reference, in the approximately 80 years of landfill activity to date, 21,389,767 yd<sup>3</sup> have been consumed per the 2021 annual report, for an average volume of about 267,000 yd<sup>3</sup> per year.*

*This plot will require intake volume data and/or estimates that predate the available annual reports. Paul to investigate; any data input from others would be welcome.*

## D. Landfill Structure

### i. Overview

The disposal area and surrounding lots are shown in Figure 3 below. This drawing is reproduced from the 2021 Site Development Plan, Appendix A, Drawing No. G03, and is reproduced here for convenience.

*Drawing below imported from pdf; quality degraded. Better means of importing into Word?*

### ii. Cell detail

Detail on individual disposal cells and the active dates for these cells is shown in Figure 4 below.

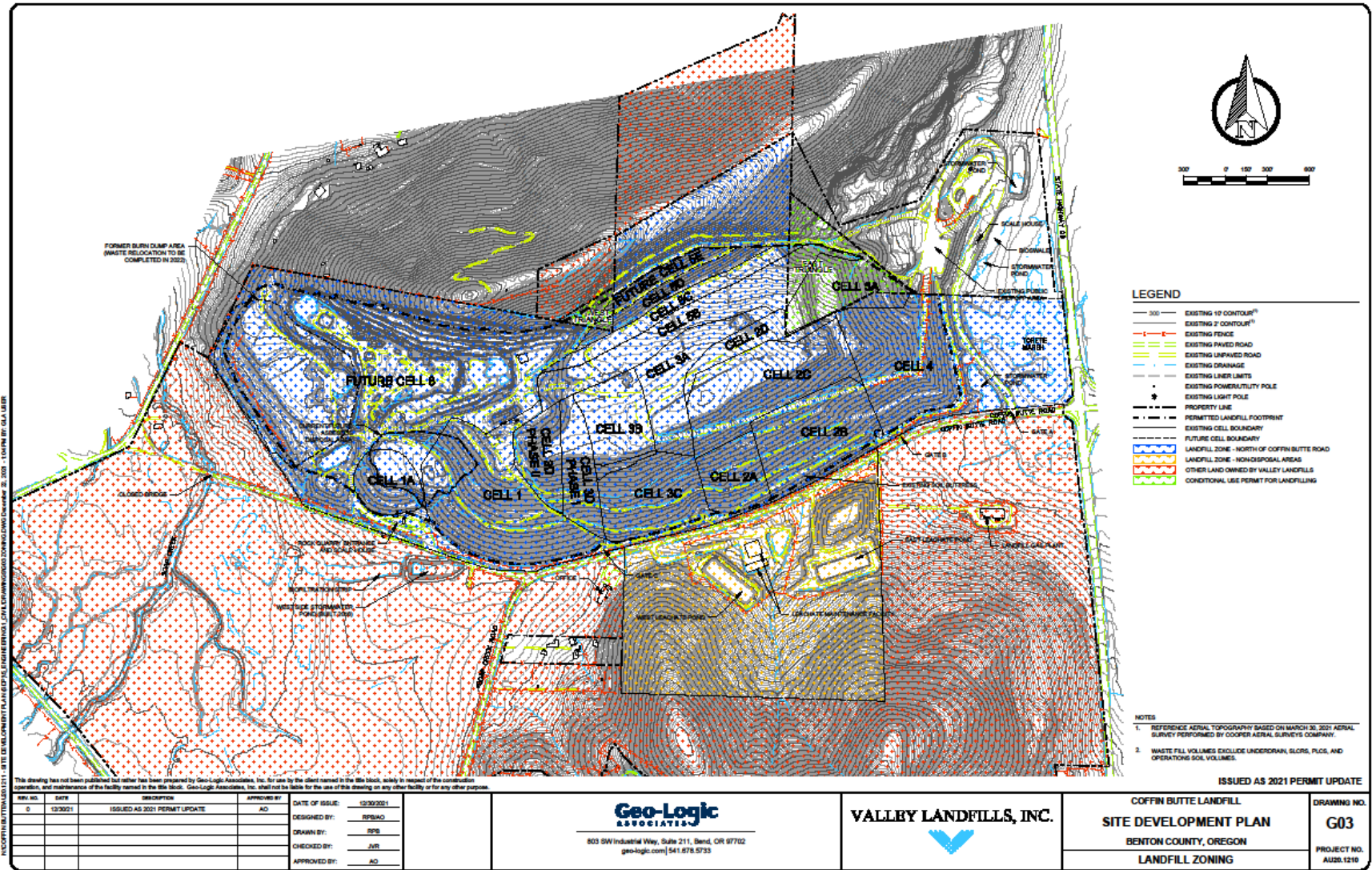


Figure 3

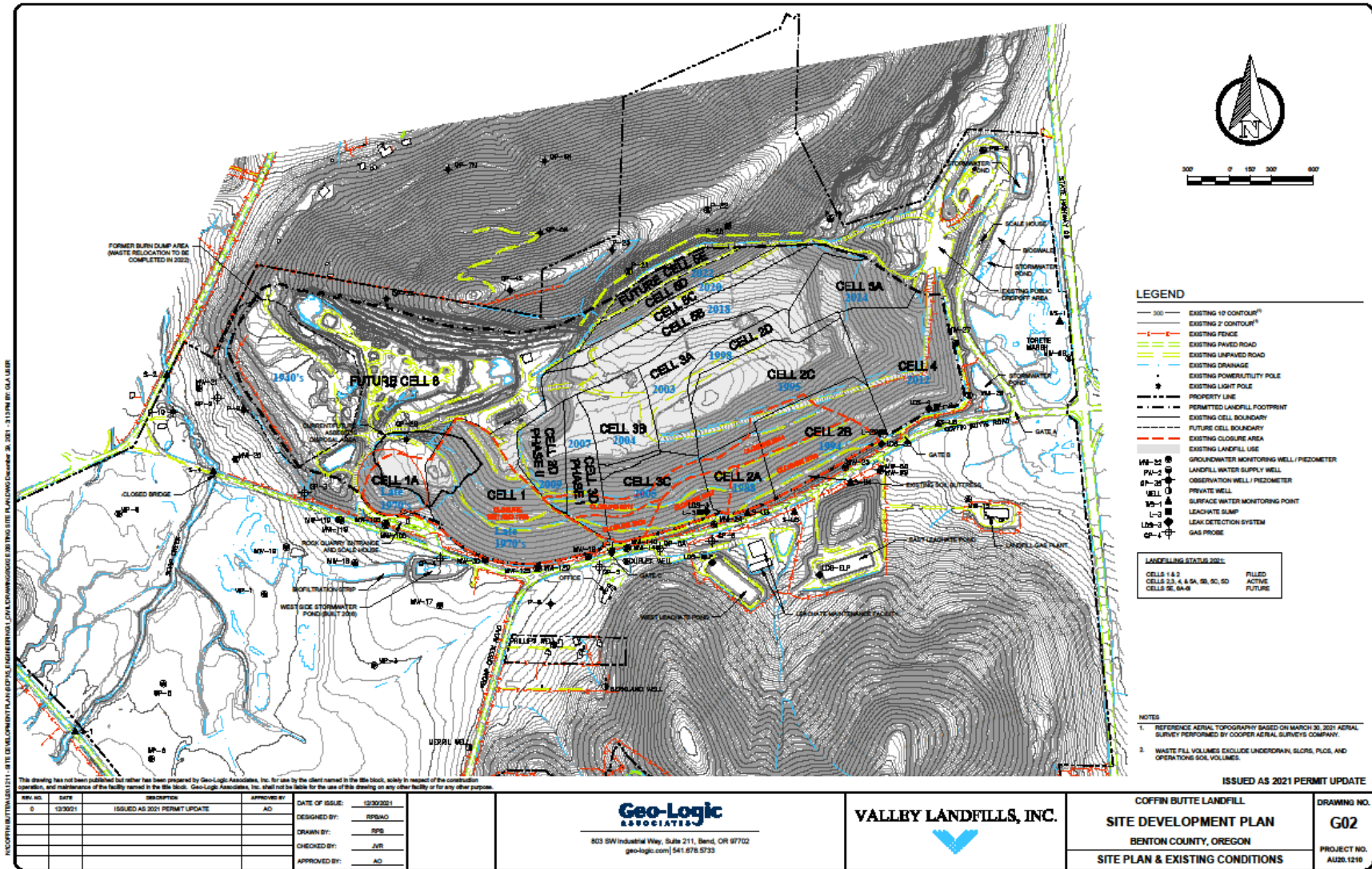


Figure 4

## Section 2: Specific Locations

Per Benton County PC-83-07-C, in 1938 a new zoning category (“LANDFILL SITE”) was created for Benton County and approximately 266 acres of land owned by Valley Landfill, Inc. were rezoned with this classification. Of these 266 acres, 194 acres, all on the north side of Coffin Butte Road, were approved for waste disposal.

Figure 5 denotes the originally proposed outline for land to be rezoned as Landfill Site (LS). Note that the northernmost section of the proposed area, extending north from the ridgeline of Coffin Butte, was ultimately not rezoned as LS due to concerns from neighbors.

The overview map included in the [Benton County & Valley Landfills MOU Relating to Land Use Issues \(2002\)](#) document, included here as Figure 6, clarifies the zoning boundaries.

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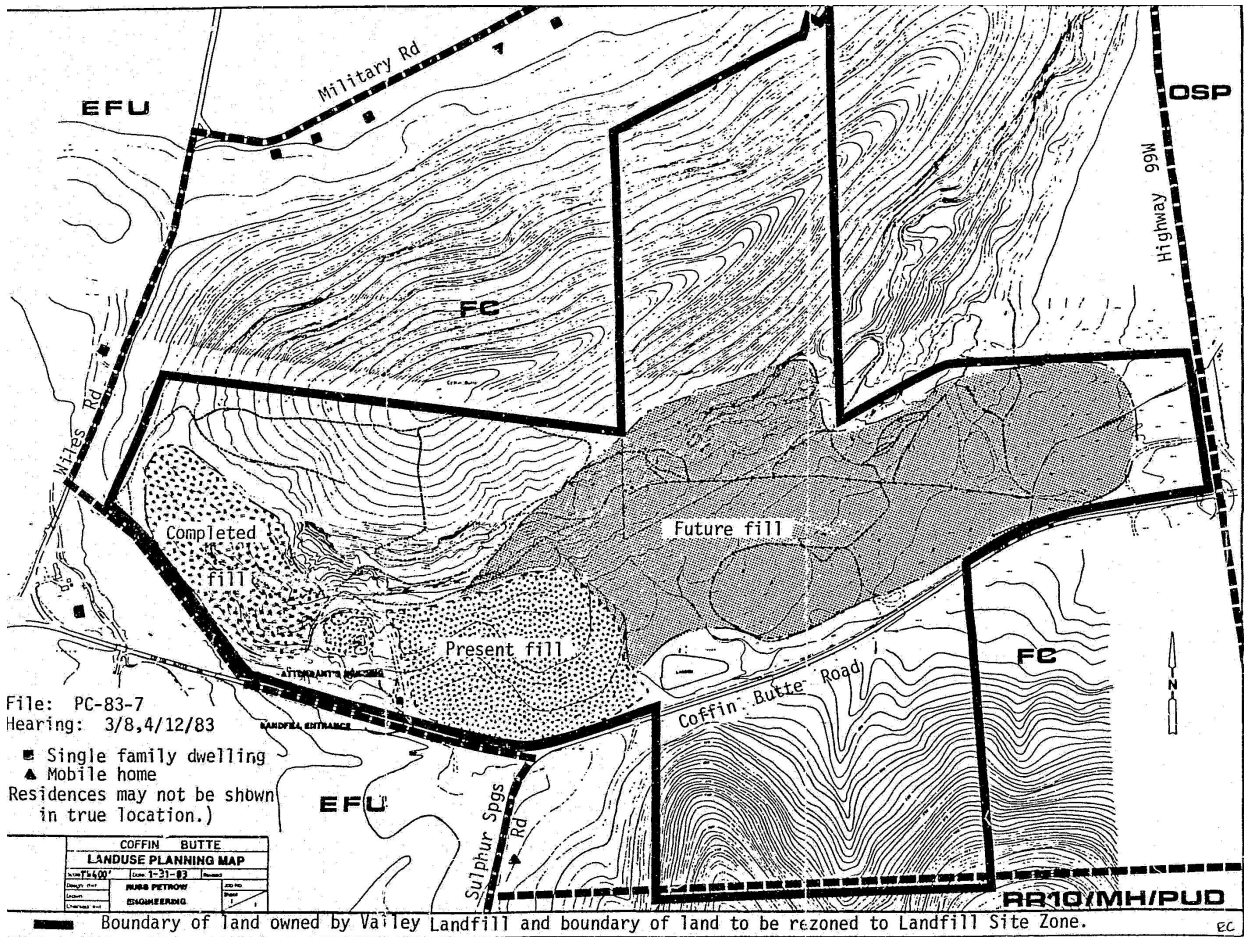


Figure 5

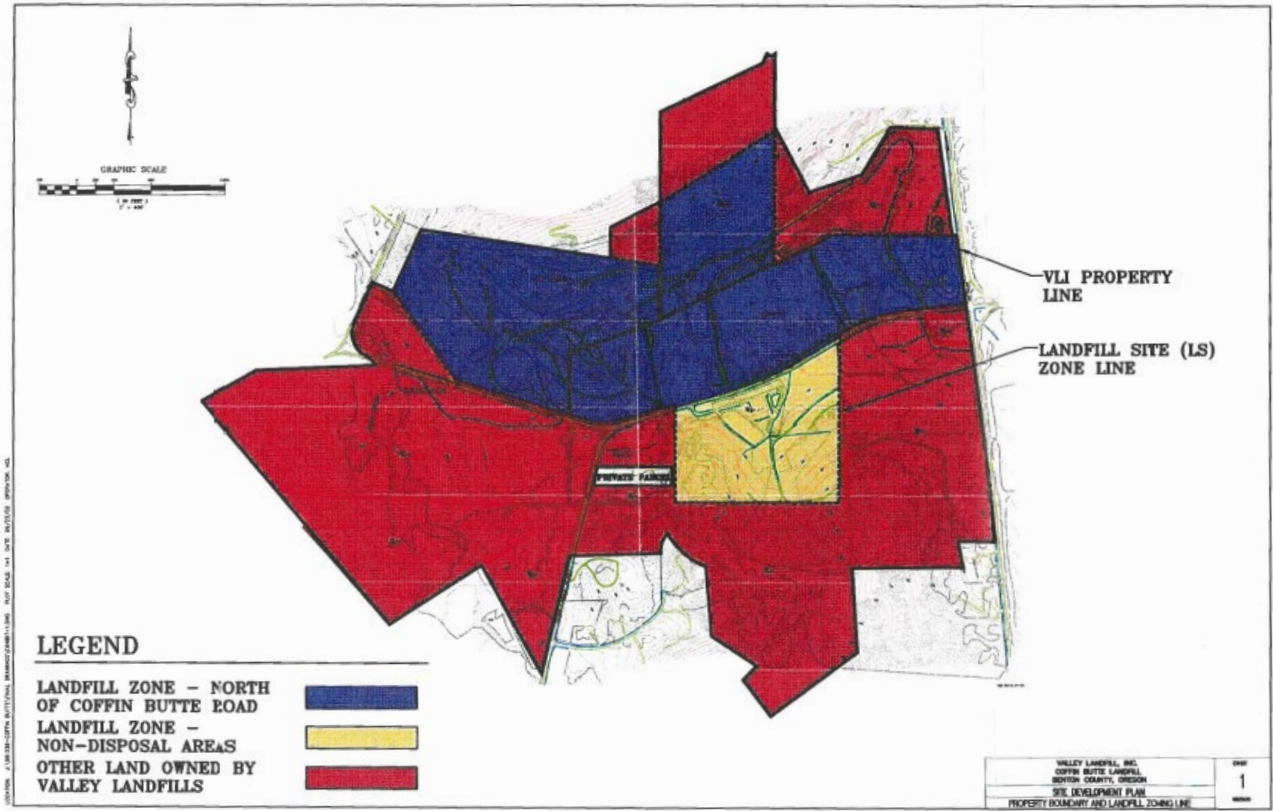


Figure 6

*Other information required/useful in this section?*

## Section 3: Landfill Life Projections

### A. Baseline: Projection to End 2022

*Document calculations leading from used/available volumes quoted in 2021 Annual Report to projected End 2022 values.*

### B. Nominal Life Projection CY 2023 to End of Life

*Incorporate Ian's life projection from macnab\_112222\_coffin\_butte\_capacity.pdf.*

*Comments re: Scenario 1 vs. Scenario 2?*

### C. Events and Factors with Potential Lifetime Impact

*Consider possible disruptions impacting life (e.g. recession, wildfire, other landfill closure, regulatory (e.g. methane))?*

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## Appendix A: Intake Volume Data

Coffin Butte annual intake volume, derived from 1993-2021 Coffin Butte Annual Report (CBAR) documents. CY 2000 is highlighted to indicate this value was derived from the 2001 report because the 2000 report document is unavailable.

<b>Year</b>	<b>CBAR Volume (Tons)</b>
1993	310,648
1994	268,472
1995	287,932
1996	369,835
1997	378,919
1998	395,751
1999	401,408
2000	413,493
2001	425,723
2002	453,261
2003	550,506
2004	586,076
2005	580,275
2006	618,340
2007	546,996
2008	528,396
2009	519,058
2010	458,590
2011	482,951
2012	473,550
2013	479,160
2014	499,687
2015	530,971
2016	552,979
2017	941,430
2018	1,010,879
2019	1,034,934
2020	863,210
2021	1,046,067



## Appendix B: Capacity Data

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