



**MEMO
SUPPLEMENTAL INFORMATION
AMENDED STAFF REPORT**

September 14, 2022

Issued by: Michelle Colby, Planning Director

RE: County Supplemental Information, amended staff report.

Amendment to Staff report. The amendment affects the last page of the staff report specifically the listed exhibits. Inadvertently the listing for Exhibit No. 5 and correlating document was omitted in the original exhibits published. In addition the wrong document was labeled Exhibit Number 4. The amended exhibits collectively, are now published with the correct numbering, heading and documents. Staff report page 51 is amended accordingly as shown below.

Staff Report page 51, list of exhibits originally published shown below:

Exhibits:

- Exhibit 1: Applicant Volume 1: Findings of Fact and Conclusions of Law
- Exhibit 2: Applicant Volume 2: Atlas of Maps
- Exhibit 3: Applicant Volume 3: Alternatives Analysis and Compatibility Analysis
- Exhibit 4: Memo RE: CWMNW Lot Legality Supplemental Findings
- Exhibit 5: 8.30.2022 Supplemental Letter from Cable Huston w/ Revised Conceptual Site Plan
- Exhibit 6: 9.12.2022 Supplemental Letter from CSA Planning

Staff Report page 51, list of exhibits AMENDMENT shown below, starting with Exhibit 4.

Exhibits:

- Exhibit 1: Applicant Volume 1: Findings of Fact and Conclusions of Law
- Exhibit 2: Applicant Volume 2: Atlas of Maps
- Exhibit 3: Applicant Volume 3: Alternatives Analysis and Compatibility Analysis
- Exhibit 4: 7.11.2022 Supplemental Memo from CSA Planning w/Lot Legality findings
- Exhibit 5: 7.19.2022 Supplemental Information Letter from Cable Huston w/comments in response to County staff report issued for Planning Commission public hearing
- Exhibit 6: 8.30.2022 Supplemental Letter from Cable Huston w/Revised Conceptual Site Plan and pre-hearing submittal, including comments on proposed conditions of approval
- Exhibit 7: 9.12.2022 Supplemental Letter from CSA Planning w/Revisions to Vol. 1

Goal Exception, Zone Change, and Conditional Use Permit Application

Volume 1 *Findings of Fact and Conclusions of Law*

Prepared for:
Chemical Waste Management
of the Northwest

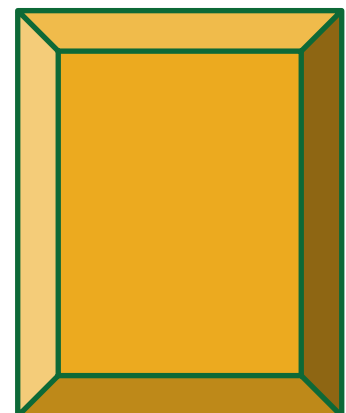
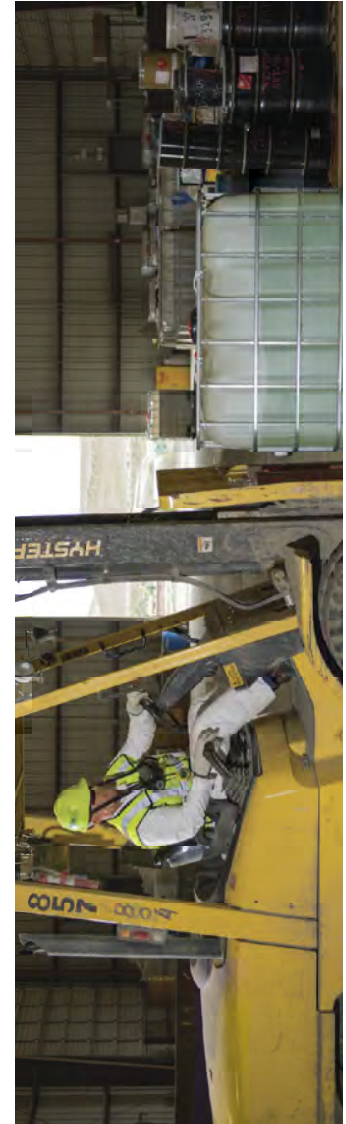
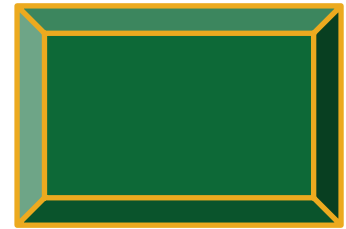


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March 30, 2022





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March 31, 2022

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**RE: Application Materials and Narrative for Plan Amendment (Goal 3 Exception),
Zone Change, and Conditional Use Permit**

This firm represents Chemical Waste Management of the Northwest, Inc. (“Applicant”). On behalf of the Applicant, we are submitting an application and supporting materials requesting an amendment to the County’s Comprehensive Plan and a corresponding Zone Change that, together, will have the effect of rezoning portions of the Applicant’s property from Exclusive Farm Use to General Industrial. The Purpose of these changes is to accommodate an expansion of the Applicant’s existing Subtitle C hazardous waste treatment, storage and disposal facility. As part of that expansion, the Applicant also seeks a Conditional Use Permit.

In addition to the application form, the Applicant is providing three volumes of materials:

Volume 1: Volume 1 is the technical legal document that addresses the relevant procedural requirements, offers findings of fact for consideration by Gilliam County, and provides draft conclusions of law for consideration by Gilliam County for all the applicable criteria. Volume 1 also includes an appendix of detailed facts concerning details for the project.

Volume 2: Volume 2 is an Atlas of Maps and Illustrations. Planning projects such as this necessarily require maps and extensive mapping analysis. Volumes 1 and 3 will include numerous references to specific maps in Volume 2. Providing a separate Atlas allows the reader to reference the maps while reading the text. Also, the 11” by 17” format improves map legibility for larger areas.

Volume 3: Volume 3 is analysis document. Goal exceptions require a series of analyses. This document includes the required analysis.

The Applicant and the Applicant’s permitting team are available to answer any questions the County may have during its initial review of these materials. We look forward to meeting with County planning staff as necessary and presenting these materials to the County’s Planning Commission and to the County Court.

Sincerely,

A handwritten signature in blue ink, appearing to read 'T. Brooks', is written over a light blue horizontal line.

Tommy A. Brooks

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ACRONYM AND ABBREVIATION LIST

CFR:	Code of Federal Regulations
CWMNW:	Chemical Waste Management of the Northwest, Inc.
DLCD:	Department of Land Conservation and Development
EFU:	Exclusive Farm Use [zone designation]
EPA:	United States Environmental Protection Agency
ESA:	Endangered Species Act
GCZO:	Gilliam County Development and Zoning Ordinance
LCDC:	Land Conservation and Development Commission
LDR:	Land Disposal Restrictions
LUCS:	Land Use Compatibility Statement
NRCS:	Natural Resource Conservation Service
OAR:	Oregon Administrative Rule(s)
ODEQ:	Oregon Department of Environmental Quality
ORS:	Oregon Revised Statute(s)
PFAS:	PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals
RCRA:	Resource Conservation and Recovery Act (Federal Law)
TPR:	Transportation Planning Rule
TSDf:	Treatment, Storage, and Disposal Facility
UGB:	Urban Growth Boundary

1 INTRODUCTION

Chemical Waste Management of the Northwest, a subsidiary of Waste Management (“CWMNW” or “Applicant”) owns and operates an existing hazardous waste treatment, storage and disposal facility (“TSDF”) in Gilliam County (“County”). The TSDF operates pursuant to Subtitle C of the Federal Resource Conservation and Recovery Act (“RCRA”).

Unlike other facilities that accept more common residential, commercial, or industrial wastes, Subtitle C TSDFs are less common and only 18 such facilities exist around the country. *See, Atlas Page 13.* Federal and state regulations encourage the expansion of Subtitle C TSDFs over the siting of new Subtitle C TSDFs. CWMNW’s existing facility has operated as a RCRA Subtitle C TSDF since 1976. CWMNW has determined that more TSDF space is needed to accommodate both short-term and long-term waste projections.

1.1 Project Overview

While CWMNW’s existing properties, which are zoned General Industrial (M-G), can accommodate some of the anticipated waste volumes and treatment objectives, additional CWMNW property zoned Exclusive Farm Use (“EFU”) is needed. Under state law, an EFU zone can be used only for farm uses and specific non-farm uses specified in ORS Chapter 215. Although TSDFs for municipal and other wastes allowed under Subtitle D of RCRA can be permitted in an EFU zone, Subtitle C TSDFs are not allowed in an EFU zone. CWMNW’s proposed TSDF expansion, therefore, requires a rezoning of the EFU properties to the General Industrial zone. That rezoning, in turn, requires an Exception to Statewide Planning Goal 3 (“Goal 3 Exception”) and a corresponding amendment to the County’s Comprehensive Plan Map (“Plan Map”). The purpose of this Application is to request the Goal 3 Exception, the Plan Map amendment, and a zone change. Additionally, the Subtitle C TSDF use is a conditional use in the M-G zone, and this land use application includes a request for a conditional use permit.

Factors such as waste category redesignations by regulatory agencies, episodic events, treatment objectives and recurring waste streams all effect demand and corresponding need for land area that is planned to allow hazardous waste facilities. The land use planning project in this application is intended to assure adequate land area is planned. A second regulatory evaluation of “need” conducted by ODEQ is part of the environmental permitting process.

The subject property where the Goal Exception is proposed is located primarily between the existing CWMNW Subtitle C TSDF and the much larger Columbia Ridge Subtitle D TSDF. Both facilities are owned and operated by Waste Management and its subsidiaries.

1.2 Technical Approach Overview

The technical approach taken in the Goal Exception is to plan adequate lands for the useful life of the Subtitle C TSDF under an environmental risk-management scenario for demand for Subtitle C TSDF capacity. This approach assumes impacts reasonably anticipated from the regulatory reclassification of wastes, together with impacts of episodic events over the minimum additional expected useful life of the TSDF of at least an additional 30-50 years. Permitting, constructing, and maintaining Subtitle C TSDFs requires long-term investment, and it is a capital-intensive enterprise. As such, this application takes a conservative approach to ensure sufficient land is

planned for the use, and then subsequent determinations of environmental need will be made by ODEQ through the environmental permitting process.

With respect to an alternative sites analysis, the application submittal takes a conservative approach by providing analysis that exceeds the minimum requirements. CWMNW's submittal evaluates specific potential alternative sites in Gilliam County as part of this initial application submittal to provide thorough review of alternatives required by the applicable rules for a Goal Exception.

2 EVIDENCE LIST

Applicant herewith submits the following evidence in support of the requested exception to Statewide Planning Goals 3 and 4. The subject application requests a Comprehensive Plan Map Amendment from Agricultural Land to General Industrial, together with a zone change from the EFU zone designation to the M-G zone designation. The application is submitted in three parts -- Volumes 1 through 3, of which this is Volume 1. Volume 1 includes the findings of fact and conclusions of law demonstrating compliance with the substantive applicable approval criteria for the proposed *reasons* Goal Exception. Volume 2 is an Atlas of Maps relevant to the requested Comprehensive Plan amendment and *reasons* Goal Exception analysis. Volume 3 is the Alternative Sites analysis for the *reasons* Goal Exception.

2.1 Volume 1 Proposed Findings of Fact and Conclusions of Law and Appendix of Fact Details (This Document)

This Volume 1 is the legal technical document which demonstrates how all required criteria are satisfied for the proposed reasons Goal Exception to Statewide Planning Goals 3 and 4. Volume 1 also includes Appendices of detailed facts as well as the Applicant's letter explaining the *land use need* for the goal exception.

2.2 Volume 2 Atlas of Maps

The Volume 2 Atlas of Maps contains the mapping relevant to the land use application. These maps are provided in a separate volume for ease of review by allowing the reader to examine the maps as they are referenced in the text of Volumes 1 and 3. The Atlas of Maps has been organized to follow the logic in the alternatives analysis in Volume 3.

2.3 Volume 3 Alternatives Sites Analysis and Compatibility Analysis

Volume 3 contains the technical analysis of potential alternative sites prepared by CSA Planning Ltd. It also contains analysis of land use compatibility around the subject properties for the lands to be designated M-G.

3 PROCEDURAL FINDINGS

The following section provides proposed Procedural Findings the County Court can adopt and include in an Ordinance approving the Goal Exception.

3.1 State of Oregon Procedural Requirements

This section explains why a Goal Exception is required for Subtitle C TSDFs in a farm zone. This section will provide procedural findings to address the procedural requirements for a Goal Exception.

197.732 Goal exceptions; criteria; rules; review.

(1) As used in this section:

- (a) "Compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.
- (b) "Exception" means a comprehensive plan provision, including an amendment to an acknowledged comprehensive plan, that:
 - (A) Is applicable to specific properties or situations and does not establish a planning or zoning policy of general applicability;
 - (B) Does not comply with some or all goal requirements applicable to the subject properties or situations; and
 - (C) Complies with standards under subsection (2) of this section.

Procedural Findings: ORS 197.732(1) implements Statewide Planning Goal 2 and is the statutory authority that allows the County to approve an "Exception" to another Statewide Planning Goal ("Goal"). Under that statute, a Goal Exception is a comprehensive plan ("Plan") provision or amendment that applies to specific properties, does not otherwise comply with some or all Goal requirements applicable to those properties, and complies with the statutory requirements in ORS 197.732(2).

CWMNW's Application requests a Goal 3 Exception. If approved, the Goal 3 Exception would amend the County's Plan by making a change to the Plan Map, rezoning the Subject Properties from the EFU zone to the M-G zone. Although the Subject Properties are not planned for or protected by Goal 4 (forestland), to the extent any Goal 4 protections might apply to the Subject Properties, the basis for the Goal 3 Exception applies equally to a Goal 4 Exception. Accordingly, references to Goal 3 in the Application should be deemed to be references to Goal 4 as well.

The Goal 3 Exception applies only to the Subject Properties and is not a planning or zoning policy of general applicability. All properties in the County other than the Subject Property would retain their current zoning designation, and the provisions in the Gilliam County Development and Zoning Ordinance ("GCZO" or "Code") applicable to those zones would remain undisturbed.

The need for the Goal 3 Exception is that the proposed use – a Subtitle C TSDF – does not comply with the requirements of Goal 3 and its implementing statutes and rules. Goal 3 is implemented in part by ORS Chapter 215 and the administrative rules in OAR 660-033. Those statutes and rules together control what uses a county may and may not allow in an EFU zone. As applicable to Gilliam County, the only non-farm uses allowed in an EFU zone are those set forth in ORS 215.283. No other uses are allowed in the EFU zone unless they are farm uses as defined by ORS 215.203. A Subtitle C TSDF is not a farm use. Although ORS 215.283(2)(k) allows some solid waste disposal facilities in the EFU zone, that statute applies only to Subtitle D TSDFs, and a Subtitle C TSDF is not included in the non-farm uses allowed under that statute.

The standards of ORS 197.732(2), which contain substantive approval standards, are addressed below in Section 4 of this Volume 1.

Based on the foregoing, CWMNW's request for a Goal 3 Exception is the kind of Exception allowed by ORS 197.732(1).

- (4) A local government approving or denying a proposed exception shall set forth findings of fact and a statement of reasons that demonstrate that the standards of subsection (2) of this section have or have not been met.

Procedural Findings: The County’s process for considering CWMNW’s Application will result in a final order from the Gilliam County Court (“County Court”). If the County Court approves the Application, that order will contain findings and a statement of the reasons demonstrating the standards in 197.732(2) have been met. In addition to information and evidence that may be developed during the County’s hearings in this process, the County Court can rely on the information and evidence provided in this Application as the basis for finding compliance with 197.732(2).

- (5) Each notice of a public hearing on a proposed exception shall specifically note that a goal exception is proposed and shall summarize the issues in an understandable manner.

Procedural Findings: The Applicant understands that the County will prepare the notices required for the hearings in this matter, and that those notices will contain the information required by ORS 197.732(5).

Division 4
INTERPRETATION OF GOAL 2 EXCEPTION PROCESS
660-004-0000

Purpose

- (1) The purpose of this division is to interpret the requirements of Goal 2 and ORS 197.732 regarding exceptions. This division explains the three types of exceptions set forth in Goal 2 “Land Use Planning, Part II, Exceptions.” Rules in other divisions of OAR 660 provide substantive standards for some specific types of goal exceptions. Where this is the case, the specific substantive standards in the other divisions control over the more general standards of this division. However, the definitions, notice, and planning and zoning requirements of this division apply to all types of exceptions. The types of exceptions that are subject to specific standards in other divisions are:
- (a) Standards for a demonstration of reasons for sanitary sewer service to rural lands are provided in OAR 660-011-0060(9);
 - (b) Standards for a demonstration of reasons for urban transportation improvements on rural land are provided in OAR 660-012-0070;
 - (c) Standards to determine irrevocably committed exceptions pertaining to urban development on rural land are provided in OAR 660-014-0030, and standards for demonstration of reasons for urban development on rural land are provided in OAR 660-014-0040.
- (2) An exception is a decision to exclude certain land from the requirements of one or more applicable statewide goals in accordance with the process specified in Goal 2, Part II, Exceptions. The documentation for an exception must be set forth in a local government’s comprehensive plan. Such documentation must support a conclusion that the standards for an exception have been met. The conclusion shall be based on findings of fact supported by substantial evidence in the record of the local proceeding and by a statement of reasons that explains why the proposed use not allowed by the applicable goal, or a use authorized by a statewide planning goal that cannot comply with the approval standards for that type of use, should be provided for. The exceptions process is not to be used to indicate that a jurisdiction disagrees with a goal.
- (3) The intent of the exceptions process is to permit necessary flexibility in the application of the Statewide Planning Goals. The procedural and substantive objectives of the exceptions process are to:
- (a) Assure that citizens and governmental units have an opportunity to participate in resolving plan conflicts while the exception is being developed and reviewed; and
 - (b) Assure that findings of fact and a statement of reasons supported by substantial evidence justify an exception to a statewide goal.
- (4) When taking an exception, a local government may rely on information and documentation prepared by other groups or agencies for the purpose of the exception or for other purposes, as substantial evidence

to support its findings of fact. Such information must be either included or properly incorporated by reference into the record of the local exceptions proceeding. Information included by reference must be made available to interested persons for their review prior to the last evidentiary hearing on the exception.

Procedural Findings: OAR 660-004 comprises the Land Conservation and Development Department's ("LCDC") administrative rules implementing the Goal Exception process allowed by Goal 2, Part II and ORS 197.732. OAR 660-004-0000 specifically is the "purpose" statement and largely mirrors the requirements set forth in ORS 197.732(1).

OAR 660-004-0000(2) and (4) confirm that the County's decision approving a Goal Exception must be based on findings of fact supported by substantial evidence in the record and by a statement of reasons that explains why the proposed use is not allowed by Goal 3. As noted above, the County Court's final decision in this proceeding will be through an order that is based on findings of fact – facts that the Applicant presents in its Application, as well as those that are developed during the hearings. Those findings can also explain why Goal 3 does not allow CWMNW's proposed use in the EFU zone and, therefore, why a Goal 3 Exception is necessary.

Pursuant to OAR 660-004-0000(3), citizens and government units will be able to actively participate in this process to resolve Plan conflicts. The County's procedural requirements result in multiple hearings, with broad notice to citizens and government units.

660-004-0010

Application of the Goal 2 Exception Process to Certain Goals

(1) The exceptions process is not applicable to Statewide Goal 1 "Citizen Involvement" and Goal 2 "Land Use Planning." The exceptions process is generally applicable to all or part of those statewide goals that prescribe or restrict certain uses of resource land, restrict urban uses on rural land, or limit the provision of certain public facilities and services. These statewide goals include but are not limited to:

(a) Goal 3 "Agricultural Lands"; however, an exception to Goal 3 "Agricultural Lands" is not required for any of the farm or nonfarm uses allowed in an exclusive farm use (EFU) zone under ORS chapter 215 and OAR chapter 660, division 33, "Agricultural Lands", except as provided under OAR 660-004-0022 regarding a use authorized by a statewide planning goal that cannot comply with the approval standards for that type of use;

(3) An exception to one goal or goal requirement does not ensure compliance with any other applicable goals or goal requirements for the proposed uses at the exception site. Therefore, an exception to exclude certain lands from the requirements of one or more statewide goals or goal requirements does not exempt a local government from the requirements of any other goal(s) for which an exception was not taken.

Procedural Findings: OAR 660-004-0010 confirms that Goal 3 is one of the Goals for which an Exception is available. The Applicant seeks an Exception to Goal 3 (and, to the extent applicable, Goal 4) as explained in Sections 4 and 5. All other Goals applicable to the Subject Properties, as applied through the County's Plan and Code, will remain applicable.

660-004-0015

Inclusion as Part of the Plan

(1) A local government approving a proposed exception shall adopt, as part of its comprehensive plan, findings of fact and a statement of reasons that demonstrate that the standards for an exception have been met. The reasons and facts shall be supported by substantial evidence that the standard has been met.

(2) A local government denying a proposed exception shall adopt findings of fact and a statement of reasons that demonstrate that the standards for an exception have not been met. However, the findings need not be incorporated into the local comprehensive plan.

Procedural Findings: The Applicant requests that the County Court’s final order approving the requested Goal 3 Exception be adopted as part of the County’s Plan. This can occur primarily through the requested amendment to the Plan Map by changing the zoning of the Subject Properties from EFU to M-G, which is consistent with the County’s past practice of amending the Plan Map to show where it has approved Goal Exceptions. Doing so will ensure that the County, the Applicant, and the public know with reasonable certainty exactly which goals or goal requirements no longer apply to the Subject Properties.

660-004-0018
Planning and Zoning for Exception Areas

- (1) Purpose. This rule explains the requirements for adoption of plan and zone designations for exceptions. Exceptions to one goal or a portion of one goal do not relieve a jurisdiction from remaining goal requirements and do not authorize uses, densities, public facilities and services, or activities other than those recognized or justified by the applicable exception. Physically developed or irrevocably committed exceptions under OAR 660-004-0025 and 660-004-0028 and 660-014-0030 are intended to recognize and allow continuation of existing types of development in the exception area. Adoption of plan and zoning provisions that would allow changes in existing types of uses, densities, or services requires the application of the standards outlined in this rule.
- (2) For "physically developed" and "irrevocably committed" exceptions to goals, residential plan and zone designations shall authorize a single numeric minimum lot size and all plan and zone designations shall limit uses, density, and public facilities and services to those that satisfy (a) or (b) or (c) and, if applicable, (d):
 - (a) That are the same as the existing land uses on the exception site;
 - (b) That meet the following requirements:
 - (A) The rural uses, density, and public facilities and services will maintain the land as "Rural Land" as defined by the goals, and are consistent with all other applicable goal requirements;
 - (B) The rural uses, density, and public facilities and services will not commit adjacent or nearby resource land to uses not allowed by the applicable goal as described in OAR 660-004-0028; and
 - (C) The rural uses, density, and public facilities and services are compatible with adjacent or nearby resource uses;
 - (b) For uses in unincorporated communities, the uses are consistent with OAR 660-022-0030, "Planning and Zoning of Unincorporated Communities", if the county chooses to designate the community under the applicable provisions of OAR chapter 660, division 22;
 - (d) For industrial development uses and accessory uses subordinate to the industrial development, the industrial uses may occur in buildings of any size and type provided the exception area was planned and zoned for industrial use on January 1, 2004, subject to the territorial limits and other requirements of ORS 197.713 and 197.714.
- (3) Uses, density, and public facilities and services not meeting section (2) of this rule may be approved on rural land only under provisions for a reasons exception as outlined in section (4) of this rule and applicable requirements of OAR 660-004-0020 through 660-004-0022, 660-011-0060 with regard to sewer service on rural lands, OAR 660-012-0070 with regard to transportation improvements on rural land, or OAR 660-014-0030 or 660-014-0040 with regard to urban development on rural land.

Procedural Findings: OAR 660-004-0018 contains various requirements for the adoption of plan and zone designations when a Goal Exception is approved. Subsections (2) and (3) of this rule are specific to “physically developed” and "irrevocably committed" Goal Exceptions. CWMNW’s request, however, is for a “reasons” Exception, which is governed by subsection (4) of the rule, addressed below.

- (4) "Reasons" Exceptions:
- (a) When a local government takes an exception under the "Reasons" section of ORS 197.732(1)(c) and OAR 660-004-0020 through 660-004-0022, plan and zone designations must limit the uses, density, public facilities and services, and activities to only those that are justified in the exception.
 - (b) When a local government changes the types or intensities of uses or public facilities and services within an area approved as a "Reasons" exception, a new "Reasons" exception is required.
 - (c) When a local government includes land within an unincorporated community for which an exception under the "Reasons" section of ORS 197.732(1)(c) and OAR 660-004-0020 through 660-004-0022 was previously adopted, plan and zone designations must limit the uses, density, public facilities and services, and activities to only those that were justified in the exception or OAR 660-022-0030, whichever is more stringent.

Procedural Findings: The Goal 3 Exception CWMNW seeks is a “reasons” Goal Exception, which must meet the applicable standards set forth in OAR 660-004-0020 through 660-004-0022. OAR 660-004-0018(a) and (b) require that “reasons” Exceptions limit the uses, density, public facilities and services, and activities on the Subject Properties to those that are justified by the Exception, and any changes to those aspects of the use must be approved by a separate Exception. The Applicant’s proposal is for a specific use described in the Application – the expansion of an existing Subtitle C TSDF. The Applicant is not requesting any other uses, densities, public facilities and services, or activities beyond what is proposed in the Application and understands that any such changes will require a new Exception. The County Court can confirm these limitations in an Ordinance it adopts approving the Goal Exception and adopting the new M-G Plan Map designation.

**660-004-0030
Notice and Adoption of an Exception**

- (1) Goal 2 requires that each notice of a public hearing on a proposed exception shall specifically note that a goal exception is proposed and shall summarize the issues in an understandable manner.
- (2) A planning exception takes effect when the comprehensive plan or plan amendment is adopted by the city or county governing body. Adopted exceptions will be reviewed by the Commission when the comprehensive plan is reviewed for compliance with the goals through the acknowledgment or periodic review processes under OAR chapter 660, divisions 3 or 25, and by the Board when a plan amendment is reviewed as a post-acknowledgment plan amendment pursuant to OAR chapter 660, division 18.

Procedural Findings: The Applicant understands that the County will prepare the notices required for the hearings in this matter, and that those notices will contain the information required by OAR 660-004-0030.

3.2 Gilliam County Procedural Requirements

**ARTICLE 6. NONCONFORMING USES
SECTION 6.170 – GOAL EXCEPTIONS**

A Goal exception is a decision to exclude certain land from the requirements of one or more applicable statewide planning goals. An exception is required to rezone land from a Resource zone to a different zone; to change the existing types of uses, densities, or services allowed in a zone or on a parcel; to amend the Transportation System Plan to change the functional classification, capacity or performance standard of a transportation facility; and similar changes. An application for a goal exception shall be processed under the procedures for an amendment in the Comprehensive Plan, and must comply with the requirements for exceptions in OAR 660-004.

Procedural Findings: GCZO 6.170 mirrors state statutes and rules, defining a Goal Exception as a decision to exclude land from an applicable Goal requirement. This Code section confirms that rezoning land from a Resource zone – such as the EFU zone – to a different zone requires a Goal

Exception. Further, this Code section confirms that a Goal Exception must comply with the provisions of OAR 660-004. Those administrative rules are addressed throughout the Application materials.

ARTICLE 10. AMENDMENTS

SECTION 10.010 - AUTHORIZATION TO INITIATE AMENDMENTS

An amendment to the text of this ordinance or to a zoning map may be initiated by the County Court, the County Planning Commission, or by application of a property owner. The request by a property owner for an amendment shall be accomplished by filing an application with the Planning Department, using forms prescribed pursuant to Section 11.130.

Procedural Findings: CWMNW owns the Subject Properties and has submitted an application requesting the Goal 3 Exception to the Planning Department. *See, Appendix A.* The Application therefore complies with this Code provision.

4 FINDINGS OF FACT

The Applicant proposes that the County Court adopt and incorporate by reference the facts set forth in this Section 4 of Volume 1 as substantial evidence in support of the County Court’s decision to approve the requested reasons Goal Exception.

4.1 Adoption of Evidence as Facts

The subject application submits Evidence of Facts in the form of the Volume 1 Appendix and in Volumes 2 and 3. This evidence has either been recited from government data sources or has been prepared by land use planners, economists, and TSDf professionals with demonstrated expertise in these fields in the State of Oregon. On this basis, the County adopts the data, analysis and information presented in the Application, and relies upon the same in reaching its Conclusions of Law in Section 5. In relying upon said evidence, the County establishes that the same constitutes facts upon which a reasonable person can base land use decisions for the requested reasons Goal Exception.

4.2 Summary of Material Facts and Property Fundamentals

See, Appendices in Section 7 for Additional Details.

4.2.1 Subject Property Description, Size, Ownership, and Authorization

The Subject Property consists of approximately 935 acres surrounding the existing Subtitle C TSDf to the north, east, and southeast. *See, Atlas Page 5.* This area consists of the property currently identified as Tax Lot 2317 on the Gilliam County Assessor’s Plat for Township 2 North, Range 20 East, and Tax Lots 1205, 1206, and 1209 of the Assessor’s Plat for Township 2 North, Range 21 East. The area also includes the westerly ~ 400 acre portion of Tax Lot 1101 in Township 2 North, Range 21 East.

Map and Tax Lots 02-20E-2317, 02-21E-1205, and 02-21E-1206 are held in fee simple ownership by CWM of the Northwest, Inc., while 02-21E-1101 is owned by Oregon Waste Systems, Inc. Map and Tax Lots 02-21E-1209 and 02-21E-2102 are owned by CWMNW. *See, Appendix B and Atlas Page 4.* If approved, the proposed TSDf expansion and Goal Exception area property will be conveyed to CWMNW, which is the operator of the Subtitle C TSDf. The agent of record for the subject application is Applicant’s Attorney Tommy Brooks with Cable Huston LLP in Portland; CSA Planning Ltd. has been engaged by Cable Huston and CWMNW to prepare the reasons Goal

Exception alternatives analysis and mapping elements in Volumes 2 and 3 and provide analysis as experts in rural Oregon Land Use Planning.

4.2.2 Previous Land Use Reviews and Approvals in Gilliam County

The existing Subtitle C TSDF was initially owned and operated by a corporation known as Chem-Nuclear Services, Inc., which purchased the property on January 14, 1972, and received the initial DEQ license for chemical waste disposal on February 20, 1976. The following list contains the land use review permits issued by Gilliam County that are most pertinent to this application. *See, Appendix E and G.*

- **Planning Application No. A(M)-002:** On February 7, 1973, Gilliam County approved a zone change for the 320 acre site from Exclusive Farm Use (AE) to General Industrial (M-G), specifically noting that it was to be used as a hazardous waste disposal facility.
- **Planning Application No. A(M)-007:** On October 16, 1978, Gilliam County approved a zone change from AE to M-G for approximately 3.74 net acres at the southeast corner of the existing facility in order to accommodate a new entrance road to the Subtitle C TSDF. This area is present day Map and Tax Lots 02-21E-1201 and 1202.
- **Planning Application No. A(M)-008:** On January 7, 1981, Gilliam County approved a zone change from AE to M-G for 320 acres for the purposes of expanding the chemical waste disposal facility; however, to date the facility has not been expanded westward. The area approved for the zone change is present day Map and Tax Lots 02-20E-2313 and 2703.
- **Host Fee and Economic Enhancement Fund Agreement:** On February 3, 1988, the Gilliam County Court adopted an ordinance putting in place an agreement with the then operator of the hazardous waste disposal facility (Chem-Security Systems, Inc.) for an annual “host fee” payment that would be used by Gilliam County for the specific purpose of maintaining Cedar Springs Road and the general purpose of enhancing Gilliam County’s economic development opportunities. The agreement is reviewed every five years pursuant to the terms therein and revised as necessary.
- **Land Use Compatibility Statements (LUCS):** Over the past ~37 years Gilliam County Planning has signed-off on numerous DEQ Land Use Compatibility Statements, or LUCS, documenting that the Subtitle C TSDF is an authorized, compatible, and permitted use.

4.2.3 Lot Legality

The Subject Property consists of approximately 935 acres comprised of five discrete parcels that stem from General Land Office (GLO) Land Patents that were granted by the Federal Government to private individuals or entities, with each patent having the legal effect of creating separate and discrete parcels. Pursuant to ORS 92.017, legally created lots and parcels remain separate and discrete unless the lot or parcel lines are vacated or the lot or parcel is further divided, as provided by law applicable at the time of land division.¹ While many original patent lands have been divided

¹ Simply describing separate units of lands together in the same description does not serve to vacate any underlying lots or parcels under ORS 92.017. *Jackson v. City of Portland*, 54 Or LUBA 138 (2007); *South v. City of Portland*, 48 Or LUBA 555 (2005);

over the years, in more rural areas where very large tracts of land have been conveyed over the intervening years, it is not uncommon that many of the original patent parcels continue to exist in the original configurations or have had the configurations modified by subsequent deeds that functioned to adjust the property lines.

Applications for property line adjustments involving the parcels within the Subject Property were recently submitted to Gilliam County (Planning File Nos. 2022-PLA-01 and 2022-PLA-02) and lot legality for the referenced five discrete parcels was fully addressed therein. *See, Appendix D.* Upon County approval of these adjustments the matter of lot legality for the Subject Property will be satisfied and is hereby incorporated to serve as evidence for the same in this application.

4.2.4 Existing and Proposed Comp Plan Map/Zoning Map Designations

Gilliam County operates under a “one map” Comprehensive Plan/Zoning Map system. The entirety of the property subject to the Goal Exception is currently designated/zoned Exclusive Farm Use (EFU) and is proposed to be changed to General Industrial (M-G). *See, Atlas Pages 3 and 6.* The Conditional Use Permit for TSDf expansion includes lands already zoned M-G and lands proposed for Goal Exception and rezoning to M-G.

4.2.5 Subject Property Transportation Facts

4.2.5.1 FUNCTIONAL CLASSIFICATION

The Subject Property is located on the north side of Cedar Springs Lane, a County-maintained road classified as a Major Collector in the 2015 Gilliam County Transportation System Plan (TSP). Cedar Springs Lane connects to State Highway 19 to the east, which is classified as a Minor Arterial, and to Blalock Canyon Road to the west, which is classified as a Major Collector. *See, Atlas Page 12.*

4.2.5.2 ACCESS

The site entrance is located approximately 5 miles west of the intersection of Highway 19 and Cedar Springs Lane. Vehicular access to the subject property is from Cedar Springs Lane via two road approaches located on Map and Tax Lot 02-21E-1206. Both road approaches are connected to a single improved gravel road that traverses the hill and enters the Subtitle C TSDf at its southwest corner.

4.2.5.3 RAILYARD

The existing Subtitle C TSDf is served by a railyard located to the north of Cedar Springs Lane approximately 1.3 miles west of the TSDf entrance. The railyard serves both the Subtitle C TSDf and the neighboring Subtitle D TSDf, with approximately 25% to 30% of the total Subtitle C TSDf materials being delivered by rail. The frequency and volumes of hazardous waste delivered to the facility are wholly dependent on the needs of waste generators to ship materials for disposal. Containers of materials that are designated for acceptance at the Subtitle C TSDf and brought in via rail are loaded on to trucks at the railyard and driven to the site via an internal private road that runs parallel to Cedar Springs Lane. No hazardous waste materials are transported on or across any County roads or State highways after being shipped by rail car.

Masson v. Multnomah County, 48 Or LUBA 100 (2004); Smith v. Lane County, 37 Or LUBA 779 (2000); Tarjoto v. Lane County, 34 Or LUBA 124 (1998); Koo v. Polk County, 33 Or LUBA 487 (1997); DLCD v. Polk County, 33 Or LUBA 30 (1997); Campbell v. Multnomah County, 25 Or LUBA 479 (1993); McKeel v. Multnomah County, 55 Or LUBA 608 (2008)

4.2.6 Subject Property Public Facilities and Services

4.2.6.1 WATER

The Subtitle C TSDF contains two wells identified as Well 3 and Well 5. Water from Well 3 is used for purposes of dust suppression and process water for the Stabilization Units and Organic Recovery Units at the site, while Well 5 provides potable water for the site.

4.2.6.2 SEWER

The Subtitle C TSDF uses septic tanks and drain fields for sanitary sewer purposes.

4.2.6.3 STORM DRAINAGE

The Subtitle C TSDF has concurrence from ODEQ that a stormwater discharge permit is not required due to the facility being designed to have no discharge to waters of the State. The facility manages uncontaminated stormwater and stormwater that has been in contact with active waste areas (contact stormwater). The collected contaminated runoff is tested and, if it meets Land Disposal Restrictions (LDRs), is sent to evaporation ponds on the property. Uncontaminated stormwater is collected in on-site retention basins which do not discharge while the leachate collected from the landfills is tested to ensure it meets LDR restrictions and if it does is used for dust suppression inside the active disposal facility or sent to the evaporation ponds.

4.2.6.4 POWER

The Subtitle C TSDF is connected to electric power provided by Columbia Basin Power.

4.2.6.5 FIRE PROTECTION

Fire protection services for the subject property outside of the active areas are provided by the North Gilliam County Rural Fire Protection District in Arlington.

4.2.6.6 POLICE PROTECTION

Police protection services for the subject property are provided by the Gilliam County Sheriff's Office from its offices in Condon.

4.2.7 Subject Property Environmental Facts

4.2.7.1 FLOODPLAIN

There are no mapped FEMA floodplain areas within the subject property, with the exception of Map and Tax Lots 02-21E-1209 and 2102 on the south side of Cedar Springs Lane. *See, Atlas Page 7.*

4.2.7.2 WETLANDS

The Gilliam County Comprehensive Plan does not identify any wetlands in Gilliam County. The Subject Properties are on a raised plateau with well drained soils that receive very little rain. Accordingly, the Subject Property is not known to contain any wetlands.

4.2.7.3 TOPOGRAPHY

The existing Subtitle C TSDF and the Subject Property are located on a gently rolling plateau immediately to the north and approximately 150 to 200 feet above the elevation of Cedar Springs Lane. The site extends from the bottom of Alkali Canyon (at an elevation of approximately 750 feet above mean sea level [msl]) north approximately 5,300 feet, climbing out of the canyon to the upland plateau (at a maximum elevation of approximately 1,150 feet msl). Hazardous waste storage, treatment, and disposal activities are limited to the portion of the site, known as "the active area", located above 950 feet msl. *See, Atlas Page 7.*

4.2.7.4 GEOLOGY

The site is part of the Alkali Canyon geologic unit mapped as Unit Ts by the USGS, which consists of tuffaceous sedimentary rocks and tuff. The site has not exhibited signs of seismic activity. No earthquakes larger than magnitude 4.0 during the period from 1841 to 2002, and only two earthquakes with a magnitude between 3.0 and 3.9 during that period, were recorded. There are no mapped Holocene or late Quaternary faults located within Gilliam County². *See, Atlas Page 8.*

4.3 Nature and Description of Proposed Use

The term “Subtitle C facility” is a regulatory label that refers to categories of TSDFs permitted to accept hazardous wastes. The term arises from the Resource Conservation and Recovery Act (RCRA) which was enacted in 1976. RCRA is the United States’ principal federal law governing the storage, treatment and disposal of solid waste and hazardous waste. This act created the Environmental Protection Agency (EPA) Office of Solid Waste, and the EPA has subsequently promulgated rules to implement RCRA which are codified in Title 40 of the Code of Federal Regulations at parts 239 to 282.³

The solid waste TSDFs most people are familiar with are “Subtitle D” designated TSDFs. These TSDFs are allowed to accept municipal and industrial waste streams that are designated non-hazardous wastes. There are numerous Subtitle D TSDFs throughout the country.

While proper construction, operation and management of a Subtitle D TSDF is a complex enterprise, Subtitle C TSDFs are many times more complex. Subtitle C TSDFs must track every type of waste that enters the TSDF, and each waste type has specific actions that are required for handling and storage. Each Subtitle C permitted facility is unique and has an approved list of hazardous wastes that the TSDF is allowed to handle and provide for permanent disposal of some or all of the waste types. Subtitle C TSDFs must be properly equipped to safely store, treat, or dispose of all wastes it receives. Safe waste management is established through: (1) the implementation of comprehensive plans; (2) the use of environmental monitoring systems; and (3) self-audit practices. The findings in this section explain, in summary terms, the typical aspects of Subtitle C TSDFs that are common and then describe additional specifics for the CWMNW facility in Gilliam County.

4.3.1 General Description of Subtitle C TSDFs

4.3.1.1 TYPICAL

Subtitle C TSDF units are designed specifically to manage the particular hazardous wastes the facility is permitted by ODEQ to accept. The essential goal of the design, construction, operation and maintenance of a Subtitle C TSDF is to prevent any hazardous waste from escaping the landfill facility and entering the soil or groundwater.

With respect to Subtitle C TSDFs, the landfill disposal units are constructed with an engineered liner system that includes a primary leachate collection system, a secondary leak detection system, and a tertiary leak detection system. Each liner is designed with sufficient strength to withstand operational use during the life of the TSDF (including the closure and post-closure process); it is designed to withstand contact with waste and leachate from the unit. The purpose of the engineered liner system is to provide overlapping protections to prevent migration of waste through the TSDF into surrounding soil or groundwater.

² <https://www.oregongeology.org/pubs/ofr/O-03-02.pdf>

³ [40 CFR Subchapter I - SOLID WASTES | CFR | US Law | LII / Legal Information Institute \(cornell.edu\)](#)

Liquid that passes through the TSDF is referred to as leachate. The lowest point of each disposal cell contains pumping systems to remove the collected leachate from the sump to ensure leachate does not accumulate in enough quantity to damage the liner. In a Subtitle C TSDF, the leachate is used as dust control inside the landfill unit, or treated in an on-site Waste Water Treatment Unit to meet LDRs and placed in the onsite evaporation ponds.

The TSDF must also be designed to separate contact stormwater from uncontaminated stormwater. Precipitation that does not contact waste is separated from active areas into retaining ponds. Contact water is collected in lined retention areas, treated if necessary, and placed in the on-site evaporation ponds. TSDFs are designed with storm water management facilities to minimize the amount of leachate produced.

The permitting process for a Subtitle C TSDF is extensive. Permits are subject to periodic reviews and renewals. States are delegated many of the permitting requirements to implement the EPA's rules under RCRA. States are prohibited from being less restrictive than the EPA rules require, but they are allowed to be more restrictive, and many states are more restrictive including Oregon. RCRA requires "cradle-to-grave" tracking and reporting for hazardous wastes. A Subtitle C TSDF is one of the potential "graves" for hazardous waste. Accordingly, the Subtitle C TSDF permit not only regulates the design, construction, and closure elements of the hazardous waste units, but also contains extensive record-keeping, reporting and performance requirements. The permittee is required to maintain financial assurances sufficient to assure the TSDF can be closed consistent with the permit requirements for closure.

There are numerous operations and maintenance tasks associated with a Subtitle C facility, such as:

- **Acceptance and Initial Handling:** Waste shipments are inspected and sampled to verify that the waste is consistent with the manifest prior to acceptance at the TSDF. Mixed waste shipments are sorted and any wastes that a particular TSDF is not permitted to accept may be placed in approved temporary storage for future transfer or may be rejected by the TSDF.
- **Pre-treatment (stabilization) and Recovery:** Some wastes can be processed to reduce the leachability of certain contaminants in the waste stream. Certain types of wastes contain economically beneficial products that can be recovered – one example is petroleum oils. Many wastes need to be stabilized before disposal. The pre-treatment actions mix the waste with reagents to balance the waste chemistry, like pH and other factors, to bind the contaminants, which reduces potential for problematic interactions between waste types in the TSDF.
- **Waste Placement:** The storage and disposal of waste at the TSDF is organized to reduce potential interactions between waste types being managed.
- **Record-Keeping:** Ongoing record-keeping is required to assure continued regulatory compliance with all the various permit requirements for the TSDF.
- **Groundwater Monitoring:** Groundwater is regularly monitored to ensure the facility is not allowing wastes to reach the groundwater .
- **Leachate:** The leachate is removed from the landfill and treatment units to ensure there is no impact to the integrity of the liner system. Leachate needs to be properly managed and constantly monitored.

- **Liner Leak Detection:** Leak detection systems are monitored to ensure no leaks are occurring from the primary liner system in each unit.
- **Air Quality:** Measures are taken to minimize airborne particulates and discharges from the roads; like dust from track-out for example. Air pollution controls employing many different technologies are required on treatment units to minimize emissions from those units.
- **Stormwater Management:** Stormwater facilities need to be maintained in accordance with the design standards, stormwater controls are constantly constructed to direct stormwater away from active areas.
- **Security:** The site needs to be kept secure to prevent any unauthorized activities at the facility.

Subtitle C TSDf treatment units are designed to manage projected volumes. When treatment units have reached their design capacity or are at the end of their useful life the treatment unit enters the closure process. Closure practices differ for each type of treatment unit; closure for a landfill disposal for example requires a cap be applied to the surface of the landfill. The landfill capping process places a cover with leak protection equivalent to the primary liner over the top surface of the landfill. The cap construction prevents stormwater from infiltrating into the landfill and reduces the quantity of new leachate. Once closed, each treatment and disposal unit is monitored for damage, integrity, and leachate production. Collected leachate continues to be treated throughout the post-closure care process. Closed units must be monitored for at least 30 years after closure.

4.3.1.2 PROJECT SITE SPECIFICS

The specifics of the CWMNW Subtitle C TSDf are set forth in the ODEQ permit for the site (Permit No. ORD 089 452 353) which was issued in accordance with the applicable provisions of ORS Chapter 466 and the regulations promulgated at OAR Chapter 340, Divisions 100 through 120. The project site specifics are set forth in that permit.

As a technical matter, the existing and proposed CWMNW “Subtitle C TSDf” is actually comprised of multiple discrete treatment, storage and disposal units approved through the ODEQ permitting process. *See, Atlas Page 2.* Singular references to the existing facility in this document and Volume 1, as a technical matter, should be read as a reference to all the existing TSDfs (open and closed) within the existing M-G zoned area.

In addition to the direct landfilling and processing, the site has an existing aggregate quarry near the western boundary of the project. Constructing treatment unit access roads is an aggregate intensive use. The existing aggregate area and additional area to the north are expected to be used for quarry operations to meet the site’s aggregate needs.

The project is also proposing a number of new evaporation ponds, containment buildings, and treatment units. Liquid wastes meeting LDR restrictions are placed in ponds for evaporation. Containment buildings are storage or treatment buildings with liners much like landfills that store hazardous wastes prior to treatment. Treatment unit technology varies based on the contaminants being treated, these technologies include but are not limited to thermal desorption, waste/reagent mixing, and filtration.

4.3.2 Siting Characteristics Considerations

4.3.2.1 TYPICAL

Subtitle C TSDFs need to be accessible to waste generators. The location relative to waste generators and competing facilities is an important consideration. The facility should be close enough to waste generators to make the hazardous waste transport economical. Proximity to other Subtitle C facilities also affect the market area for a particular TSDF. Freight access and connections are important to allow multiple shipping methods, ideally with viable logistics options for semi-trucks, rail, and maritime shipping. Safe handling of wastes from transport modes to landfilling is an important consideration.

Subtitle C TSDFs need to have adequate size to achieve an economy of scale that makes sense for this type of enterprise. Because of all the regulatory requirements, management expertise, and design and construction expenses, most Subtitle C TSDFs are relatively large. For example, the average permitted capacity at the 18 Subtitle C TSDF's in the country is 4.8 million tons. This average rises to 5.4 million tons once the two smallest "outlier" TSDF's (zero and 90k tons of permitted capacity each) are removed from the average. Given that there are engineering constraints for landfill stability, (side-slopes are generally restricted to a 3 to 1 maximum), many acres are required to site even a "small" Subtitle C landfill. In addition to the economy of scale necessary to operate a hazardous waste TSDF, new Subtitle C landfill disposal units in Oregon need to provide a minimum 1,000-foot setback (which functions as separation buffer) from landfill disposal areas to property lines.⁴

Subtitle C TSDFs are required to have appropriate geology, hydrology, and hydrogeology. Minimum Federal requirements prohibit TSDFs within 200-feet of a fault with displacement during the Holocene period and include significant restrictions within floodplain areas. Beyond consideration of the minimum Federal requirements, it makes good business sense to site Subtitle C TSDFs where design, construction and operational and management is cost effective. While the design of a Subtitle C TSDF is expressly engineered to prevent any discharge, locations where the underlying hydrogeology does not readily support transport to the aquifer or surface waters is paramount. Groundwater tables that are deep below the surface eliminate the likelihood of upward vertical hydraulic pressure on the TSDF. The geology must be sufficient to support the compressive forces of the treatment or disposal units, facility construction equipment, and construction of buildings and machines to support the TSDF uses. Stormwater drainage adds cost because diversions of natural watercourses are expensive and can be challenging from a regulatory standpoint.

In addition to the geology, hydrology and hydrogeology, other environmental conditions factor into appropriate siting for Subtitle C TSDFs. Arid climates are preferred because they reduce the amount of leachate generated through contact with treatment and disposal units and also tend to support deeper groundwater tables. Earthwork also tends to be more cost-effective where soil moisture content is consistent. Gentle topography allows for more uniform TSDF cell design engineering and straightforward arrangement and site planning of buildings and equipment that support the actual TSDF. Threatened and endangered animal and plant habitats are typically avoided, if possible, because endangered species permitting can be a costly endeavor – even when avoidance is regulatorily practicable.

In addition to the above factors, siting of Subtitle C TSDFs also considers social factors. Social factors that are typically considered include land use patterns, aesthetics, and security. Sites that

⁴ See OAR 340-120-0010(2)(e)(B); Gilliam County Comp Plan Goal 2 Finding 4 and Goal 11 Finding 7

have compatible land uses are typically preferred. From an aesthetics standpoint, Subtitle C TSDFs are Rural Industrial facilities and locating them in places that will not impact urban or natural area aesthetics is prescribed by the locational separation requirements set forth in OAR 340-120-0010 and 0015. For security reasons, some remoteness from population centers can be a benefit by providing a buffer from population centers and allow space to install security. Separation from population centers must be balanced so that the TSDF is still located close enough to provide an adequate labor market to support operations. In Oregon, specific locational separation requirements are set out in the administrative rules at OAR 340-120-0010 and OAR 340-120-0015 which require separation from many land use types to ensure land use pattern compatibility.

4.3.2.2 PROJECT CHARACTERISTICS AND SITE REQUIREMENTS

The CWMNW Subtitle C TSDF is well situated from a siting characteristics standpoint for a Subtitle C TSDF:

- Geographically, the site is well located to accept waste from interior areas of the northwestern United States but is still relatively close to the larger metropolitan areas of Seattle and Portland.
- The site is easily accessible from Interstate 84 and has access to rail spur from a Class 1 railroad that terminates in a railyard at the site. The site is accessible from the north or south from the John Day Highway (Highway 19) via Cedar Springs Lane; John Day Highway connects directly to I-84 in Arlington. Alternative routes to the facility from the west via the Phillipi Canyon Interchange or the Blalock Canyon Interchange are also physically possible for use as a temporary detour route in the event of an emergency closing of John Day Highway.
- The site is relatively flat and is not visible from nearby urban areas nor is it featured prominently within the viewshed of any major outdoor recreation or natural area sites.
- The site is not near any population centers and is more than three miles from the nearest Urban Growth Boundary. However, the site is close enough to Arlington, Condon and Boardman to have reasonable access to labor markets (<40 miles).
- The site is not near any high-value farmland or intensive agriculture.
- The site is part of the Alkali Canyon geologic unit which is mapped as Unit Ts by the USGS which consists of tuffaceous sedimentary rocks and tuff. The site has not exhibited signs of seismic activity. No earthquakes larger than magnitude 4.0 during the period from 1841 to 2002, and only two earthquakes with a magnitude between 3.0 and 3.9 during that period, were recorded. There are no mapped Holocene or late Quaternary faults located within Gilliam County⁵.
- The subsurface hydrogeology drains away from the Columbia River⁶.
- There are no drainages that traverse the site. The nearest drainages are Rock Creek approximately 3.5 miles southwest and the Columbia River which is approximately 5.5 miles north.
- The site receives an average of less than 9 inches of rain per year⁷ and the 24-hour maximum 100-year precipitation event is estimated to be less than 2.5 inches⁸.

⁵ <https://www.oregongeology.org/pubs/ofr/O-03-02.pdf>

⁶ Need technical resource for this from Chem Waste.

⁷ https://prism.oregonstate.edu/projects/gallery_view.php?state=OR (2014 precipitation map)

⁸ https://www.oregon.gov/ODOT/Programs/ResearchDocuments/SPR656_Rainfall_Analysis_Final_Report_web.pdf

With respect to the specific site requirements for the expansion project, the Alternatives Analysis in Volume 3 sets forth the specific site requirement evaluation factors in Section 1.1 and these site requirements are incorporated by reference herein.

4.3.3 State and Federal Permitting Discussion

The Federal Environmental Protection Agency (EPA) can delegate permitting authority for Subtitle C TSDFs to states. If a state does not have the capacity or desire to have its own permitting process then the TSDF can be permitted in those states directly by the EPA. Oregon has accepted the RCRA permitting authority delegated by EPA and permitting is reviewed and authorized by Oregon Department of Environmental Quality (ODEQ) with oversight from EPA. ODEQ issues permits under the authority of the Federal RCRA, CFR 40, Parts 124, 260-266, 268, and 270 and OAR 340-100 through OAR 340-108, and OAR 340-120.

The CWMNW permit has EPA Identification Number ORD 089 452 353. The most recent permit renewal issuance was issued by the Environmental Quality Commission on August 10, 2006. *See, Appendix I.* The permit is hundreds of pages long and contains 18 attachments that describe the design and operations of the hazardous waste units:

Attachment #1-Waste Analysis Plan
Attachment #2-Security Procedures, Hazards Prevention & Training Plan
Attachment #3-Inspection Plan
Attachment #4-Contingency Plan
Attachment #5-Closure/Post Closure Plan
Attachment #7-Groundwater Monitoring Plan
Attachment #8-Bulk Liquid Storage Treatment Plan
Attachment #9- Waste Storage Units Design and Operations Plan
Attachment #10-Stabilization/Debris Treatment Plan
Attachment #13-Surface Impoundments Design Operations Plan
Attachment #14-Landfill Design, Operations, and Response Action Plan
Attachment #16-Construction Quality Assurance Plan
Attachment #17-Landfill Final Cover Design Plan
Attachment #18-Landfill Design Drawings
Attachment #19-Bioremediation Facility Design and Operations Plan
Attachment #22-ORU #2 Organic Recovery Unit #2 and #3 Design & Operations Plan
Attachment #23-Bulk Liquid Storage/Waste Water Treatment Plan
Attachment #25-Thermal Desorber Desorption Unit TDU-1 Design & and Operations Plan

In total, the ODEQ permits for CWMNW are many hundreds of pages. Ongoing inspections and reporting requirements are intended to assure the facility is operated in accordance with the ODEQ permit and that the site operates in compliance with applicable RCRA and ODEQ requirements.

4.3.4 Subtitle C TSDF Demand Characteristics

The Applicant has provided a letter describing the *land use need* for hazardous waste disposal. *See, Appendix F.* This letter explains the factors expected to contribute to the *land use need* to assure adequate land is planned to respond to *environmental needs* for hazardous waste disposal. These factors include:

- Episodic events, like fires or tsunamis, that can increase demands for hazardous waste disposal facilities as part of the disaster clean-up process.

- Recurring waste streams.
- Regulatory reclassification of wastes that elevate waste categories to require management by a Subtitle C TSDF. For example, it is expected that PFAS wastes will be reclassified and require future PFAS contaminated sites to be cleaned up with disposal into a Subtitle C facility. PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals.
- Need for additional bulk liquids evaporation ponds.
- Utilization of on-site aggregate resources to meet the aggregate demands of Subtitle C Facility construction and maintenance.
- Useful life of the facility.

The Applicant’s letter identifies the need for an additional ~576 acres of land area outside the 1000-foot buffer that would be regulatorily for landfilling which results in an exception area of ~935 acres. This is the *land use need* for this Goal Exception application.

4.4 Productive Resource Use Impacts Assessment

For Goal Exceptions for Rural Industrial Development, OAR 660-004-0022(3)(c) requires an evaluation of the loss of productive resource land resulting from the Goal Exception. The majority of the proposed Goal Exception area is located between the existing CWMNW Subtitle C facility to the west and the Columbia Ridge Subtitle D facility to the east and northeast. The Goal Exception area does include some lands to the north of the existing Subtitle C TSDF. The property to the north of that land is part of the Cedar Springs Ranch. Thus, the Goal Exception to the north only creates a narrow new strip of land that can be landfilled and still maintain the required 1000-foot property line setback. Accordingly, the Goal Exception area is already affected by the TSDF uses in the area in ways that limit resource uses. The below subsections describe the existing resource land uses, resource use potential and physical characteristics of the lands where the Goal Exception is proposed. *See, Atlas Pages 2 to 6 and Page 9.*

4.4.1 Township 2 North, Range 20 East Tax Lot 2317

The property is located immediately north of the existing CWMNW Subtitle C TSDF. The property is approximately 157 acres and is approximately 1.0 mile (east-west) by 0.25 miles (north-south). The property is not irrigated. The southernmost thousand feet of the property is located within the *1,000-foot* Subtitle C landfill buffer. The effect of the proposed Goal Exception will be to move the buffer area approximately 320-feet north on this property. The below table summarizes the soil characteristics on this property.

Soil Unit	Percent	Irrigation	Non-Irrigated Capability Class
14B – Krebs silt loam, 2 to 5 percent slope	51.0%	Not Irrigated	6
23B – Olex silt loam, 0 to 5 percent slope	40.5%	Not Irrigated	6
24D – Olex gravelly silt loam, 5 to 20 percent slope	8.5%	Not Irrigated	6

This property is not high-value farmland. The soils on the property are suitable for limited use as rangeland and the property has been used for seasonal grazing over time. However, given its proximity to the existing facility to the south and the CWMNW ownership of the site, the facility buffer use is the priority use for the property and any potential rangeland use is treated as a secondary land use. The potential conversion of the southernmost 320 feet for landfilling activities represents a minimal loss of resource land. This land is the closest to the existing facility and has soils that are limited for agricultural production.

4.4.2 Land Patent 1043 Parcel

The property is l-shaped and located immediately northeast of the existing CWMNW Subtitle C TSDF. The property is approximately 197 acres and at its broadest points is approximately 0.75 miles (east-west) by 0.50 miles (north-south). The property is not irrigated. The westernmost thousand feet of the property is located within the *1,000-foot* Subtitle C landfill buffer. The proposed Goal Exception will place the northern half of the property within the new 1,000-foot buffer area, and the southern half will be within the proposed M-G zoning area. The below table summarizes the soil characteristics on this property.

Soil Unit	Percent	Irrigation	Non-Irrigated Capability Class
14B – Krebs silt loam, 2 to 5 percent slope	44.6%	Not Irrigated	6
23B – Olex silt loam, 0 to 5 percent slope	5.8%	Not Irrigated	6
32B – Ritzville silt loam, 2 to 7 percent slope	49.6%	Not Irrigated	3

This property is not high-value farmland. The soils on the property have limitations that reduce the choice of plants or require special conservation practices and very careful management or are mainly suitable for pasture or rangeland. Furthermore, and given its proximity to the existing facility to the west and the CWMNW ownership of the site, the facility buffer and TSDF expansion uses are the priority uses for the property and its potential use for pasture or rangeland use is only a hypothetical and secondary land use. The potential conversion of the southern portion for landfilling activities represents a minimal loss of resource land, as this land directly abuts the existing facility and contains existing internal access roads between the Subtitle C and Subtitle D TSDFs.

4.4.3 Land Patent 810684 Parcel

The property is l-shaped and located immediately east of the existing CWMNW Subtitle C TSDF. The property is approximately 286 acres and at its broadest points is approximately 0.75 miles (east-west) by 0.70 miles (north-south). The property is not irrigated. The westernmost thousand feet of the property is located within the *1,000-foot* Subtitle C landfill buffer. The proposed Goal Exception will place the entirety of the property within the proposed M-G zoning area and will contain a new landfill (identified as Landfill L15 on Atlas Page 5). The below table summarizes the soil characteristics on this property.

Soil Unit	Percent	Irrigation	Non-Irrigated Capability Class
4C – Blalock loam, 2 to 12 percent slope	23.3%	Not Irrigated	6
14B – Krebs silt loam, 2 to 5 percent slope	2.3%	Not Irrigated	6
23B – Olex silt loam, 0 to 5 percent slope	5.4%	Not Irrigated	6
24E – Olex gravelly silt loam, 20 to 40 percent slope	1.1%	Not Irrigated	6
32B – Ritzville silt loam, 2 to 7 percent slope	49.6%	Not Irrigated	3
56B – Willis silt loam, 2 to 5 percent slope	24.4%	Not Irrigated	3

This property is not high-value farmland and portions have been used for the extraction of clay that is used in the operation of the existing Subtitle C TSDF. The soils on the property have limitations that reduce the choice of plants or require special conservation practices and very careful management or are mainly suitable for pasture or rangeland. Furthermore, and given its proximity to the existing facility to the west and the CWMNW ownership of the site, the landfill use is the priority use for the property and its potential use for pasture or rangeland use is only a hypothetical one as in addition being used for clay extraction the property also contains several roads that have long been used for internal access between the Subtitle C and Subtitle D TSDFs.

4.4.4 Property Line Adjustment 1, Parcel # 1

The property is l-shaped and abuts the southeast corner of the existing CWMNW Subtitle C TSDF. The property is approximately 196 acres and at its broadest points is approximately 1.14 miles (east-west) by 0.50 miles (north-south). The property is not irrigated. The westernmost thousand feet of the property is located within the 1,000-foot Subtitle C landfill buffer. The entire property will serve as part of the new 1,000-foot buffer area around the existing and proposed landfill expansion areas. The below table summarizes the soil characteristics on this property.

Soil Unit	Percent	Irrigation	Non-Irrigated Capability Class
4C – Blalock loam, 2 to 12 percent slope	4.2%	Not Irrigated	6
14D – Krebs silt loam, 5 to 20 percent slope	18.5%	Not Irrigated	6
14E – Krebs silt loam, 20 to 40 percent slope	17.8%	Not Irrigated	6
23B – Olex silt loam, 0 to 5 percent slope	1.7%	Not Irrigated	6
24E – Olex gravelly silt loam, 20 to 40 percent slope	40.7%	Not Irrigated	6
32B – Ritzville silt loam, 2 to 7 percent slope	4.1%	Not Irrigated	3
56B – Willis silt loam, 2 to 5 percent slope	1.9%	Not Irrigated	3
58 – Xeric Torrfluvents, nearly level	11.1%	Not Irrigated	6

This property is not high-value farmland and it constitutes the break from the plateau down to Alkali Canyon. In addition to the topographical limitations, the small areas of the property that are relatively flat contain soils with limitations that reduce the choice of plants or require special conservation practices and very careful management. Furthermore, the property contains the existing access to the access points to Cedar Springs Lane and the access road between the Subtitle C TSDf and the railyard to the east. Converting the entirety of the property to buffer area will result in no practical loss of resource land given the topographical limitations and the existing use for interior access roads.

4.4.5 Property Line Adjustment 2, Parcel # 1

The property is approximately 90 acres and at its broadest points is approximately 0.19 miles (east-west) by 0.75 miles (north-south). The property is not irrigated. The entire property will serve as part of the new 1,000-foot buffer area to the east and northeast of the proposed landfill expansion area. The below table summarizes the soil characteristics on this property.

Soil Unit	Percent	Irrigation	Non-Irrigated Capability Class
4C – Blalock loam, 2 to 12 percent slope	20.1%	Not Irrigated	6
14B – Krebs silt loam, 2 to 5 percent slope	10.2%	Not Irrigated	6
23B – Olex silt loam, 0 to 5 percent slope	69.6%	Not Irrigated	6

This property is not high-value farmland as it is composed entirely of soils that have severe limitations that make them generally unsuitable for cultivation. Use of these soils is mainly restricted to pasture and rangeland; however, the property is traversed by internal access roads between the Subtitle C and Subtitle D TSDfS. Converting the entirety of the property to buffer area will result in no practical loss of resource land given the severe soil limitations and the existing use for interior access roads.

4.5 Volume 2 Atlas of Maps

The County concludes that the mapping and information contained in the *Volume 2 Atlas of Maps* is accurate and factual in all respects and is based upon the most up-to-date and reliable information available and contains the type of information on which the County routinely relies. All direct references to Volume 2, in part or whole, in this Section 4 and in the Conclusions of Law in Section 5 are herewith deemed a concurrent incorporation and adoption of said reference as a finding of fact.

4.6 Volume 3 Alternative Sites Analysis and Compatibility Analysis

The County concludes the information and computations in Volume 3 to be correct and accurate, and are properly treated as facts upon which a land use decision would be properly based. All direct references to Volume 3, in part or whole, in this Section 4 and in the Conclusions of Law in Section 5 are herewith deemed a concurrent incorporation and adoption of said reference as a finding of fact consistent with and including the County and City findings of fact established herein.

4.7 Statement of Need and Comparative Advantages

RCRA requires hazardous waste to be managed *cradle to grave*, as does Oregon Law. The need for proper treatment, storage, and disposal of hazardous wastes is established by Federal and Oregon Law and those laws include specific provisions for Subtitle C TSDFs, and thus, recognize the Subtitle C TSDFs are necessary to properly manage hazardous waste. A Subtitle C TSDF is the appropriate *grave* for many types of hazardous wastes. These regulations establish the public need for places that provide safe, secure, and economical locations to dispose of hazardous wastes.

Under Oregon Law and Administrative Rules, the need for new Subtitle C TSDF construction and capacity delivery is evaluated by ODEQ as a preliminary step in the environmental permitting process. To get to this regulatory step with ODEQ, the land use jurisdiction must issue a Land Use Compatibility Statement that verifies the hazardous waste disposal facility will be located where local land use regulations allow the facility.

Because of this regulatory structure, *Need*, means different things in the two regulatory steps. The first step is the much broader *land use need* that is based upon long-term projections of potential hazardous waste generation and the amount of land area that could be appropriate for future ODEQ permitting. The *land use need* functions to protect the environment by providing a sufficient area in an appropriate location with land use approvals in place to undertake future ODEQ permitting to respond to future hazardous waste stream flows. *See, Section 4.3.4 above and the letter in Appendix F.*

The *land use need* is important to assure that siting decisions are made in a deliberate manner through the application of Oregon's land use planning process well in advance of any specific *environmental need* arising. The second step is a more particular determination of *environmental need* made by ODEQ through the permitting process for individual landfills/landfill cell permitting; the ODEQ need determination is made on a shorter time horizon and permits landfilling based upon the expected *environmental need* for additional Subtitle C TSDF capacity.

The *land use need* recognizes that the *environmental need* evolves over time and is planned to account for likely or potential regulatory changes and episodic events that change waste stream flows both in the near term and the long term. In the regulatory context, new science and information about materials that pose health risks can be identified and then these materials become targeted for clean-up and must be located in an appropriate facility. The letter in Appendix F considers expected regulatory changes that will require heightened levels of care, handling and disposal for PFAS. PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals.

The practical effect on land use of the Subject Properties from this two-step regulatory process concerning *need* is that the change in the land use maps for the Goal Exception will not change any land uses on the ground, until such future time as *environmental need* is identified by CWMNW to require additional landfilling capacity and ODEQ confirms this *environmental need* through the environmental permitting process. If the *land use need* is not determined and satisfied prior to realization of the *environmental need*, the *environmental need* cannot be met.

The subject Goal Exception serves to identify an appropriate location in Gilliam County that determines and satisfies the *land use need* where ODEQ can approve future TSDF activities to meet an *environmental need*. Thus, the particularity of a Goal Exception for Rural Industrial Development for a Subtitle C TSDF is based upon the *land use need* that could potentially be required to protect the environment in the future to be followed by specific determinations to protect

the environment made through future ODEQ applications. Those ODEQ applications will evaluate the shorter term need for Subtitle C TSDF capacity.

Given the particularity of *land use need* for Rural Industrial Development to allow expansion of a Subtitle C TSDF, the economic factors that constitute comparative advantages are numerous and include the following:

- Economic location (central) with terminal facilities and equipment. Because most waste is heavy and bulky, the ability to ship by train is a major comparative advantage. The CWMNW site is inland far enough to be cost effective to ship to from interior parts of the Northwestern United States, while still being relatively close to the two largest metropolitan areas of Seattle and Portland. The site has access to a Class 1 railroad via a small segment of short-line that connects to a large railyard in which to handle material. The site is also located directly off Interstate 84.
- Any duplication of facilities or labor resources is economically disadvantageous, such as:
 - Duplicate leachate handling systems and staff
 - Duplicate material handling or transfer systems and staff
 - Duplicate labs and lab staff
 - Duplicate waste recovery equipment, facilities, and staff
 - Duplicate stabilization equipment, facilities, and staff

All the above facilities, equipment and staff are already present at the CWMNW site and will continue to be for many years even without an expansion.

- The intrinsic site conditions of CWMNW's existing and proposed expansion areas minimize exogenous environmental risks and are a comparative advantage because environmental risk reduction is central to the business activity. The CWMNW site has a number of intrinsic site conditions that minimize exogenous environmental risks, including:
 - Geology with no faults from recent geologic time and very few small earthquakes have been recorded over the last 170+ years.
 - Hydrology that does not direct groundwater toward major waterways and there are no wetlands or floodplain
 - Arid climate that minimizes leachate production
 - No known threatened or endangered species in the area
 - Significant locational separation from population centers

5 CONCLUSIONS OF LAW

The following section provides proposed Conclusions of Law the County Court can adopt and include in an Ordinance approving the Goal Exception.

5.1 Oregon Revised Statutes Criteria

This section provides conclusions of law addressing compliance with all the State's statutory criteria.

197.732 Goal exceptions; criteria; rules; review.

(1) As used in this section:

- (a) “Compatible” is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.
- (b) “Exception” means a comprehensive plan provision, including an amendment to an acknowledged comprehensive plan, that:
 - (A) Is applicable to specific properties or situations and does not establish a planning or zoning policy of general applicability;
 - (B) Does not comply with some or all goal requirements applicable to the subject properties or situations; and
 - (C) Complies with standards under subsection (2) of this section.

Conclusions of Law: The Gilliam County Court concludes the requested Statewide Planning Goal Exception has properly applied the terms “compatible” and “exception” as used in the subsequent findings herein, and that CWMNW’s request for a Goal 3 Exception is the kind of Exception allowed by ORS 197.732(1).

(2) A local government may adopt an exception to a goal if:

- (c) The following standards are met:
 - (A) Reasons justify why the state policy embodied in the applicable goals should not apply;

Conclusions of Law: The Gilliam County Court concludes that the state policy to protect farmland embodied by Statewide Planning Goal 3 should not be applied to the Subject Property because the property is uniquely suited for Rural Industrial Development for hazardous waste handling and disposal within one or more RCRA Subtitle C facilities, versus the highest and best agricultural use of the property being rangeland of limited productivity. The County Court concludes the Land Conservation and Development Commission (LCDC) has adopted specific administrative rules for Rural Industrial Development Goal Exceptions which are found at OAR 660-004-0020(3) and the Court herewith incorporates and adopts the conclusions of law below addressing this rule, and concludes accordingly, the reason for the Goal Exception to Statewide Planning Goal 3 set forth therein satisfies the requirements of ORS 197.732(2)(c)(A). The County Court further concludes Statewide Planning Goal 3 should not be applied to the Subject Property for the following reasons:

1. Statewide Planning Goal 2 and its implementing rule at OAR 660-004 include specific requirements for Goal Exceptions for Rural Industrial Development. The County Court herewith incorporates and adopts the conclusions of law addressing the exception requirements of Statewide Planning Goal 2 and OAR 660-004-0022(3) for Rural Industrial Development and those conclusions explain how the specific requirements for Goal Exception under ORS 197.732 are satisfied.
2. Statewide Planning Goal 6 directs local governments to prepare land use plans that maintain and improve the land, water and air quality of the State of Oregon. Areas of the state, like the Portland Harbor and many brownfields throughout the state, require clean-up from past contamination for land uses contemplated by local comprehensive plans to be implemented. The Subject Property is well located and already contains existing facilities to support the proper disposal of contamination waste that requires disposal in a Subtitle C TSDF. This Gilliam County action will support the development and redevelopment of contaminated areas elsewhere in the state and advance Goal 6 statewide.

3. Statewide Planning Goal 7 directs local governments to prepare land use plans to protect people and property from natural hazards. Disasters have and will occur in the future. When disasters occur, the clean-up and restoration become the priority and some disasters can result in the unintentional formation of hazardous wastes. The subject Goal Exception will assure land use planning is in place in advance of ODEQ and EPA permitting that would be required to dispose of such wastes in response to a disaster event. Further, by locating hazardous waste disposal facilities in an area that is not located within any regulatory floodplain or an area that has experienced material seismic activity, the integrity of the facility remains intact to respond to natural hazard incidents in other areas.
4. Statewide Planning Goals 9, 10, and 14, in combination, direct local governments to prepare local land use plans that will ensure lands will be planned for and available to accommodate most of the residential and employment land development needs of the state within urban areas. Urban land use plans throughout the state identify certain areas for urban development that are constrained by contamination issues. Planning sufficient land in an appropriate setting for proper hazardous waste disposal will support cleanup of contaminated lands inside UGBs that are planned for redevelopment areas, and this will advance the objectives for urban development in these areas embodied in Statewide Planning Goals 9, 10, and 14.

(B) Areas that do not require a new exception cannot reasonably accommodate the use;

Conclusions of Law: The County Court concludes the Land Conservation and Development Commission (LCDC) has adopted specific administrative rules for Goal Exceptions which are found at OAR 660-004 and the Court herewith incorporates and adopts the conclusions of law below addressing this rule, and concludes the reason for the Goal Exception to Statewide Planning Goal 3 set forth therein satisfy the requirements of ORS 197.732(2)(c)(B). The County Court also incorporates and adopts herein the Applicant's Volume 3 Alternatives Analysis and concludes based upon that analysis that there are no other areas in Gilliam County that can reasonably accommodate a Subtitle C TSDF without an exception.

(C) The long term environmental, economic, social and energy consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site; and

Conclusions of Law: The Gilliam County Court concludes the Land Conservation and Development Commission (LCDC) has adopted specific administrative rules for Goal Exceptions which are found at OAR 660-004 and the Court herewith incorporates and adopts the conclusions of law below addressing this rule, and concludes accordingly, the reason for a Goal Exception to Statewide Planning Goal 3 set forth therein satisfies the requirements of ORS 197.732(2)(c)(C). The County Court also incorporates and adopts herein the Applicant's Volume 3 Alternatives Analysis, and concludes based upon that analysis the long-term environmental, social, economic, and energy ("ESEE") consequences of any other potential location for a Subtitle C TSDF requiring a Goal Exception would be at least as adverse, if not more adverse, than the proposed location.

(D) The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts.

Conclusions of Law: The Gilliam County Court concludes the Land Conservation and Development Commission (LCDC) has adopted specific administrative rules for Goal Exceptions which are found at OAR 660-004 and the Court herewith incorporates and adopts the conclusions

of law below addressing this rule, and concludes accordingly, the reason for a Goal Exception to Statewide Planning Goal 3 set forth therein satisfies the requirements of ORS 197.732(2)(c)(D). The County Court also incorporates and adopts herein the Applicant's Volume 3 Alternatives Analysis and concludes based upon that analysis that the proposed Goal Exception is located on land between two existing TSDFs and this land use pattern has existed for decades and the rangeland uses on surrounding lands have continued over the period with no apparent impacts of any kind.

5.2 Oregon Administrative Rules Criteria

This section provides conclusions of law addressing compliance with all the State's administrative rule criteria.

660-004-0020

Goal 2, Part II(c), Exception Requirements

- (1) If a jurisdiction determines there are reasons consistent with OAR 660-004-0022 to use resource lands for uses not allowed by the applicable Goal or to allow public facilities or services not allowed by the applicable Goal, the justification shall be set forth in the comprehensive plan as an exception. As provided in OAR 660-004-0000(1), rules in other divisions may also apply.

Conclusions of Law: The Gilliam County Court concludes approval of the subject land use application will be adopted by ordinance amending the comprehensive plan and the adopting ordinance will incorporate and adopt the justification for Goal Exception into the comprehensive plan as provided herein.

- (2) The four standards in Goal 2 Part II(c) required to be addressed when taking an exception to a goal are described in subsections (a) through (d) of this section, including general requirements applicable to each of the factors:
 - (a) "Reasons justify why the state policy embodied in the applicable goals should not apply." The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations, including the amount of land for the use being planned and why the use requires a location on resource land;

Conclusions of Law: The Gilliam County Court herewith incorporates and adopts the conclusions of law setting out the reasons justifying the proposed Rural Industrial Development pursuant to OAR 660-004-0022(3) below, and concludes here, justification for the exception is sufficient by virtue of the reasons set forth to address that rule alone.

Notwithstanding the foregoing conclusion, the County Court concludes the proposed Rural Industrial Development is unique and is a use for which there are additional reasons that justify why the policies embodied by Statewide Planning Goal 3 (and Goal 4 to the extent it might be applicable) should not apply to the properties for the requested exception and these reasons include the following:

1. Statewide Planning Goal 6 directs local governments to prepare land use plans that maintain and improve the land, water, and air quality of the State of Oregon. Areas of the state, like the Portland Harbor and many brownfields throughout the State, require clean-up from past contamination for land uses contemplated by local comprehensive plans to be implemented. The Subject Properties are well located and already contain existing facilities to support the proper disposal of contaminated waste that requires disposal in a Subtitle C TSDF. This Gilliam County action will support the development and redevelopment of contaminated areas elsewhere in the state and advance Goal 6 statewide.

2. Statewide Planning Goal 7 directs local governments to prepare land use plans to protect people and property from natural hazards. Disasters have and will occur in the future. When disasters occur, the clean-up and restoration becomes the priority and some disasters can result in the unintentional formation of hazardous wastes. The subject Goal Exception will assure land use planning is in place in advance of ODEQ and EPA permitting that would be required to dispose of such wastes in response to a disaster event.
3. Statewide Planning Goals 9, 10, and 14, in combination, direct local governments to prepare local land use plans that will ensure lands will be planned to and available to accommodate most of the residential and employment land development needs of the state within urban areas. Urban land use plans throughout the state identify certain areas for urban development that are constrained by contamination issues. Planning sufficient land in an appropriate setting for proper hazardous waste disposal will support cleanup of contaminated lands inside UGBs that are planned for redevelopment areas and this will advance the objectives for urban development in these areas embodied in Statewide Planning Goals 9, 10, and 14.

With respect to the amount of land in the requested Goal Exception, Gilliam County herewith incorporates and adopts the findings in above Sections 4.3.4 and 4.7. Based upon these analyses, Gilliam County concludes that the proposed Subtitle C TSDF expansion needs to include ~576 acres of additional land for actual landfilling activity, plus additional room required for the 1000-foot buffer. Gilliam County concludes the proposed Goal Exception area depicted on Atlas Page 5 depicts the 1,000-foot buffer for landfilling activities and would result in 459 acres of additional area planned to allow landfilling in addition to the 117 acres of existing M-G area west of the existing TSDF areas, for a total of ~576 acres that would be available for future Subtitle C landfilling activities that are not currently developed. Gilliam County concludes the requested amount of land is consistent with the identified *land use need* and is appropriate in all ways for the size and scale necessary to continue facility operations and ensure land use plans are in place that will allow the types of environmental protections and permitting deemed appropriate by ODEQ and the EPA for hazardous waste disposal.

- (b) "Areas that do not require a new exception cannot reasonably accommodate the use". The exception must meet the following requirements:
 - (A) The exception shall indicate on a map or otherwise describe the location of possible alternative areas considered for the use that do not require a new exception. The area for which the exception is taken shall be identified;

Conclusions of Law: The Gilliam County Court herewith incorporates and adopts the Maps at Atlas Pages 15 to 32 and the related Volume 3 Alternative Sites Analysis, and concludes based thereupon, that the subject exception site along with possible alternative areas that do not require an exception were identified and analyzed.

- (B) To show why the particular site is justified, it is necessary to discuss why other areas that do not require a new exception cannot reasonably accommodate the proposed use. Economic factors may be considered along with other relevant factors in determining that the use cannot reasonably be accommodated in other areas. Under this test the following questions shall be addressed:
 - (i) Can the proposed use be reasonably accommodated on nonresource land that would not require an exception, including increasing the density of uses on nonresource land? If not, why not?

Conclusions of Law: The Gilliam County Court concludes that the nature of the use requires a reasonably large expanse of land to accommodate any new or expanded Subtitle C TSDF to assure it can accommodate the required 1,000-foot property line setback. Gilliam County herewith incorporates and adopts Section 2 in the *Volume 3 Alternatives Analysis and Compatibility Analysis* and based thereupon concludes the proposed use cannot reasonably be accommodated on any site that is non-resource or that would not also require a Goal Exception. The *Volume 3 Alternatives Analysis and Compatibility Analysis* examined eight potential sites in Gilliam County that would not require a new Goal Exception (Alternative Sites A-H in the analysis). Every potential alternative site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources, including, but not limited to leachate collection and treatment systems, labs, scales, and stabilization bins, as well as all the staff needed to operate and maintain those facilities. In addition to the comparative disadvantages that would apply to any potential alternative site for an additional Subtitle C TSDF, as explained in more detail in *Volume 3*, none of these alternatives would be appropriate for siting a second Subtitle C TSDF in Gilliam County for the following reasons:

- After accounting for the 1,000-foot property line setback, Site A would contain only 25 acres of land available for TSDF activities. Existing uses of the site would be incompatible with a hazardous waste TSDF. The site contains open air grain bins that are partially underground and near the center of the industrial area between the majority of the industrially designated area and the railyard facilities. This would require hazardous waste handling between the railyard and any disposal site to go around (but very near) those open-air grain bins. *See, Atlas Pages 16 and 17.*
- After accounting for the 1,000-foot property line setback, Site B would contain only 36 acres of land available for TSDF activities. Significant additional land acquisition outside the M-G area would be required for the 1000-foot property lines setback to supply a TSDF size with sufficient economy of scale to function properly. The site is within a UGB and too near to several urban uses, and therefore, it is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. *See, Atlas Pages 18 and 19.*
- After accounting for the 1000-foot property line setback, Site C would not contain any land available for TSDF activities. Significant additional land acquisition outside the industrial designated areas would be required for the 1000-foot property line setback to supply any land available for landfilling that would comply with the setback requirement TSDF size with sufficient economy of scale to function properly. The site is within one mile of a UGB and it is much too close to the Columbia River, which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. The land outside the river is steep and would be difficult, if not impossible, on which to construct a TSDF. *See, Atlas Pages 20 and 21.*
- The vast majority of Site D is within one mile of an identified recreation area, Willow Creek, which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. While the site has potential for rail access, the location of the railroad is down along Willow Creek. Inter-modal transloading is one of the areas of risk for facility operation, so putting this in a location so close to a natural area that the TSDF itself is supposed to be separated from by at least one mile is not a reasonable alternative. Moreover, the area where the rail is located is steep and there is not much flat space in which to construct a new railyard. *See, Atlas Pages 22 and 23.*
- After accounting for the property line setback, Site E would contain only 25 acres of land available for TSDF activities. Significant additional land acquisition outside the M-G area

would be required for the 1000-foot property line setback to supply a TSDF size with sufficient economy of scale to function properly. The site is within one mile of a UGB (actually immediately adjacent to a UGB) which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. In addition to proximity of the UGB generally, the site is also too close under the separation requirements of those administrative rules due to proximity of uses that include churches, schools, residential areas and airports. *See, Atlas Pages 24 and 25.*

- After accounting for the 1000-foot property line setback, Site F would not contain any land available for TSDF activities. Significant additional land acquisition outside the industrial designated areas would be required for the 1000-foot property line setback to supply any land available for landfilling that would comply with the property line setback requirement and yield a TSDF size with sufficient economy of scale to function properly. The site contains a residential subdivision, which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. *See, Atlas Pages 26 and 27.*
- After accounting for the 1000-foot property line setback, Site G would not contain any land outside of the Columbia River available for TSDF activities. The site is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015 because it is too close to or overlaps with the Columbia River. The land outside the river is steep and would be difficult, if not impossible, on which to construct a TSDF. *See, Atlas Pages 28 and 29.*
- After accounting for the 1,000-foot property line setback, Site H would contain only 53 acres of land available for TSDF activities. Significant additional land acquisition outside the L-I area would be required for the 1000-foot property line setback to supply a TSDF size with sufficient economy of scale to function properly. The site is within a mile of a UGB (actually adjacent to a UGB) which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. In addition to proximity of the UGB generally, the site is also too close under the separation requirements of those administrative rules due to proximity of uses that include churches, schools, residential areas and airports. *See, Atlas Pages 30 and 31.*

With respect to “*density of uses*”, the Gilliam County Court concludes that the concept of density does not apply in the context of a TSDF. Subtitle C TSDFs, and for that matter Subtitle D TSDFs, are typically designed to maximize the available airspace for disposal. However, there are practical engineering limitations on how “deep” the excavation can go for the liner system to be installed and how “tall” the disposal pyramid can ultimately be based upon the size of the base, required 3 to 1 side-slopes, hydrostatic loads, and structural loads. For Subtitle C TSDFs, the design must also consider how much or how many different types of materials are appropriate within a single cell or TSDF. In practice, CWMNW already constructs the Subtitle C TSDFs to maximize the available airspace, so *densifying the use* is not a practical solution to reduce the amount of land that will ultimately be required.

The other issue is that Subtitle C TSDFs must be operated at sufficient scale to meet all the environmental regulatory requirements. This reality is reflected in the Gilliam County land use regulations which require Subtitle C TSDFs to be at least 200 acres in size and maintain a 1,000 buffer, which is also required by Oregon Administrative Rule⁹. As such, it is not practical (let alone a good idea) to construct a number of small and really deep and tall Subtitle C TSDFs on sites that do not require a Goal Exception or on nonresource lands (Gilliam County does not have a Rural Use or other nonresource land use category).

⁹ See, GCZO Section 4.060(B)(9).

- (ii) Can the proposed use be reasonably accommodated on resource land that is already irrevocably committed to nonresource uses not allowed by the applicable Goal, including resource land in existing unincorporated communities, or by increasing the density of uses on committed lands? If not, why not?

Conclusions of Law: Gilliam County herewith adopts and incorporates the analysis in Section 2.3 of the *Volume 3 Alternatives Analysis and Compatibility Analysis* and concludes accordingly that that there are no resources zoned properties in Gilliam County that are devoted to nonfarm or non-forest uses of sufficient size to accommodate an additional Subtitle C TSDF in Gilliam County.

- (iii) Can the proposed use be reasonably accommodated inside an urban growth boundary? If not, why not?

Conclusions of Law: Gilliam County concludes siting a new Subtitle C TSDF is not appropriate within an Urban Growth Boundary. Moreover, siting a Subtitle C TSDF within an urban growth boundary would not be consistent with the locational separation requirements of OAR 340-120-0010 and OAR 340-120-0015.

- (iv) Can the proposed use be reasonably accommodated without the provision of a proposed public facility or service? If not, why not?

Conclusions of Law: Gilliam County concludes this criterion is not applicable or applicable only in a very limited way because the proposed use is appropriately rural and does not require any urban levels of public facilities or services. Road access, which is something required by OAR 340-120, is available for the use, and rural road access is appropriate in all ways for the proposed use.

- (C) The “alternative areas” standard in paragraph B may be met by a broad review of similar types of areas rather than a review of specific alternative sites. Initially, a local government adopting an exception need assess only whether those similar types of areas in the vicinity could not reasonably accommodate the proposed use. Site specific comparisons are not required of a local government taking an exception unless another party to the local proceeding describes specific sites that can more reasonably accommodate the proposed use. A detailed evaluation of specific alternative sites is thus not required unless such sites are specifically described, with facts to support the assertion that the sites are more reasonable, by another party during the local exceptions proceeding.

Conclusions of Law: Gilliam County Court herewith adopts and incorporates the *Volume 3 Alternatives Analysis and Compatibility Analysis* as its basis to evaluate the alternative areas standard in *Paragraph B* and the County concludes the analysis does identify specific sites and analyze thereby meeting or exceeding the analysis standards set forth in OAR 660-004-0020(C).

- (c) “The long-term environmental, economic, social and energy consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site.” The exception shall describe: the characteristics of each alternative area considered by the jurisdiction in which an exception might be taken, the typical advantages and disadvantages of using the area for a use not allowed by the Goal, and the typical positive and negative consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts. A detailed evaluation of specific alternative sites is not required unless such sites are specifically described with facts to support the assertion that the sites have significantly fewer adverse impacts during the local exceptions proceeding. The exception shall include the reasons why the consequences of the use at the chosen site are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site. Such reasons shall include but are not limited to a description of: the facts used to determine which resource land is least productive, the ability to sustain resource uses near the proposed use, and the long-term economic impact on the general area caused by

irreversible removal of the land from the resource base. Other possible impacts to be addressed include the effects of the proposed use on the water table, on the costs of improving roads and on the costs to special service districts;

Conclusions of Law: Gilliam County Court herewith adopts and incorporates Section 3 of the *Volume 3 Alternatives Analysis and Compatibility Analysis* as its basis to evaluate the ESEE consequences of alternative areas in the County that would also require a Goal Exception. The County Court concludes that the *Volume 3 Alternatives Analysis and Compatibility Analysis* includes a broad ESEE consequences analysis in Sections 3.1 and 3.2. The County Court concludes that the analysis explains why the ESEE consequences of the proposed use are not significantly more adverse than would typically result from the same proposal being located in areas requiring a Goal Exception. Further, locating a second Subtitle C TSDf in Gilliam County has more adverse economic, social, environmental and energy consequences than the proposed site which are summarized as follows:

- Negative Economic consequences caused by the duplication of many types of equipment and labor resources.
- Negative Social consequences of dispersing hazardous waste landfilling activities in more than one location in Gilliam County.
- Negative Environmental consequences of dispersing hazardous waste landfilling activities in more than one location in Gilliam County.
- Negative Energy consequences caused by the duplication of many types of equipment and labor resources.

While the Court concludes that the above conclusions are adequate to address the criteria at OAR 660-004-0020(C) and that a detailed evaluation of specific alternative sites is not required, the Court concludes that Sections 3.3 to 3.6 take the additional steps of identifying and analyzing specific alternative sites also requiring an exception. *See also, Atlas Pages 32 to 36.* That analysis identified two potential sites and both of those sites are shown to have more adverse economic consequences when compared to the proposed site for the following reasons:

- The economic consequences of either alternative site is negative due to duplication of facilities, labor and equipment necessary to operate two Subtitle C TSDFs.
- The social consequences are negative due to impacts on residences in these areas as well as new roads being impacted by the truck hauling of hazardous wastes in rural areas of the County.
- Environmental consequences are negative caused by the opening of a second Subtitle C TSDf in an area where no TSDf impacts currently exist versus a location that is primarily located between two existing TSDf's.
- Energy consequences are slightly negative and are caused primarily by the increased transportation by truck required to reach either of the additional sites and working around existing powerlines or relocating them would be inefficient.

For all the foregoing reasons, the Gilliam County Court concludes the ESEE consequences of expanding the existing Subtitle C TSDf will have no greater net adverse ESEE consequences than any other potential site in Gilliam County that would also require a Goal Exception.

- (d) "The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts." The exception shall describe how the proposed use will be

rendered compatible with adjacent land uses. The exception shall demonstrate that the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. "Compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.

Conclusions of Law: Gilliam County concludes that the 1000-foot property line setback from landfilling will assure compatibility with the surrounding uses and that the same is supported by language in the Comprehensive Plan. Gilliam County also herewith incorporates and adopts the conclusions of law in Section 4 of *Volume 3 Alternatives Analysis and Compatibility Analysis*, and concludes based thereupon, that the nature of the uses in the area do not involve intensive resource activities and that nothing about the proposed Goal Exception is expected to give rise to compatibility issues on surrounding resource lands.

- (3) If the exception involves more than one area for which the reasons and circumstances are the same, the areas may be considered as a group. Each of the areas shall be identified on a map, or their location otherwise described, and keyed to the appropriate findings.

Conclusions of Law: The Gilliam County Court concludes the subject application concerns an exception for a single location, and therefore, OAR 660-004-0020(3) is not applicable to the subject application.

660-004-0022

Reasons Necessary to Justify an Exception Under Goal 2, Part II(c)

An exception under Goal 2, Part II(c) may be taken for any use not allowed by the applicable goal(s) or for a use authorized by a statewide planning goal that cannot comply with the approval standards for that type of use. The types of reasons that may or may not be used to justify certain types of uses not allowed on resource lands are set forth in the following sections of this rule. Reasons that may allow an exception to Goal 11 to provide sewer service to rural lands are described in OAR 660-011-0060. Reasons that may allow transportation facilities and improvements that do not meet the requirements of OAR 660-012-0065 are provided in OAR 660-012-0070. Reasons that rural lands are irrevocably committed to urban levels of development are provided in OAR 660-014-0030. Reasons that may justify the establishment of new urban development on undeveloped rural land are provided in OAR 660-014-0040.

Conclusions of Law: Gilliam County Court concludes that the proposed use is a Rural Industrial Development use conditionally permitted in the M-G industrial zone, and accordingly, the Court concludes the proposed use is Rural Industrial Development which is a use specifically provided for in this Division herein below at OAR 660-004-0022(3), and therefore, reasons justifying why Statewide Planning Goals 3 and 4 should not be applied are set forth below addressing that rule.

- (1) For uses not specifically provided for in this division, or in OAR 660-011-0060, 660-012-0070, 660-014-0030 or 660-014-0040, the reasons shall justify why the state policy embodied in the applicable goals should not apply. Such reasons include but are not limited to the following: There is a demonstrated need for the proposed use or activity, based on one or more of the requirements of Goals 3 to 19; and either
- (a) A resource upon which the proposed use or activity is dependent can be reasonably obtained only at the proposed exception site and the use or activity requires a location near the resource. An exception based on this paragraph must include an analysis of the market area to be served by the proposed use or activity. That analysis must demonstrate that the proposed exception site is the only one within that market area at which the resource depended upon can reasonably be obtained; or
 - (b) The proposed use or activity has special features or qualities that necessitate its location on or near the proposed exception site.

Conclusions of Law: Gilliam County Court concludes that the proposed use is a Rural Industrial Development use conditionally permitted in the M-G industrial zone, and accordingly, the Court concludes the proposed use is Rural Industrial Development which is a use specifically provided

for in this Division herein below at OAR 660-004-0022(3), and therefore, reasons justifying why Statewide Planning Goals 3 and 4 should not be applied are set forth below addressing that rule.

- (3) Rural Industrial Development: For the siting of industrial development on resource land outside an urban growth boundary, appropriate reasons and facts may include, but are not limited to, the following:
- (a) The use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports;
 - (b) The use cannot be located inside an urban growth boundary due to impacts that are hazardous or incompatible in densely populated areas; or
 - (c) The use would have a significant comparative advantage due to its location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities), which would benefit the county economy and cause only minimal loss of productive resource lands. Reasons for such a decision should include a discussion of the lost resource productivity and values in relation to the county's gain from the industrial use, and the specific transportation and resource advantages that support the decision.

Conclusions of Law: Gilliam County Court concludes that the proposed use is a Rural Industrial Development use conditionally permitted in the requested M-G industrial zone, and accordingly, the Court concludes the proposed use is Rural Industrial Development which is a use specifically provided for in OAR 660-004-0022(3). Gilliam County Court adopts the following reasons and facts explaining why the proposed Subtitle C TSDf expansion must be located on resource land outside an urban growth boundary:

1. Subtitle C TSDfS are not appropriate inside an urban growth boundary because the nature of the use is incompatible with densely populated areas. The rule specifically uses the word “hazardous,” and while the facility is engineered, constructed, maintained and operated in a manner intended to minimize potential hazards, the material handled at the facility are designated as hazardous by either the Federal Government or State Government or both. Moreover, OAR 340-120-0015 expressly discourages the siting of new hazardous waste disposal facilities within one mile of any UGB containing a population of 2,500 or less, two miles for any UGB containing populations between 2,500 and 10,000, and three miles from any UGB containing 10,000 people or greater.
2. The Findings in Section 4.7 are herewith incorporated and adopted to explain the need for the facility and the many comparative advantages for an exception that would allow for future expansion of the existing Subtitle C TSDf. Section 4.7 explains how the land use planning process involves consideration of long-term needs for land appropriately designated land that could potentially be determined to be needed through the environmental regulatory processes with ODEQ and EPA. Section 4.7 further explains the numerous comparative advantages associated with an expanded Subtitle C TSDf at the subject location vs. creating a new facility elsewhere. Briefly summarized, the existing facility has numerous labor and equipment resources devoted to the use at the subject location that would need to be duplicated at any other potential site, which puts such alternative sites at a comparative disadvantage to provide economic disposal that also meets the environmental regulatory requirements for responsible disposal.

660-012-0060 (Transportation Planning Rule or TPR)

OAR 660-012-0060

Plan and Land Use Regulation Amendments

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

Conclusions of Law: The Gilliam County Court concludes that vehicular traffic to and from the area proposed for exception and zone change to M-G is from Cedar Springs Lane which is a County Road. This County Road is currently used to access the site for trucks hauling waste bound or the Subtitle C TSDf consistent with the current functional classification and nothing about the proposal will alter the function of the roadway. The proposal therefore does not require a change in the functional classification of an existing or planned transportation facility.

(b) Change standards implementing a functional classification system; or

Conclusions of Law: The Gilliam County Court herewith concludes that the proposed Goal Exception is to expand an existing land use and will have no effect on standards that implement the County's functional classification system.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Conclusions of Law: The Gilliam County Court concludes that vehicular traffic to and from the area proposed for the Goal Exception and zone change to M-G is from Cedar Springs Lane which is a County Road. This County Road is currently used to access the site for trucks hauling waste bound or the Subtitle C TSDf consistent with the current functional classification and nothing about the proposal will alter the types or levels of travel or access to the site.

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Conclusions of Law: The Gilliam County Court concludes that the most recent TSP prepared by Kittelson and Associates in 2015¹⁰ shows intersection of Cedar Springs Lane where it connects to the State Highway System at Oregon 19 (a Regional Highway) to operate at Level of Service A with a calculated 2035 V/C ratio of 0.06 which is less than the standard of 0.75. Accordingly, Gilliam County Court concludes the proposed amendment is not anticipated to degrade the

¹⁰ TSP was adopted by Gilliam County Ordinance No. 2015-02.

performance of any existing or planned transportation facility below the performance standards identified in the TSP.

- (C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Conclusions of Law: The Gilliam County Court concludes that the most recent TSP prepared by Kittelson and Associates in 2015 does not show any intersections in the area that are otherwise not projected to not meet the identified performance standards in the TSP.

5.3 Gilliam County Criteria

This section provides conclusions of law addressing compliance with all of Gilliam County's criteria.

SECTION 10.050 APPROVAL CRITERIA FOR AMENDMENTS

A. The applicant for an amendment must show that the proposed change conforms with the Comprehensive Plan.

Conclusions of Law: Gilliam County Court has reviewed the Comprehensive Plan and the foregoing findings of fact and conclusions of law for Goal Exception and concludes accordingly that the requirements for Goal Exception have been satisfied and the M-G zoning is the zoning the County applies to exception lands intended to be used for Subtitle C TSDF purposes.

- B. A plan or land use regulation amendment significantly affects a transportation facility if it:
1. Changes the functional classification of an existing or planned transportation facility;
 2. Changes standards implementing a functional classification system;
 3. Allows types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or
 4. Would reduce the level of service of the facility below the minimum acceptable level identified in the Transportation System Plan.

Conclusions of Law: Gilliam County Court herewith incorporates and adopts the above conclusions of law addressing the Transportation Planning Rule (OAR 660-012-0060) and concludes accordingly that the proposed Goal Exception and rezoning to M-G will not change the functional classification of any existing or planned transportation facility, nor change the functional class standards, nor allow types or level of land use that would result in levels of travel or access that are inconsistent with the functional class of a transportation facility, nor reduce the level of service below the minimum acceptable level identified in the TSP.

- C. Amendments to the comprehensive plan and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the function, capacity, and level of service of the facility identified in the Transportation System Plan. This shall be accomplished by one of the following:
1. Limiting allowed land uses to be consistent with the planned function of the transportation facility;
 2. Amending the Transportation System Plan to ensure that existing, improved, or new transportation facilities are adequate to support the proposed land uses consistent with the requirement of the Transportation Planning Rule; or
 3. Altering land use designations, densities, or design requirements to reduce demand for automobile travel needs through other modes.

Conclusions of Law: Gilliam County Court herewith incorporates and adopts the above conclusions of law addressing the Transportation Planning Rule (OAR 660-012-0060) and concludes accordingly that the proposed amendments will not significantly affect a transportation facility.

ARTICLE 4. USE ZONES

SECTION 4.060 M-G GENERAL INDUSTRIAL ZONE

B. CONDITIONAL USES PERMITTED. Land and buildings in an M-G Zone may be used by the following uses and their accessory uses, subject to the standards and conditions attached to such use as provided by Sections 7.010 through 7.040, inclusive, and when approved pursuant to the Conditional Use process.

9. Hazardous Waste Facility provided that:

- a. The minimum lot size is 200 acres, except that two or more continuous lots may satisfy this requirement; and

Conclusions of Law: The expanded hazardous waste facility will be composed of 8 parcels that comprise a total of 1,567 acres.

- b. An agreement is in effect with Gilliam County, reviewable every 5 years, that requires:
 - (1) Payment of roadway improvement and maintenance fees to the County for use of the County road leading to the facility; and
 - (2) Payment of a host fee to the County for all waste received and managed at the facility regardless of whether the waste is disposed of on site.

Exception: If waste for which a host fee has been paid to the County is subsequently managed or disposed of at another facility that is also a party to a host fee agreement with the County, no additional host fee will be due to the County.

Conclusions of Law: There is an existing on-going agreement in place between the Applicant and Gilliam County that was initially executed February 3, 1988. The agreement stipulates that it shall be reviewed by the Gilliam County Court at five year intervals and establishes that the Applicant shall pay an annual host fee to the County for maintaining Cedar Springs Road and the general purpose of enhancing Gilliam County's economic development opportunities.

- c. The facility is operated pursuant to a hazardous waste facility management plan as described in Subsection D of this section.

Conclusions of Law: The facility is operated pursuant to a management plan as outlined in the conclusions of law for Subsection D below.

D. HAZARDOUS WASTE FACILITY MANAGEMENT PLAN. For the purpose of Subsection B.9 of this section, a "hazardous waste facility management plan" shall consist of all permits issued under ORS Chapter 466 by the Oregon Environmental Quality Commission ("EQC") and/or Oregon Department of Environmental Quality ("DEQ"), plus any agreements between the County and the operator and any conditions imposed by the County pursuant to this subsection. The County shall review the management plan at the time of any DEQ/EQC permit issuance, renewal, or modification that requires a land use compatibility statement from the County. The land use compatibility statement shall be reviewed as a zoning permit pursuant to Section 11.130.B, except that the County Court, Planning Director, or other designated county representative may refer the review to a public hearing if the appropriate official deems a public hearing necessary or beneficial. The County shall issue a land use compatibility statement upon the following findings:

1. The operation or modification complies with the requirements of OAR 340-120-0015 and/or other applicable State statutory or rule requirements; and
2. Any significant adverse impacts of the facility subject to the DEQ/EQC permitting process on public facilities, public services, property values near the site, or similar public interests have been or will

be adequately mitigated or resolved through the DEQ/EQC permitting process, imposition of conditions by the County, or by agreement between the County and the operator.

Conclusions of Law: The existing hazardous waste facility has been in operation since it was initially permitted by ODEQ in 1976 and currently operates under ODEQ Permit No. OR 089 452 353 that was first issued and effective on August 21, 2006. The permit and facility management plan have been renewed and modified at various points in time since, with the most recent modification having been approved by ODEQ on December 16, 2021, as Modification M127. This permit modification authorized the construction of a new container storage unit comprised of five sub-cells in a series of phases. It also removed reference and guidance associated with the former Waste Pile #1 which was certified and clean closed in August of 2020.

In addition, numerous land use compatibility statements (LUCS) for the facility have been issued by Gilliam County over the intervening years. A LUCS was issued in 2007 in connection with the 2006 ODEQ permit renewal.

ARTICLE 7 CONDITIONAL USES

SECTION 7.010 – AUTHORIZATION TO GRANT OR DENY CONDITIONAL USES

A conditional use listed in this ordinance shall be permitted, altered or denied in accordance with the standards and procedures of this ordinance and this article by action of the Planning Commission or Planning Director. In the case of a use existing prior to the effective date of this ordinance, and classified in this ordinance as a Conditional Use, a change in use or in lot area or an alteration of a Conditional Use, a change in use or in lot area or an alteration of structure shall conform with the requirements for a Conditional Use.

A. GENERAL APPROVAL CRITERIA AND CONDITIONS

1. In addition to criteria, standards and conditions that may be set forth in a specific Zone, this Article, or other regulations applicable to a specific Conditional Use shall not be approved or permitted unless the following criteria are met. A Conditional Use may be approved on the Condition or Conditions that the applicant obtain and maintain compliance with other permits and approvals required.
 - a. The proposed use shall be in compliance with the applicable Comprehensive Plan designation and policies.

Conclusions of Law: The existing hazardous waste facility is located on property designated and zoned General Industrial (M-G) in which a Hazardous Waste Facility is a conditionally permitted use subject to the standards of Sections 4.060(B)(9) and (D) of the Gilliam County Development and Zoning Ordinance and these conditional use approval criteria and conditions. By virtue of its continuous operation and current ODEQ permit, the existing facility is found to be in compliance with the following applicable Comprehensive Plan findings and policies, all of which will also apply to the proposed expansion area. Gilliam County specifically identifies the below relevant Comprehensive Plan provisions:

GOAL 2: LAND USE PLANNING

FINDINGS:

2. The County has conducted a review of the following inventories.
 - H) Hazardous Waste Disposal Sites Inventory: Said inventory lists one site within Gilliam County, said site is identified as CWMNW near Arlington. Specific findings concerning the existing CWMNW site are extensive and explain that environmental quality monitoring activities are conducted around the site. Current regulations and monitoring systems applicable to the subject and similar sites are considered adequate; any

modifications or changes in use will be addressed through the ODEQ/EQC permitting process and land use compatibility review.

4. The County has reviewed all factors relating to the need for a buffer area around the Chemical Waste Management, NW hazardous waste disposal site and has determined that the current buffer area required by the applicable ORS combined with the application of Exclusive Farm Use (EFU) Zoning in compliance with that applicable ORS is adequate to provide the protection necessary to protect adjoining land areas and uses. Relative thereto it is the findings of the County that no additional "buffer area" provisions are necessary.

Conclusions of Law (Continued): Gilliam County specifically concludes that the comprehensive plan contains findings that the 1,000-foot buffer area required by ODEQ separates the TSDFs to ensure compatibility with surrounding land uses. With respect to facilities that do not involve landfilling, Gilliam County concludes that ODEQ permitting of those facilities is sufficient to ensure the construction and operation of those facilities will be compatible with surrounding low intensity range land uses. Gilliam County further concludes that the site plan design, specific use locations and similar development components will be specified by ODEQ, subject to Land Use Compatibility Statements review by County Planning when specific ODEQ permit changes are requested.

GOAL 11: PUBLIC FACILITIES AND SERVICES

FINDINGS

7. A site for the treatment and disposal of environmentally hazardous and similar types of toxic wastes is currently operating near Arlington and is shown on the Plan Map. Site monitoring and surveillance is performed on a regular basis by both the Department of Environmental Quality and the operator pursuant to license conditions. The facility was established prior to imposition of the current County Zoning designation in 1977 and operated as a pre-existing non-conforming use until October 25, 2000. On this date, the County amended the zoning designation to authorize hazardous waste management facilities as permitted use in the zone, subject to certain pre-conditions designed to enable the County to address and mitigate impacts of the facility and any future modifications or changes of use. The County changed the zoning in recognition of the long existence of the facility, its likely continuation for the foreseeable future, and its importance to both the County and the region. In addition, the site monitoring and surveillance activities by ODEQ, the court required buffer area, and adjacent EFU Zoning is considered adequate protection and safeguard for adjoining land uses. Relative thereto, there is no need identified for a special buffer area zoning around the subject facility. Further, the development of a PCB plant at the subject facility is not proposed, nor is such an issue in the immediate future.

POLICIES:

12. The County will continue to provide the leadership in providing for proper solid and hazardous waste management and disposal in the County. Relative thereto, the County shall support and give due consideration to any and all alternatives for the disposal of solid and hazardous wastes within the County, which are found to have no significant adverse environmental impact and to be economically beneficial. Such considerations shall not be limited to only those proposals providing for the disposal of locally generated wastes alone, but shall also take into consideration regional and other area needs. In the case of any solid or hazardous waste disposal project, as necessary and appropriate, the County shall seek competent technical advice in the development and regulation of such facilities, and shall in any case, require the approval of the appropriate State and/or Federal agencies as a condition of County approval.

Conclusions of Law (Continued): Gilliam County specifically concludes that the comprehensive plan contains findings and policies that recognize the existence of the CWMNW Subtitle C TSDF and that this facility should be supported where environmental impacts can be minimized and the facility will be economically beneficial. Gilliam County concludes the existing TSDF is

economically beneficial by providing many well-paying jobs in the County and it has been and will continue to be operated in an environmentally responsible manner. Gilliam County further concludes the proposed Subtitle C TSDf will continue to operate consistent with the applicable State and Federal Requirements and the same will remain a condition of approval applicable to the facility.

GOAL 12: TRANSPORTATION

FINDINGS

9. Oregon Waste Systems, Inc. is currently operating a Solid Waste Disposal Facility adjacent to Chemical Waste Management, NW, a hazardous waste facility. Said firm is independently investigating the transportation requirements for such a facility. These include a new rail spur and possible improvements to the Cedar Springs Road. Transportation of materials to the subject facility very possibly could benefit the County by reducing the likelihood that the rail line will be completely abandoned.

Conclusions of Law (Continued): Gilliam County specifically concludes that this comprehensive plan finding is a legacy finding and that Waste Management has already made the discussed rail spur and railyard improvements. In summary conclusion, Gilliam County concludes that, with adoption of the Goal Exception, the proposed Subtitle C TSDf will comply in all ways with the Comprehensive Plan Map designation and the Comprehensive Plan.

- b. As applicable, sewage and/or solid waste disposal methods shall be provided in compliance with applicable local, State and Federal regulations.

Conclusions of Law: The existing hazardous waste facility uses long established septic tanks and drain fields for sewage disposal, and new or expanded facilities can and will be built for the proposed expansion area in accordance with the local, State and Federal regulations that may be in place at that time. Disposal of solid waste at the facility is handled in accordance with the requirements of the current ODEQ permit.

- c. Proposal shall be found to be in compliance or conditioned upon compliance with applicable air and noise pollution standards.

Conclusions of Law: Gilliam County concludes the hazardous waste facility is regulated by and operating under a permit issued and monitored by ODEQ and the EPA and the facility can and must comply with applicable standards of ODEQ.

- d. Required access shall be legally established, available, and adequate to serve the proposed use or provisions to provide such evident.

Conclusions of Law: Gilliam County concludes the hazardous waste facility has legally established access to the site and disposal facilities via Cedar Springs Lane and no additional accessways are necessary for the proposed expansion of the facility.

- e. Public services deemed necessary shall be available or provisions for such provided and no use shall be approved which is found to exceed the carrying capacities of affected public services unless there are provisions to bring such capacities up to the need.

Conclusions of Law: Gilliam County concludes the existing hazardous waste facility is adequately served by all needed public services as outlined in Section 4.2.6, and there are no anticipated needs for additional public service capacities at this time.

- f. Proposal shall be in compliance with the applicable standards and limitations of the primary and combining zone as may be applicable.

Conclusions of Law: Gilliam County concludes the existing facility is located within the General Industrial (M-G) zone in which a Hazardous Waste Facility is a conditionally permitted use subject to the standards of Sections 4.060(B)(9) and (D) of the Gilliam County Development and Zoning Ordinance, both of which are addressed herein above and incorporated herein to demonstrate this criterion is satisfied.

- g. No use shall be approved which is found to have a significant adverse impact on resource-carrying capacities unless there are provisions for mitigating such impact.

Conclusions of Law: Gilliam County concludes the proposal is for a Comprehensive Plan Map Amendment from Agricultural Land to General Industrial and a zone change from Exclusive Farm Use (EFU) to M-G in order to accommodate an expansion of the existing hazardous waste facility whose operation is regulated and monitored by the ODEQ. As noted in the Gilliam County Comprehensive Plan under Goal 11: Public Facilities and Services, Finding No. 7, "...the site monitoring and surveillance activities by ODEQ, the court required buffer area, and adjacent EFU Zoning is considered adequate protection and safeguard for adjoining land uses."

- h. No use shall be approved which is found to exceed the carrying capacities of affected public services and facilities.

Conclusions of Law: Gilliam County concludes the existing hazardous waste facility is adequately served by all needed public services as outlined in Section 4.2.6, and there is no evidence that the proposed expansion of the facility will exceed the carrying capacity of any public services and facilities affected by the hazardous waste facility use.

- i. All required State and Federal permits or approvals have been obtained or will be as a condition of approval

Conclusions of Law: Gilliam County concludes the hazardous waste facility is regulated by and operating under a permit issued and monitored by ODEQ and the EPA and the facility can and must comply with applicable standards of ODEQ. Gilliam County concludes the existing hazardous waste facility is operating under ODEQ permit ORD 089 452 353, and any future modifications to said permit, including expansion of the existing facility, must be reviewed and approved by ODEQ.

SECTION 7.020 – STANDARDS GOVERNING CONDITIONAL USES

In addition to the standards of the zone in which the conditional use is located and the general standards of this ordinance, conditional uses shall meet the following standards:

A. CONDITIONAL USES, GENERALLY

1. **Setback.** Requirements are addressed in each individual zone.

Conclusions of Law: The hazardous waste facility has a court ordered 1,000-foot setback around any areas of landfilling areas and said buffer far exceeds the standard setback requirements of the M-G zone which are 15 feet for front yards and 10 feet for side and rear yards. With respect to structures that are not part of a TSDF proper, the minimum setbacks of the M-G zone will be maintained.

6 ULTIMATE CONCLUSIONS

Based on the foregoing findings and information, the County Court can find that the application for a Comprehensive Plan amendment for a Goal 3 Exception, Comprehensive Plan Map/Zoning Map amendment to General Industrial (M-G), and Conditional Use Permit for expansion of the Subtitle C TSDf can and has been substantiated under each of the relevant local and state approval criteria enumerated and discussed above.

Respectfully submitted,

Cable Huston LLP



Tommy A. Brooks
Partner

Dated: March 31, 2022

7 APPENDIX OF DETAILED FACTS

APPENDIX A

Application Forms

COMPREHENSIVE PLAN TEXT
OR MAP AMENDMENT

ZONING ORDINANCE TEXT
OR MAP AMENDMENT

Project Application #: _____

Date Received: _____

Date Deemed Complete: _____

Final Decision or Public Hearing Date: _____

Gilliam County Planning Land Use Permit Application

This application must be submitted to the Gilliam County Planning Department, P. O. Box 427, Condon, OR 97823, (541) 384-2381, and must be accompanied by a non-refundable application fee(s). Acceptance of the application and fee(s) does not guarantee approval or a determination of completeness.

Section 1: Contact Information

Name & signature of Applicant:

Address:

City, State, Zip:

Telephone Number:

e-mail address

**Name & signature of current Property
Owner(s):**

(If Property Owner is not the applicant)

Address:

City, State, Zip:

Telephone Number:

e-mail address:

The applicant or an appointed representative MUST be in attendance at the Public Hearing (if required) of the Gilliam County Planning Commission in order to explain the project. Applicant will be notified of the Hearing date, location and time. If there is no representative present during the scheduled Public Hearing for this Land Use Permit Application, the application will be continued to a date and time specific.

Section 2: Certification

Complete this section for **ALL** applications.

I, the undersigned, swear under penalty of perjury that the responses are made truthfully and to the best of my knowledge. It is further understood that the signing of this application if for a dwelling will preclude any lawsuits related to the by-products (i.e. noise, dust, odor, etc.) of farming operations.

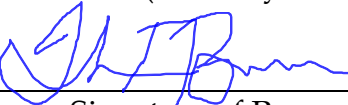
ALL Property Owners with any interest in the properties being affected by this Land Use Permit Application must sign and date this form. If more room is needed signing the reverse side of this page is appropriate. **IF THE FORM IS NOT SIGNED BY ALL PROPERTY OWNERS, THE APPLICATION WILL BE DEEMED INCOMPLETE!**

X 

Signature of Applicant

Date

Printed Name of Applicant
(Attorney in Fact)

X 

Signature of Property Owner

Date

Printed Name of Property Owner
(Attorney in Fact)

X

Signature of Property Owner

Date

Printed Name of Property Owner

Comprehensive Plan and Zoning Ordinance Amendments

1. Which document is being proposed to be added to, deleted from, or otherwise modified?

Comprehensive Plan Map Amendment

Comprehensive Plan Text Amendment

Zoning Map Amendment

Zoning Text Amendment

2. If amendments to the Comprehensive Plan Map are being proposed, what is the current designation and what is being proposed?

Current Designation: _____

Proposed Designation: _____

3. If amendments to the Zoning Map are being proposed, what is the current zoning and what is being proposed?

Current Zoning: _____

Proposed Zoning: _____

4. What is the current use of the property? _____

5. Describe the requested text amendment and where it would be placed in the Comprehensive Plan or Zoning Ordinance:

Property Information

Complete this section as applicable. Necessary for map amendment, not required for text amendment.

1. **Location** of Property

(Provide written directions starting from a county road or state highway on how an individual would travel to the property)

2. Has the Property or dwelling received a **Rural Address**? If so, what is it?

Yes: 17629 Cedar Springs Ln

No

3. Assessor's **Account Number(s)** for the Property: (this is a four digit number)

Assessor Office 541-384-3781

4. Applicable Gilliam County Zoning Ordinance Criteria:

5. **Legal Description** of Property:

(this information can be obtained from Assessor Office 541-384-3781)

Township:

Range:

Section:

Tax Lot(s):

See attached Exhibit A for list of accounts and Legal Descriptions

Use separate sheet of paper for ENTIRE Legal Description and mark it "Exhibit A".

<p>6. Located within an Urban Growth Boundary (UGB)?</p>	<p><input type="checkbox"/> Yes, which city?</p> <p><input type="checkbox"/> No</p>
<p>7. Zoning Designation:</p> <p>Proposed Zoning Classification (if requesting a Zone Map Amendment)</p>	<p><input type="checkbox"/> Exclusive Farm Use (EFU)</p> <p><input type="checkbox"/> OTHER _____</p>
<p>8. Current Use of Property: (irrigated or non-irrigated crops, pasture or grazing lands), the number, location and type of existing dwellings and structures on the property.</p>	
<p>9. Surrounding Uses of Property: (irrigated or non-irrigated crops, pasture or grazing lands), the number, location and type of existing dwellings.</p>	
<p>10. Size of Property: (acres) NOTE: A "tract of land" is contiguous property within the same ownership. A tract is viewed differently at times in terms of land use.</p>	<p>ACRES Total acreage for existing M-G lands and Goal Exception is ~1,567. Goal Exception area is ACRES ~935 acres</p>
<p>11. Does the Property reside in a Floodplain? If the Property is in a Floodplain, will building permits eventually be applied for on this project? https://msc.fema.gov/portal/home</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Zone: _____</p> <p>Flood Plain Panel Number: _____</p>

APPENDIX B

Existing DEQ Permit for Facility



HAZARDOUS WASTE PERMIT

FOR THE

STORAGE, TREATMENT, AND
DISPOSAL OF
HAZARDOUS WASTE



State of Oregon
Department of
Environmental
Quality

Issued in accordance with the applicable provisions of ORS Chapter 466 and the regulations promulgated at OAR Chapter 340 Divisions 100 through 120, and, the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the regulations promulgated at Title 40 of the Code of Federal Regulations as adopted into Oregon Rules by OAR 340-100-0002.

This Permit is effective as of August 21, 2006, and shall remain in effect until August 21, 2016, unless revoked and reissued (40 CFR §270.41), terminated (40 CFR §270.43), or continued in accordance with OAR 340-105-0051.

ISSUED TO:

Chemical Waste Management of the Northwest, Inc.
17629 Cedar Springs Lane
Arlington, OR 97812
Telephone: (541) 454-2643

ISSUED BY:

Lynn Hampton, Chair
Oregon Environmental Quality Commission

8/10/06

Date

Joni Hammond, Regional Administrator
Eastern Region

8-10-06

Date

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INTRODUCTION

Permittee: Chemical Waste Management of the Northwest, Inc.

Environmental Protection Agency Identification Number: ORD 089 452 353

Pursuant to Oregon Revised Statutes Chapter 466 and the hazardous waste rules promulgated by the Oregon Environmental Quality Commission in Chapter 340 of the Oregon Administrative Rules (OAR), and, pursuant to the Solid Waste Disposal Act (42 U.S.C. 3251 et seq.), as amended by the Resource Conservation and Recovery Act of 1976 [42 U.S.C. 6901 et seq., (RCRA)] and the Hazardous and Solid Waste Amendments of 1984 (HSWA) and regulations promulgated by the U.S. Environmental Protection Agency (Agency) in Title 40 of the Code of Federal Regulations, this Permit is issued to Chemical Waste Management of the Northwest, Inc. (Permittee), to operate a hazardous waste treatment, storage, and disposal Facility located in Gilliam County near Arlington, Oregon, on Cedar Springs Road at latitude 45° 37' 30" and longitude 120° 22' 30".

The Permittee shall comply with all Terms and Conditions set forth in this Permit and with documents referenced in this Permit. Some of these documents are defined and referenced as “standalone documents”, “referenced standalone documents”, or shortened as “documents”. The Permittee shall comply with all applicable state rules, including OAR 340 Divisions 100-120, and the rules of the Oregon Department of Transportation, the Oregon Department of Water Resources, the Workers' Compensation Department, the Oregon State Health Division, and other state agencies having jurisdiction over the Facility. Additionally, the Permittee shall comply with all applicable federal regulations in 40 CFR Parts 260 through 266, Part 268, and Part 270, as adopted by Oregon rule at OAR 340-100-0002.

In some cases, within the Permit and the referenced standalone documents, the Department has included references to other documents which are not physically contained in this Permit or the referenced standalone documents. In such cases, the Permittee shall still comply with the procedures of those referenced documents, even though they are not physically contained in this Permit, to the extent necessary to remain in compliance with the conditions of this Permit and referenced standalone documents. The Permittee shall maintain a set of such referenced documents at the Facility.

The Department's issuance of this Permit is based upon the administrative record. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time, shall be grounds for the termination of this Permit and/or initiation of an enforcement action, including criminal proceedings. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in the permit application or in any report to the Department, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

The Department shall enforce all Conditions of this Permit. Other state agencies having jurisdiction over the Facility shall exclusively enforce the requirements of their rules. ‡ **Rev. 1**

The first RCRA hazardous waste permit for the Facility was originally issued on March 11, 1988, by the Oregon Environmental Quality Commission, the Oregon Department of Environmental Quality, and the U.S. Environmental Protection Agency. The Permittee submitted a Permit renewal Part A and B application in March 1998. The Department has reviewed the renewal application and issued a draft hazardous waste storage, treatment, and disposal Permit for public comment. The draft hazardous waste Permit was issued for comment on February 22, 2006. The final Permit decision will be made by the Environmental Quality Commission and the Department of Environmental Quality. See ORS 466.140, 466.145, and 466.015.

This Permit may be modified in accordance with 40 CFR 270.40 (as amended by OAR 340-105-0040), 40 CFR 270.41 (as amended by OAR 340-105-0041), and 40 CFR 270.42.

Issuance of this Permit shall terminate the hazardous waste permit issued in March 1988 and its subsequent modifications.

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LIST OF STANDALONE DOCUMENTS

The following documents are incorporated, in their entirety, by reference into this hazardous waste Permit. Their structure and most of the content comes from the Permittee's RCRA 1998 Permit renewal application and from previous Department approved modifications to the hazardous waste permit which was first issued in March 1988. In cases where there are inconsistencies between this Permit and a standalone document, the Permit supersedes the standalone document. In some cases, the Department has altered specific language in the standalone documents by adding Permit Conditions and/or changing language in the standalone documents. Alterations as described in the Permit Conditions found in this Permit supersedes the language of the standalone document. These incorporated documents, as modified by specific Permit Conditions are enforceable conditions of this Permit.

Standalone

Document 1 Waste Analysis Plan, administrative record no. 06074.

Standalone

Document 2 Security Procedures, Hazard Prevention, Training Plan, administrative record no. 06075.

Standalone

Document 3 Inspection Plan, administrative record no. 06076.

Standalone

Document 4 Contingency Plan, administrative record no. 06077.

Standalone

Document 5 Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance, administrative record no. 06078.

Standalone

Document 7 Groundwater Monitoring Plan, administrative record no. 06080.

Standalone

Document 8 Bulk Liquid Storage/Treatment Plan, administrative record no. 06081.

Standalone

Document 9 Container Storage Design and Operations Plan, administrative record no. 06082.

Standalone

Document 10 Stabilization/Chemical Treatment Plan, administrative record no. 06083.

Standalone

Document 11 Debris Treatment Plan, administrative record no. 06084.

Standalone

Document 12 Containment Building Design and Operations Plan, administrative record no. 06085.

Standalone

Document 13 Surface Impoundments Design and Operations Plan, Response Action Plan, administrative record no. 06086.

Standalone

Document 14 Landfill Design and Operations Plan, administrative record no. 06087.

Standalone

Document 15 Landfill Response Action Plans, administrative record no. 06088.

Standalone

Document 16 Construction Quality Assurance Plan, administrative record no. 06089.

Standalone

Document 17 Landfill Final Cover Design Plan, administrative record no. 06090.

Standalone

Document 18 Landfill Design Drawings, administrative record no. 06091.

Standalone

Document 19 Bioremediation Facility and Organic Recovery Unit Design and Operations Plan, administrative record no. 06092. ‡ **Rev. 12**

Standalone

Document 20 PCB Operations Plan, administrative record no. 06093.

Standalone

Document 21 Waste Piles Plan, administrative record no.06092. ‡ **Rev. 23**

Standalone

Document 22 Organic Recovery Unit #2 Design and Operations Plan, administrative record no. 06094.

Standalone

Document 23 WWTP-2 Liquid Storage/Treatment Plan, administrative record no. 06094.

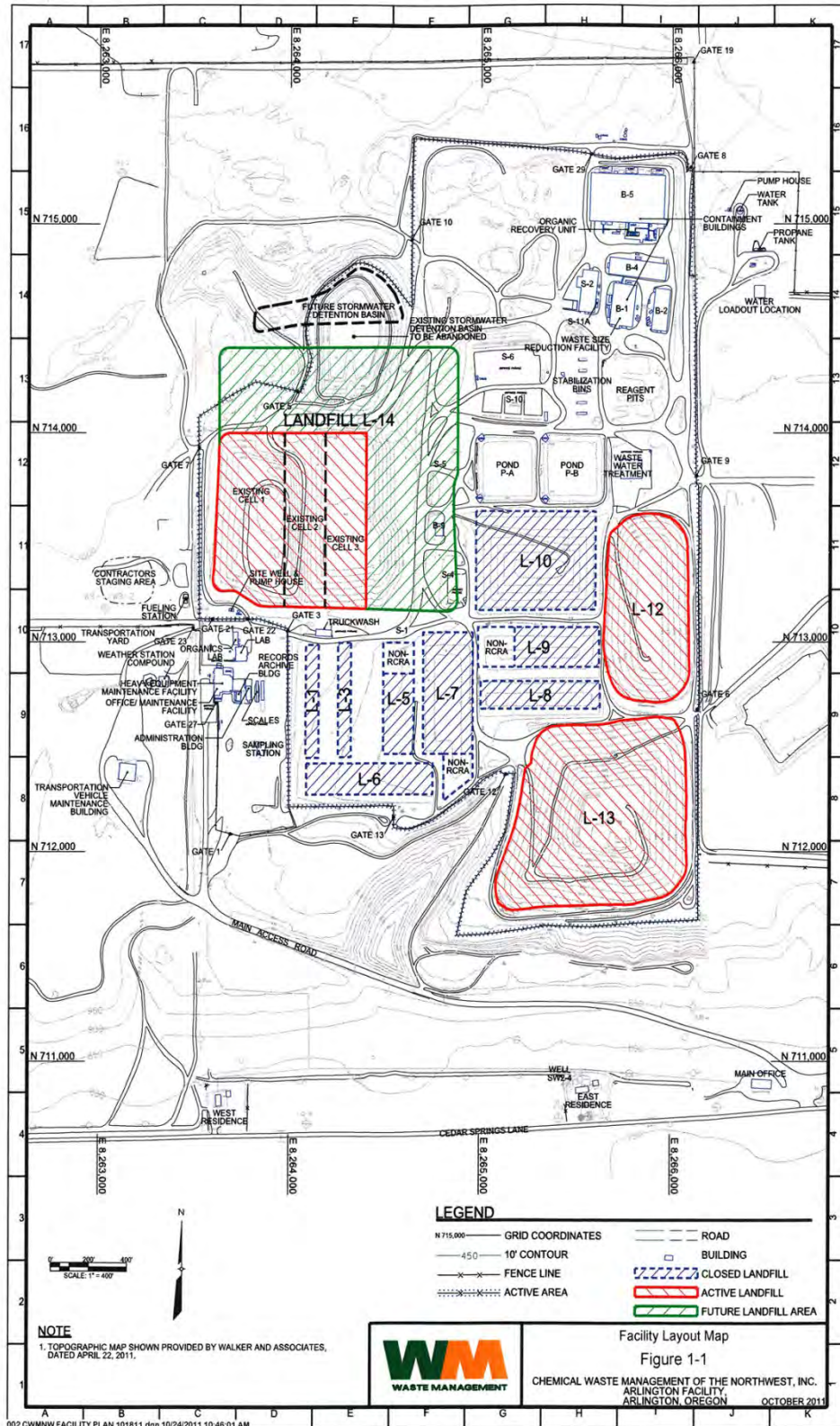
DEFINITIONS

For this hazardous waste Permit, the following definitions shall apply:

- a. The term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency (EPA) or a designated representative. The Director, Office of Air, Waste, and Toxics, EPA Region 10, is a duly authorized and designated representative of the Administrator for purposes of this Permit.
- b. The term "Agency" shall mean the United States EPA Region 10.
- c. The abbreviation "A.R. (no.)" shall mean the administrative record index number for a specific document.
- d. The term "Commission" shall mean the Oregon Environmental Quality Commission.
- e. The term "daily" shall mean only those days which the Permittee considers to be regular workdays which shall include Monday through Friday excluding holidays. In the event of a full temporary facility shutdown or a holiday combined with extra days, no more than 72 hours shall elapse between inspections listed at a frequency of "normal working day" or "daily." For partial temporary shutdown where employees do arrive at the facility and can perform duties in accordance with the Permit, such duties shall be performed during partial temporary shutdown.
- f. The term "Department" shall mean the Oregon Department of Environmental Quality (DEQ).
- g. The term "Director" shall mean the Director of the Oregon Department of Environmental Quality or a designated representative. By Department delegation all notifications and approvals assigned to the Director are delegated to the Eastern Region Hazardous Waste Program Manager ("Manager").
- h. The term "Eastern Region Clean-up Manager" shall mean the Manager implementing the authority of ORS 465 in the Department's Eastern Region.
- i. The terms "Facility" or "Site" shall mean the legal description of the Chemical Waste Management of the Northwest, Inc., property (including structures, appurtenances, and improvements) used to store, to treat or to dispose hazardous waste as authorized by this Permit. For purposed of Permit Condition I.N., "permitted Facility" shall also include significant physical alterations not otherwise detailed in this Permit.
- j. The term "Inspector" shall mean the designated representative of the "Manager" delegated to routine Facility oversight.
- k. The term "Manager" shall mean the Manager of the DEQ Eastern Region Hazardous Waste Program.
- l. The term "Permit" shall mean the Permit issued by the Commission and the Department pursuant to ORS 340 Divisions 105 and 106.
- m. The term "standalone document" or "referenced standalone document" shall mean those documents listed in the List of Standalone Documents in this Permit.

- n. The term “within [x] days of the effective date of this Permit” shall mean within [x] calendar days after the effective date of this Permit. If the date within [x] amount of days after the effective date of this Permit falls on a weekend or holiday, the time shall automatically be extended until the following regular workday.
- o. In cases where the Permittee is required to comply with a specific provision of 40 CFR Part 264 and that provision refers to "Regional Administrator" or "Director", the term "Regional Administrator" or "Director" shall be interpreted to mean the Manager, Eastern Region Hazardous Waste Program.
- p. All definitions contained in 40 CFR Parts 260 through 270, and, OAR 340 Divisions 100 through 106 and 120 are hereby incorporated, in their entirety, by reference into this Permit, except that any of the definitions used above, (a) through (o), supersede any definition of the same term in 40 CFR 260.10, 270.2, 264.141, and OAR 340-100-0010. Where a term is not defined in the Permit, regulations or rules, the term is defined according to the standard dictionary definition or the generally accepted scientific or industrial meaning of the term.

Figure 1-1 Facility Layout Map



I. STANDARD CONDITIONS

I.A. Effect of Permit

The Permittee is authorized to store, treat, and dispose hazardous waste in accordance with the Conditions of this Permit and in accordance with 40 CFR 262.34. Any storage, treatment, or disposal of hazardous waste by the Permittee at this Facility that is not authorized by this Permit or by 40 CFR 262.34, and for which a Permit is required under Section 3005 of RCRA and ORS 466.095 and 466.100 is prohibited.

I.B. Personal and Property Rights

This Permit does not convey any property rights of any sort, or any exclusive privilege, nor does this Permit authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations.

I.C. Permit Actions

I.C.1.

This Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, 270.43 and OAR 340 Divisions 105 and 106. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [40 CFR 270.30(f)]

I.C.2.

Except as provided by specific language in this Permit, any modification or change in design or operation of this Facility or in a hazardous waste management practice covered by the Permit shall be done in accordance with 40 CFR 270.41 and 270.42, unless a change in accordance with Permit Condition II.R. is appropriate.

I.C.3. [Reserved]

I.D. Severability

I.D.1.

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. Invalidation of any state or federal statutory or regulatory provision, which forms the basis for any Condition of this Permit, does not affect the validity of any other state or federal statutory or regulatory basis for said Condition.

I.D.2.

In the event that a condition of this Permit is stayed for any reason, the Permittee shall continue to comply with the related applicable and relevant conditions in the previously-expired permit until final resolution of the stayed condition unless compliance with the related applicable and relevant conditions in the previously-expired permit would be technologically incompatible with compliance with other Conditions of this Permit, which have not been stayed.

I.E. Duty to Comply

I.E.1.

The Permittee shall comply with all Conditions of this Permit, except that the Permittee need not comply with the Conditions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency Permit [issued under 40 CFR 270.61, OAR 340-105-0061, or ORS 466.095(3)]. Any Permit noncompliance, except under the terms of an emergency Permit, constitutes a violation of the applicable provision of Oregon State law and/or RCRA, as amended by HSWA, and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, or denial of a Permit renewal application.

I.E.2.

Compliance with the terms of the Permit does not constitute a defense to any action brought under ORS 466.180, 466.185, 466.190, 466.200, 466.210, 466.225, or 465, or Sections 3007, 3008, 3013 and 7003 of RCRA (42 U.S.C. 6934 and 6973), Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. 9606(a)], as amended by the Superfund Amendments and Reauthorization Act of 1986, or any other federal or state law governing protection of public health or the environment from any imminent and substantial endangerment to human health or the environment. Specific exclusions from compliance with this Permit are found at 40 CFR 270.4.

However, compliance with the terms of this Permit does constitute a defense to any action alleging failure to comply with the applicable law upon which this Permit is based. ‡ **Rev. 3**

I.F. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new permit, in accordance with 40 CFR 270.30(b). The Permittee shall submit such permit application at least 180 calendar days prior to the expiration date of this Permit, unless the Manager has granted permission for a later date (but no later than the expiration date of the existing Permit) in accordance with 40 CFR 270.10(h).

I.G. Continuation of Expiring Permit

This Permit, all Conditions herein and the standalone documents shall continue in force until the effective date of a new Permit if the Permittee has submitted a timely, complete application (under 40 CFR 270 Subpart B and OAR Chapter 340 Division 105), and, through no fault of the Permittee, the Manager, the Administrator, or the Commission does not issue a new Permit under 40 CFR 124.15 on or before the expiration date of the previous Permit. In accordance with 40 CFR 270.50, this Permit shall be reviewed five years after the effective date and modified, as necessary, in accordance with 40 CFR 270.41.

I.H. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the Conditions of this Permit.

I.I. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

I.J. Proper Operation and Maintenance

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee so as to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This Condition requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit.

I.K. Duty to Provide Information

The Permittee shall furnish to the Manager or his designee, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager and Inspector, upon request, copies of records required to be kept by this Permit.

I.L. Inspection and Entry

The Permittee shall allow the Department, or its authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

I.L.1.

Enter at reasonable times upon the Permittee's premises where regulated hazardous or solid waste management units or activities are located or conducted, or where records must be kept under the Conditions of this Permit;

I.L.2.

Have access to and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;

I.L.3.

Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

I.L.4.

Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA or Oregon Law, any substances or parameters at any location.

I.M. Monitoring and Records

I.M.1.

Samples and measurements taken by the Permittee for the purpose of monitoring shall be representative of the monitored activity. The Permittee may request to substitute analytical methods which are equivalent to those specifically approved for use in this Permit by meeting the following:

I.M.1.a.

The Permittee may submit to the Manager a request for a substitution of an analytical method(s) that is equivalent to the method(s) specifically approved for use in this Permit. The request shall provide information demonstrating that the proposed method(s) is equal or superior to the approved analytical method(s) in terms of sensitivity, accuracy, and precision (i.e., reproducibility); and

I.M.1.b.

The Manager notifies the Permittee in writing that the substitution of the analytical method(s) is approved. Such approved substitution of an analytical method(s) shall not require a permit modification.

I.M.2.

The Permittee shall retain records of all monitoring information, (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this Permit, the certification required by 40 CFR 264.73(b)(9), and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report, certification, or recording unless a longer retention period for certain information is required by other Conditions of this Permit. This three year period may be extended by the Manager at any time by notification, in writing, to the Permittee. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the Facility and, for disposal units, for the post-closure care period as well.

I.M.3.

Records of monitoring information shall include:

I.M.3.a.

The date, exact place, and time of sampling or measurements;

I.M.3.b.

The name, title, and affiliation of the individual(s) who performed the sampling or measurements;

I.M.3.c.

The date(s) analyses were performed;

I.M.3.d.

The name, title, and affiliation of the individual(s) who performed the analyses;

I.M.3.e.

The analytical techniques or methods used; and

I.M.3.f.

The results of such analyses.

I.N. Reporting Planned Changes

The Permittee shall give notice to the Manager, as soon as possible of any planned physical alterations or additions to the permitted Facility.

I.O. Certification of Construction or Modification

The Permittee may not commence storage, treatment, or disposal in a new hazardous waste management unit or in a modified portion of an existing unit until:

I.O.1.

The Permittee has submitted to the Manager by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the hazardous waste management unit has been constructed or modified in compliance with this Permit; and

I.O.2.a.

The Inspector has inspected the modified or newly constructed hazardous waste management unit and has notified the Permittee in writing that he finds it is in compliance with the Conditions of this Permit; or

I.O.2.b.

Within 15 days of the date of submission of the letter in Permit Condition I.O.1., the Permittee has not received notice from the Manager by letter, by certified mail or hand delivery, of his or her intent to inspect, prior inspection is waived and the Permittee may commence treatment, storage, or disposal of hazardous waste.

I.P. Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the Permitted Facility or activity that might result in noncompliance with Permit requirements.

I.Q. Transfer of Permit

This Permit is issued and is personal to the Permittee and is transferable only in accordance with 40 CFR 270.40 and OAR 340-105-0040(2).

I.R. Monitoring Reports

The Permittee shall report monitoring results to the Manager at the intervals required in specific Conditions of this Permit.

I.S. Compliance Schedules

The Permittee shall submit reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule required by specific Conditions of this Permit to the Manager no later than 14 calendar days following each schedule date.

I.T. Twenty-Four Hour Reporting

I.T.1.

The Permittee shall verbally report to the Manager or Inspector, any noncompliance with this Permit which may endanger health or the environment, within 24 hours from the time the Permittee becomes aware of the noncompliance. ‡ **Rev. 3** The report shall include:

[OAR 340-105-0030(2)(b)]

I.T.1.a.

Information concerning release of any hazardous waste that might cause an endangerment to public drinking water supplies; and,

I.T.1.b.

Any information of a release or discharge of hazardous waste or of a fire or explosion from the hazardous waste management facility that might threaten human health or the environment.

I.T.2.

The description of the occurrence and its cause shall include:

I.T.2.a.

Name, address, and telephone number of the owner or operator;

I.T.2.b.

Name, address, and telephone number of the Facility;

I.T.2.c.

Date, time, and type of incident;

I.T.2.d.

Name and quantity of material (s) involved;

I.T.2.e.

The extent of injuries, if any;

I.T.2.f.

An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable; and,

I.T.2.g.

Estimated quantity and disposition of recovered material that resulted from the incident.

I.T.3.

Within 5 calendar days of the time the Permittee becomes aware of noncompliance that may endanger human health or the environment, the Permittee shall provide to the Manager a written submission. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue if the noncompliance has not been corrected; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The

Manager may waive the five-day written notice requirement in favor of a written report within fifteen days.

I.U. Other Noncompliance

The Permittee shall report to the Manager all other instances of noncompliance not reported under Conditions I.R., I.S., and I.T. of this Permit, by March 1 of the following year. This report shall contain the applicable information listed in Condition I.T. of this Permit.

I.V. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in the Permit application or in any report to the Manager or Inspector, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

I.W. Signature and Certification

All applications, reports required by the Permit and other information requested by the Manager, when submitted to the Manager, or Inspector, by the Permittee shall be signed and certified in accordance with 40 CFR 270.11.

I.X. Confidential Information

Information submitted by the Permittee to the Manager or Inspector that is claimed as trade secret, confidential, or confidential business information by the Permittee will be handled in accordance with the applicable provisions of OAR 340-100-0003.

I.Y. Fees

The Permittee shall pay fees as required under ORS 466.160, 466.165, and promulgated at OAR 340-105, and other state statutes and related rules. This Condition does not preclude the Permittee from challenging any future promulgation or adoption of a statute, rule, or administrative action imposing any fee on the Permittee.

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II. GENERAL FACILITY CONDITIONS

II.A. Design and Operations of Facility

II.A.1.

The Permittee shall design, construct, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

II.A.2.

The Permittee shall construct all future hazardous waste management units in accordance with the approved designs and specifications that are included in the standalone documents of this Permit, except for minor changes deemed necessary by the Permittee to facilitate proper construction of the units. Minor deviations from the approved designs or specifications necessary to accommodate proper construction shall be noted on the as-built drawings, and the rationale for those deviations shall be provided in narrative form. After completion of construction of each future waste management unit, the Permittee shall submit final as-built drawings and the narrative report to the Manager as part of the construction certification document specified in Permit Condition I.O.1.

II.B. Required Notices

II.B.1.

The Permittee shall notify the Inspector in writing at least four weeks in advance of the date hazardous waste from a foreign source is expected to arrive at the Facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

II.B.2.

When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), the Permittee shall inform the generator in writing that it has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The Permittee shall keep a copy of this written notice as part of the operating record in accordance with 40 CFR 264.73(b)(7).

II.C. General Waste Analysis

II.C.1.

The Permittee shall follow the procedures as stated in Standalone Document No. 1, Waste Analysis Plan. [40 CFR 264.13]

II.C.2.

The Permittee shall follow the requirements of 40 CFR 268.7(b), (c), (d) and (e).

II.C.3.

In storing hazardous waste in a storage unit, treating hazardous waste in a treatment unit, or placing hazardous waste in a land disposal unit, the Permittee is responsible for meeting the requirements of 40 CFR 268.

II.C.4.

In addition to the appropriate reporting of noncompliance under Permit Condition I.T. or I.U, upon discovery by the Permittee, or Department notification to the Permittee, that the procedures and tasks in the Waste Analysis Plan (Standalone Document No. 1) failed to characterize adequately a hazardous waste and, as a result, did not designate the proper storage, treatment, or disposal of the hazardous waste, the Permittee shall submit a report to the Department within 45 days of the discovery or notification evaluating the Waste Analysis Plan and explaining why the failure occurred.

II.C.5.

The Permittee may accept hazardous and non-hazardous wastes that are (1) containerized liquid corrosive wastes, (2) bulk liquid corrosive wastes, (3) containerized liquid ignitable and organic wastes, (4) bulk liquid ignitable and organic wastes, (5) containerized and bulk liquid reactive wastes, (6) all containerized liquid wastes not included in (1) through (5), including pesticide wastes plus every combination, (7) all bulk liquid wastes not included in (1) through (6) including pesticide wastes plus every combination, (8) bulk or containerized solid wastes including lab packs such as filter cakes and spill and site cleanup residue, (9) semi-solid or sludge wastes, (10) PCB contaminated wastes greater than or equal to 50 ppm, and (11) compressed gases.

II.C.5.a.i.

The Permittee may accept: Recoverable Organic Wastes limited to: Petroleum hydrocarbon wastes, spent non-halogenated solvents, spent halogenated solvents, commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.ii.

The Permittee may accept: Inorganic wastes limited to: Corrosive wastes, toxicity characteristic wastes, primary and secondary metals wastes (non-reactive), electroplating wastes (non-reactive) soils, sludge, debris, inorganic pigments, aqueous wastes (non-reactive) asbestos and asbestos containing material (RCRA regulated wastes), commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.iii.

The Permittee may accept: Reactive Wastes limited to: Water reactive solid wastes, commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.iv.

The Permittee may accept: Non-recoverable Organic Hazardous Wastes limited to: soils, sludges, debris, toxicity characteristics wastes, organic acids and bases, wood products wastes, pesticide wastes, petroleum/refining wastes, aqueous wastes (non-reactive), commercial chemical products, off-specification species, process residues and spill residues.

II.C.5.a.v.

The Permittee may accept: State-only hazardous waste containing a three percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(e); State-only hazardous waste containing a ten percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(f); spill cleanup residue, soil, water or other debris

containing any amount of state-only hazardous wastes; blister agent and nerve agents materials approved for disposal from the Umatilla Army Depot; designated state-only hazardous waste numbers P998 and P999, respectively; residues from the demilitarization, treatment, and testing of blister and nerve agents designated state-only hazardous waste numbers F998 and F999, respectively; PCB containing materials regulated under OAR 340-110; solid wastes defined by ORS 459.005 and/or OAR 340-93-0030 including cleanup materials contaminated by hazardous substances, commercial solid waste, construction and demolition waste, industrial solid waste, leachate, sludge, wood waste, and asbestos and asbestos-containing material; and pesticide wastes managed under OAR 340-109-0010.

II.C.5.b.i.

The Permittee may not accept at the Facility for treatment or disposal the following hazardous wastes: K013, K027, K044, K045, K047, P006, P009, P031, P033, P056, P063, P065, P076, P078, P081, P095, P096, P111, P112, P122, U020, U023, U033, U096, U115, U117, U124, U125, U133, U135, U160, U162, U169, U171, U189, U205, U213, U223, and U234. However, the Permittee may accept the above-listed hazardous wastes for treatment or disposal if they are residues from the treatment of these wastes and handled in accordance with the Conditions of this Permit. Also, the Permittee may accept the above-listed hazardous wastes for treatment or disposal if they meet the definition of hazardous debris at 40 CFR 268.2. The Permittee may accept for storage, treatment and disposal all soils that are or were hazardous wastes and are subject to the alternative land disposal restrictions treatment standards in 40 CFR 268.49.

II.C.5.b.ii.

The Permittee may not store the following hazardous waste compressed gasses: P009, P031, P033, P056, P063, P076, P078, P095, P096, and U135.

II.C.6.a.

For new hazardous waste codes the Permittee wants to manage at the Facility, which are promulgated after the effective date of this Permit but have been previously been managed at the facility, the Permittee shall submit a permit modification in accordance with 40 CFR 270.42(g).

II.C.6.b.

For new hazardous waste codes that have been promulgated after this Permit is issued and have not been previously managed at the Facility, the Permittee shall submit a permit modification in accordance with that table found in Appendix I of 40 CFR 270.42.

II.C.7. ‡ **Rev. 7**

II.D. Security Procedures

The Permittee shall comply with the security procedures in Standalone Document No. 2, Security Procedures, Hazard Prevention, Training Plan [A.R. 06075].

II.E. Inspection Plan

II.E.1.

The Permittee shall follow the procedures in Standalone Document No. 3, Inspection Plan [A.R. 06076].

II.E.2.

The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Inspection reports shall be recorded and maintained as required by 40 CFR 264.15(d).

II.E.3.

The Permittee shall maintain a copy of the latest approved Inspection Plan [A.R. 06076] at the Facility until the Facility is fully closed and certified.

II.F. Training Plan

II.F.1.

The Permittee shall train all personnel who handle hazardous waste in hazardous waste management, safety and emergency procedures, as applicable to their job description, in accordance with Standalone Document No. 2, Security Procedures, Hazard Prevention, Training Plan [A.R. 06075]. These personnel shall be trained in accordance with the Training Plan and documentation of training shall be maintained as specified in the Training Plan.

II.F.2.

The Permittee shall maintain a copy of the latest approved Security Procedures, Hazard Prevention, Training Plan [A.R. 06075] at the Facility until the Facility is fully closed and certified closed.

II.G. Hazards Prevention

The Permittee shall follow the hazards prevention procedures in Standalone Document No. 2, Security Procedures, Hazards Prevention, Training Plan [A.R. 06075].

II.H. Contingency Plan

The Permittee shall follow the contingency procedures in Standalone Document No. 4, Contingency Plan [A.R. 06077].

II.I. Manifest System, Recordkeeping, and Reporting

II.I.1.a.

The Permittee shall follow the procedures for using the manifest system and identifying and resolving significant manifest discrepancies in accordance with 40 CFR 264.71, 264.72, and 270.30(1)(7) and Standalone Document No. 1, Waste Analysis Plan [A.R. 06074].

II.I.1.b.

The Permittee shall submit an un-manifested waste report to the Manager, in accordance with 40 CFR 264.76 and 270.30(1)(8), within fifteen calendar days of receipt of un-manifested waste.

II.I.2.

The Permittee shall maintain a written operating record at the Facility in accordance with 40 CFR 264.73(a) for all records identified in 40 CFR 264.73(b)(1) through (b)(17).

II.I.3.

The Permittee shall retain all hazardous waste management records, including data collected in accordance with procedures of the Response Action Plans, and make such records available, at reasonable times, for inspection to the Inspector, in accordance with 40 CFR 264.74(a).

II.I.4.

The retention period for all records required by this Permit is extended automatically during the course of any unresolved enforcement action regarding the Facility or as directed by the Manager, in accordance with 40 CFR 264.74(b).

II.I.5.a.

The Permittee shall submit a survey plat indicating the location and dimensions of landfill units or other hazardous waste disposal units in accordance with 40 CFR 264.116 to the local land use authority and to the Department by the date of submission of certification of closure of each landfill unit at the Facility.

II.I.5.b.

The Permittee shall submit post-closure notices to the local land use authority and to the Department in accordance with 40 CFR 264.119(a).

II.I.6.

The Permittee shall submit a monthly hazardous waste management record to the Manager in accordance with OAR 340-105-0120(7). The Permittee shall submit an annual report covering Facility activities to the Manager in accordance with OAR 340-104-0075(3).

II.I.7.

The Permittee shall submit additional reports to the Manager, in accordance with 40 CFR 264.77 as required by 40 CFR Part 264 Subparts F, K through N, AA, BB, and CC.

II.I.8.

All reports, notifications, applications, or other materials required to be submitted to the USEPA shall be submitted to the Director, Office of Air, Waste and Toxics at EPA Region 10 in Seattle, WA.

II.J. Closure

II.J.1.

The Permittee shall meet the general closure performance standard in 40 CFR 264.111 during closure of all hazardous waste management units and the Facility. Compliance with 40 CFR 264.111 shall require closure of each hazardous waste management unit in accordance with the Standalone Document No. 5, Closure/Post-Closure Plan Cost Estimates, Financial Assurance, Insurance [A.R. 06078].

II.J.2.

Final cover design for landfill units L-12, L-13, and L-14 shall be as specified in Closure Cover Design Details in Standalone Document No. 17, Landfill Final Cover Design Plan [A.R. 06090], and landfill units L-12, L-13, and L-14 shall be capped in accordance with Standalone Document No. 17, Landfill Final Cover Design Plan [A.R. 06090].

II.J.3.

For all landfill units and other hazardous waste management units to be closed as landfills, minor deviations from the Permitted closure designs, specifications, or procedures necessary to accommodate proper closure shall be noted on the as-built drawings and the rationale for those deviations in designs, specifications, or procedures shall be provided in narrative form with the closure certification statements. Such minor deviations shall not be considered modifications of the Permit. ‡ **Rev. 3** Within 60 calendar days after completion of the closure of each landfill unit and other hazardous waste management units closed as landfills, the Permittee shall submit the final as-built drawings of the closed unit, the narrative report and the certification statements to the Manager.

II.J.4.

For all hazardous waste management units other than units closed as landfills, minor deviations from the Permitted closure procedures necessary to accommodate proper closure shall be described in a narrative form with the closure certification statements. Such minor deviations shall not be considered modifications of the Permit. The Permittee shall describe the rationale for implementing minor deviations as part of this narrative report. Within 60 calendar days after completion of closure of each hazardous waste management unit, other than landfill units and units closed as landfills, the Permittee shall submit the certification statements and narrative report to the Manager.

II.J.5.

The Permittee shall amend the Closure Plan when required in accordance with 40 CFR 264.112(c).

II.J.6.

The Permittee shall notify the Manager at least 60 calendar days prior to the date it expects to begin closure of any surface impoundment or landfill unit and at least 45 calendar days prior to the date it expects to begin closure of any tanks, container storage unit, or containment building.

II.J.7.

For closure at all hazardous waste units, the Permittee shall submit a task-specific/unit-specific closure work plan to the Department no less than 30 days before the Permittee begins closure activities at the specific unit. The Department shall review the work plan for conformity with this Permit and issue an approval to proceed. ‡ **Rev. 1**

II.J.8.

The Permittee shall decontaminate or dispose of all Facility equipment as specified in the Closure Plan.

II.J.9.

The Permittee shall provide certification statements that each unit at the Facility has been closed in accordance with the applicable specifications in the Closure Plan, in accordance with 40 CFR 264.115.

II.J.10 [Reserved]

II.J.11.

The Permittee shall follow the soil sampling procedures and analysis outlined in Appendix A of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078]. The Permittee shall modify the sampling grid procedure, as appropriate and necessary, when sampling soils at or near the perimeter of buildings and concrete structures, or in similar situations. Such change shall not require a permit modification. The Permittee shall document the change in the closure report submitted to the Manager in accordance with Permit Condition II.J.3.

II.J.12.

In the event that any hazardous waste management unit, other than a landfill unit, cannot be "clean closed" by removing hazardous waste, hazardous constituents and contaminated subsoil as specified in section II.J. of this Permit, the Permittee shall revise the Facility post-closure plan to include a post-closure plan for that unit. The Permittee shall submit the post-closure plan for that unit to the Manager, as a Permit modification request, within 90 calendar days of the date that the Manager notifies the Permittee, in writing, that the unit shall be closed as a landfill, in accordance with 40 CFR 264.118(a).

Other Closure Conditions

II.J.13.a. [Reserved]

II.J.13.b.

Regardless of any Permit Condition found in a standalone document or this Permit, at closure for surface impoundments P-A and P-B, the Permittee shall either: (1) Remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 40 CFR 261.3(d) applies, or (2) appropriately modify this Permit and allow P-A and P-B to operate and eventually close as a landfill. [OAR 340-104-0228]

II.J.13.c.

Regardless of any Permit Condition found in a standalone document or this Permit, requests for variance and stated timelines in Standalone Document No. 5, Closure/Post-Closure Plans, Costs Estimates, Financial Assurance, Insurance [A.R. 06078] allowed for closure for all units are hereby not approved. The Permittee shall follow the closure time frames set forth in 40 CFR 264.113 unless another time frame is approved by permit modification.

II.J.13.d.

The Permittee shall upon final closure of the Facility remove all Facility hazardous waste structures (e.g., tanks, storage units, etc.), and all Facility unused buildings, non-hazardous structures, and equipment and restore, to the extent reasonably practicable, the site to its original condition. However, the Permittee may at any time submit in writing a request for a modification to Standalone Document No. 5, Closure/Post-Closure Plans [A.R. 06078] for any structure, building or equipment the Permittee determines it desires to leave standing after the final Facility closure. In the request for a modification, the Permittee shall identify a use for any structure, building or equipment to remain standing upon final closure of the Facility. Upon Department written approval of the modification, Permittee may leave the structure, building or equipment standing upon final closure of the Facility. The closure/post-closure costs for all

Facility hazardous waste structures (e.g., tanks, storage units, etc.) and all Facility unused buildings, non-hazardous structures, and equipment shall use the estimated costs to sample and, if needed, decontaminate the structure, building or equipment. [ORS 466.150(5)]‡ **Rev. 10**

II.J.13.e.

(removed ‡ **Rev. 21**)

II.J.13.e.i.

(removed ‡ **Rev. 21**)

II.J.13.g.

Upon commencement of the end of the post -closure period, the Permittee shall negotiate in good faith and enter with the Department an Access Agreement under reasonable terms that will allow the Department to enter the Facility when necessary to carry out actions authorized by ORS 466.095 through 466.225.

II.K. Cost Estimate for Facility Closure

II.K.1.

The Permittee shall comply with the requirements of 40 CFR 264.142(a). The Permittee shall maintain a current closure cost estimate for each individual waste management unit. These costs shall be summarized, by the Permittee, for final closure of the entire Facility.

II.K.2.

The Permittee shall adjust the closure cost estimate for inflation on an annual basis, in accordance with 40 CFR 264.142(b).

II.K.3.

During the active life of the Facility, the Permittee shall revise the closure cost estimate within 30 calendar days of an approved modification to the closure plan, if such modification results in an increase in the closure cost estimate, in accordance with 40 CFR 264.142(c).

II.K.4.

During the operating life of the Facility, the Permittee shall keep at the Facility a copy of the latest closure cost estimate and, when this estimate has been adjusted in accordance with 40 CFR 264.142(b), the latest adjusted closure cost estimate in accordance with 40 CFR 264.142(d).

II.K.5.

The Permittee shall maintain an updated summary of current closure costs for the entire Facility closure based on the waste management units that have received RCRA waste, but have not yet been certified as closed and have not been released from the financial assurance requirements as specified in Permit Condition II.N., (i.e., active units).

II.K.6.

Prior to placement of hazardous waste in any new hazardous waste management unit, the Permittee shall amend, as necessary, the summary of current closure costs to reflect the estimated closure cost of that new unit. Such amended closure costs shall be annually adjusted for inflation, as required by 40 CFR 264.142(b). [See Permit Condition II.N.2.].

II.K.7.

Upon closure certification of any hazardous waste management unit, in accordance with 40 CFR 264.115, and after the Manager has released the Permittee from the financial assurance requirements for that unit as specified in Permit Condition II.N., the Permittee may adjust the summary of current closure costs to reflect the closure cost of that unit. Along with the closure certification statement for a closed unit, the Permittee shall submit the current version of the closure cost estimate for the Facility, indicating cost estimates for each remaining unit to be closed, to the Manager.

II.L. Post-Closure Care

II.L.1.

The Permittee shall comply with Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimate, Financial Assurance, Insurance [A.R. 06078]. In addition, the Permittee shall comply with 40 CFR 264.117, 264.118, 264.119, and 264.120.

II.L.2.

The period of post-closure care for each closed landfill unit shall end after 30 years from the effective date of this permit renewal. Units that have not closed by the date of this permit renewal shall have a 30 year post-closure period commencing upon the certified closure date of the unit.

II.L.3.

As part of the post closure certification sent in accordance with 40 CFR 264.120, the Permittee shall submit to the Department a report which includes a determination of future use, or abandonment of, groundwater monitoring wells at the Facility in accordance with OAR 690-240.

II.M. Cost Estimate for Post-Closure Care

II.M.1.

The Permittee shall comply with 40 CFR 264.144(a). The Permittee shall maintain a current post-closure cost estimate for each post-closure activity.

II.M.2.

The Permittee shall adjust the post-closure cost estimate for inflation on an annual basis, in accordance with 40 CFR 264.144(b).

II.M.3.

During the active life of the Facility, the Permittee shall revise the post-closure cost estimate within 30 calendar days of an approved modification to the post-closure plan, if such modification results in an increase in the post-closure cost estimate, in accordance with 40 CFR 264.144(c).

II.M.4.

During the operating life of the Facility, the Permittee shall keep at the Facility a copy of the latest post-closure cost estimate and, when this estimate has been adjusted in accordance with 40 CFR 264.144(b), the latest adjusted post-closure cost estimate in accordance with 40 CFR 264.144(d).

II.M.5.

[Reserved]

II.M.6. [Removed]

‡ Rev. 1, 5

II.N. Financial Assurance for Facility Closure

II.N.1.

The Permittee shall comply with 40 CFR 264.143, as amended by OAR 340-104-0143 or 40 CFR 264.146, by providing documentation of financial assurance, as required by 40 CFR 264.151, as amended by OAR 340-104-0151, in the amount of the cost estimates required by Permit Condition II.K.1.

II.N.2.

Prior to placement of hazardous waste in any new hazardous waste management unit, the Permittee shall update the closure financial assurance mechanism, as necessary, so that an adequately funded financial assurance mechanism for closure of the Facility, including the new unit, is in effect. A copy of the updated financial assurance mechanism shall be submitted to the Manager before waste is placed in the new unit. [See Permit Condition II.K.6.].

II.N.3.

Changes in financial assurance mechanisms shall be approved by the Manager pursuant to 40 CFR 264.143.

II.O. Financial Assurance for Facility Post-Closure

II.O.1.

The Permittee shall comply with 40 CFR 264.145, as amended by OAR 340-104-0145, or 40 CFR 264.146 by providing documentation of financial assurance, as required by 40 CFR 264.151, as amended by OAR 340-104-0151, in the amount of the cost estimates required by Permit Condition II.M.1.

II.O.2.

Changes in financial assurance mechanisms shall be approved by the Manager pursuant to 40 CFR 264.145.

II.P. Liability Requirements

II.P.1.

The Permittee shall comply with the requirements of 40 CFR 264.147(a), as amended by OAR 340-104-0147, and the documentation requirements of 40 CFR 264.151, as amended by OAR 340-104-0151, including the requirements to have and maintain liability coverage for sudden

accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs.

II.P.2.

The Permittee shall comply with the requirements of 40 CFR 264.147(b), as amended by OAR 340-104-0147, and the documentation requirements of 40 CFR 264.151, as amended by OAR 340-104-0151, including the requirements to have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

II.Q. Incapacity of Owners or Operators, Guarantors, or Financial Institutions

The Permittee shall comply with 40 CFR 264.148.

II.R. Equivalent Materials/Information

If certain equipment, materials, procedures, and administrative information (such as names, phone numbers, addresses, obsolete forms, addition of new forms and to forms, format of tables or forms, deletion from forms of units certified as closed, etc.) are specified in this Permit, the Permittee is allowed to use an equivalent or superior substitute or deletion. Use of such equivalent or superior substitute or deletion shall not be considered a modification of the Permit, but the Permittee shall present the proposed change to the Department, and then with Department approval (such approval may be verbal or written) submit to the Department by written letter the revision, accompanied by a narrative explanation, and the date the revision becomes effective. If the Department determines that the change is not in accordance with the approval, the Department will by letter direct the Permittee to submit the change again.

II.S. RCRA Subparts AA and BB and Other Air Emissions

The Permittee shall comply with the all applicable requirements found in 40 CFR 264 Subparts AA and BB, and other air emission physical and operational limitations and requirements in this Permit and the standalone documents.

II.T. ORS 466.065 Requirements

II.T.1.

The Permittee shall not land dispose greater than 5,900,000 tons of hazardous waste during the ten-year term of this Permit without approval from the Department in accordance with ORS 466.065(1).

II.T.2.

The Permittee shall not treat greater than 37,275,980 tons of hazardous waste during the ten-year term of this Permit without approval of the Department in accordance with ORS 466.065(1).

II.T.3.

The Permittee shall comply with all applicable Federal and Oregon technological requirements for treating and disposing of hazardous waste.

II.T.4.

The Permittee shall maintain the property line setback as specified at OAR 340-120-0010(e)(B) by having at least a 1,000 foot separation between active waste management areas and facilities, and property boundaries.

II.T.5.

The Permittee, and its parent company, shall comply with all applicable Oregon and Federal requirements for financial and technical capability to properly construct and operate the Facility.

II.T.6.

The Permittee shall own, or contract with, an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of hazardous waste being transported to the Facility by a motor vehicle owned by the Permittee.

II.T.7.

The Permittee shall determine if any transporter of hazardous waste hired by the Permittee, owns or has a contract with an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of hazardous waste being transported by a motor vehicle to the Facility.

II.T.8.

The Permittee shall, upon arrival at the Permittee's Facility of any motor vehicle transporting hazardous waste in a motor vehicle not owned or hired by the Permittee, request to review the transporter's authorization to transport hazardous waste in Oregon and the driver's authorization to drive a motor vehicle transporting hazardous waste in Oregon. The Permittee shall provide to the Department in writing the name of any transporter or driver that fails to demonstrate the requested authorization.

II.U. Management of Subpart CC Wastes

II.U.1.

The Permittee shall not manage hazardous wastes containing an average volatile organic concentration of 500 parts per million by weight (ppmw), or more as determined by 40 CFR 264.1083, at any permitted tank or surface impoundment, until this Permit is modified to incorporate the requirements of 40 CFR 264.1082(b), except as 40 CFR 264.1080 and 40 CFR 264.1082(b) provide otherwise.

II.U.2.a.

The Permittee is authorized to manage volatile organic hazardous wastes with an average concentration of 500 parts per million by weight, or more, as determined using 40 CFR 264.1083, at all permitted storage units in accordance with the Container Level 1 or Level 2 standards, as applicable, meeting the requirements of 40 CFR 264.1086(c) and (d), respectively. Except as provided by Permit Condition II.U.3., management of Container Level 3 standards is prohibited unless this permit is modified.

II.U.2.b.

If the Permittee manages volatile organic hazardous wastes with an average concentration of 500 parts per million by weight or more, as determined by 40 CFR 264.1083, in containers at a

permitted storage unit that require Container Level 1 or 2 standards, the Permittee shall comply with 40 CFR 264.1086(c) and (d), respectively.

II.U.3.

The Permittee may manage volatile organic hazardous wastes with an average concentration of 500 parts per million by weight, or more, as determined by 40 CFR 264.1083, that are undergoing biotreatment in accordance with Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092], Standalone Document No. 19.

II.V. Organic Recovery Unit-2 Compliance with Subpart BB Standards

II.V.1.

In accordance with 40 CFR 264.1064(m), compliance with Subpart BB standards at the Organic Recovery Unit-2 and the tank systems in Wastewater Treatment System 2 shall be demonstrated by the regulations under 40 CFR 61 Subpart ff. Documentation of compliance with 40 CFR 61 Subpart ff standards shall be maintained in the operating record.

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III. CONTAINER STORAGE

III.A. Design and Operation

III.A.1.a.

The Permittee may store those containerized wastes listed under Permit Condition II.C.5. and II.C.5.a.i.v., and the second, third and fourth sentences in Permit Condition II.C.5.b.i. only in storage units S-1, S-2, S-3, S-4, S-5, S-6, S-10, and S-11A. The Permittee shall not store containerized water reactive hazardous wastes in these units except as allowed in Standalone Document No. 9, Container Storage Design and Operation Plan [A.R. 06082]. ‡ **Rev. 3**

III.A.1.b.

The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii in all container storage units.

III.A.1.c.

The Permittee may store containerized hazardous wastes in containment buildings B-2 and B-5 in compliance with Permit Conditions under III.A. through III. I and Standalone Document No. 9, Container Storage Design and Operation Plan. The Permittee may not have more than 50 hazardous waste containers in each of these containment buildings. ‡ **Rev. 3**

III.A.2.

The quantity of containerized hazardous waste stored in each designated container storage unit shall be limited by the design capacity of that unit, as specified in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082].

III.A.3.

The Permittee shall store containerized hazardous waste in the manner described in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082], except as otherwise specified in this section of the Permit. Compliance with the storage operation procedures outlined in Container Storage Design and Operations Plan [A.R. 06082] and Permit Condition II.A.1, shall constitute compliance with the following requirements of 40 CFR Part 264:

- 264.171 Condition of containers;
- 264.172 Compatibility with waste containers;
- 264.173 Management of containers;
- 264.174 Inspections;
- 264.176 Special requirements for ignitable or reactive wastes; and
- 264.177 Special requirements for incompatible wastes.

III.A.4.

The Permittee is authorized by law to store or treat hazardous waste in containers in accordance with 40 CFR 262.34.

III.A.4.a.

Except as provided in Section VII of this Permit, bioremediation of containerized solid wastes containing free liquids shall be conducted in storage units authorized to store liquid wastes in accordance with the operation procedures and monitoring in Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092].

III.A.5.

All container storage units shall be designed in accordance with all design requirements, engineered drawings, and applicable recommendations in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082].

III.A.5.a.

Container storage units S-3 and S-5, are not authorized to store containerized liquid hazardous wastes unless this Permit is modified. ‡ **Rev. 3**

III.B. Inspections

The Permittee shall store all containers of hazardous waste on a single tier, (i.e., no stacking) at all container storage units, except as allowed by Permit Condition III.C.1. and Stand Alone Document No. 9 and except that small containers that are suitable for stacking (e.g., boxes or crates) may be stacked to a reasonable level, (not to exceed 5 feet in height) and intermodal type containers specifically designed for stacking may be stacked, provided the stack is stable and there is no apparent hazard of such containers tipping or falling and provided that inspection of such containers is not inhibited. Containers used in bio-treatment may be stacked three high. ‡ **Rev. 3**

The Permittee shall, immediately upon request from the Inspector reposition any container, as necessary, to make the label on that container visible from the aisle for the purpose of inspection.

III.C. Aisle Space

III.C.1.

The Permittee shall maintain a minimum of 2.5 feet of aisle space for hazardous waste containers at all container storage units at the Facility. Maintenance of the specified aisle space shall constitute compliance with 40 CFR 264.35. At container storage unit S-2: The Permittee shall not double stack 55-gallon, or larger, hazardous waste containers unless all permitted floor space in an individual storage area (A, B, C, D or E) within container storage unit S-2 is occupied by a container. The Permittee may double stack 55-gallon, or larger, containers if such permitted floor space is occupied. ‡ **Rev. 3** Containers that have a volume less than 55-gallons may be double-stacked at anytime.

III.C.2.

At container storage unit S-2, the Permittee shall maintain a minimum aisle width of four (4) feet between hazardous waste container rows and between containers and walls for ignitable and reactive hazardous wastes. ‡ **Rev. 3**

III.D. Containment

III.D.1.

The Permittee shall store hazardous waste containers in a manner that minimizes the potential for container deterioration. ‡ **Rev. 3**

III.D.2.

Container storage of liquid and non-liquid hazardous wastes in S-1, S-2, S-3, S-4, S-5, S-6, S-10, and S-11A in the manner specified in Standalone Document No. 9, Container Storage Design and Operation Plan [A.R. 06082], shall constitute compliance with 40 CFR 264.175(b) and (c).

III.E. Requirement for Containerized Wastes

All containers holding hazardous waste shall be covered at all times, except when hazardous wastes are being added, removed, or inspected. ‡ **Rev. 3**

III.F. Special Requirement for Incompatible Wastes

The Permittee shall comply with 40 CFR 264.177.

III.G. Closure

The Permittee shall close all container storage units in accordance with Section 1.0 of the Closure Plan in Standalone Document No. 5 [A.R. 06078] and Section II.J. of this Permit.

III.H. Additional Conditions at Container Storage Unit S-2

III.H.1.

S-2 storage areas A through E, as shown in drawing 10-AS-1 in Standalone Document No. 9, shall be constructed such that 10% of the maximum volume stored in the specific storage area is contained within that specific storage area. At a minimum, all surrounding berms around each specific storage area shall be no less than 3 inches in height.

III.H.2.

The Permittee shall follow the operational conditions found in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082] as amended by Permit Conditions III.H.3. through III.H.7.

III.H.3.

Within container storage unit S-2, the Permittee may only store hazardous wastes at storage areas A, B, C, D and E, as designated in drawing 10-AS-1 in Standalone Document No. 9. ‡ **Rev. 3** Hazardous wastes found in the designated area "Receiving Area" shall be hazardous wastes undergoing analysis in accordance with Standalone Document No. 1, Waste Analysis Plan A.R. 06074].

III.H.4.

Unless otherwise approved by the Department, the maximum allowable storage for hazardous waste containers for each storage location is: ‡ **Rev. 3**

Storage Areas				
A	B	C	D	E
(# 55-gal. drums)	(# 55-gal. drums)	(# 55-gal. drums)	(# 55-gal. drums)	(# 55-gal. drums)
(gallons)	(gallons)	(gallons)	(gallons)	(gallons)
164	142	142	142	188
9,020	7,810	7,810	7,810	10,340

III.H.5.

The Permittee shall maintain rows of hazardous waste containers to be no more than two 55-gallon drums wide. For hazardous waste containers larger than 55-gallon drums, a container row shall be no wider than the single largest container in that row. ‡ **Rev. 3**

III.H.6.

The Permittee may not store incompatible wastes within the same storage area which is serviced by a single sump.

III.H.7.

The Permittee shall have signage to indicate what class of hazardous waste (e.g., acid, oxidizer, toxic, etc.) is being stored within a container storage unit which is serviced by a single sump.

III.I. Subpart CC Air Emission Requirements

The Permittee shall comply with Permit Conditions II.U.2.a. and II.U.2.b.

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IV. TANK STORAGE AND TREATMENT

IV.A. Applicability of Rules

IV.A.1.

The Permittee shall comply with the regulations pertaining to hazardous waste tank systems in 40 CFR 264 Subpart J.

IV.A.2.

The Permittee is authorized by law to store or treat hazardous waste generated on-site in tanks in accordance with 40 CFR 262.34.

IV.A.3

The Permittee shall not store hazardous wastes prohibited from storage under Permit Condition II.C.5.b.ii. in all tanks, and shall not treat hazardous wastes prohibited from treatment the first sentence of Permit Condition II.C.5.b.i. in all tanks.

IV.B. Bulk Liquid Storage and Treatment Facility/Wastewater Treatment Unit ‡ Rev. 14

IV.B.1.

The bulk liquid storage and treatment facility/wastewater treatment unit shall consist of all associated ancillary equipment, containment system, and tanks which includes: Six 10,500 gallon tanks, two 5,200 gallon mix tanks, one 1,500 gallon clarifier, one 2,600 gallon thickener tank, one 1,440 gallon surge tank, two 400 gallon sand filters, two eleven gallon bag filters, and two 1,700 gallon carbon vessels ‡ Rev. 14, as described in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081]. In addition, the tank system capacity includes the tanks described in the Wastewater Treatment Facility Operations Manual, also found in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081].

IV.B.2.

The Permittee may store and treat any wastes, in liquid form, listed under Permit Conditions II.C.5. and II.C.5.a.i-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the bulk liquid storage and treatment facility. Compliance with 40 CFR 264.198 for ignitable or reactive wastes is required, in order for such wastes to be managed in the Permitted tank systems. Additionally, if the waste is incompatible with any waste already in a tank, or the tank itself, based on compatibility assessment as specified in Standalone Document No. 1, Waste Analysis Plan [A.R. 06074], such waste shall not be stored or treated in that tank.

IV.B.3.

The Permittee shall operate the bulk liquid storage and treatment facility/wastewater treatment unit ‡ Rev. 14 in accordance with the procedures in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081].

IV.B.4.

The Permittee shall maintain spill controls, and overflow prevention controls as required by 40 CFR 264.194. Overflow prevention controls shall be set such that one foot of freeboard in each tank (headspace) is maintained at all times.

IV.C. Stabilization Unit Tanks

IV.C.1.

The stabilization unit tanks shall consist of 12 in-ground steel tanks, with a capacity of approximately 15,000 gallons each. The design of each tank and the secondary containment structure shall be as described in Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083].

IV.C.2.

The Permittee may store and treat any wastes described in Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the stabilization unit tanks. Additionally, if any hazardous waste is water reactive, has a pH less than or equal to 2, or is incompatible with other wastes already in the tank, based on the compatibility assessment as specified in the Waste Analysis Plan [A.R. 06074], such waste shall be treated in accordance with the applicable sections of Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083]. Water-reactive hazardous waste may only be treated upon Department approval for each waste stream (which approval shall not be considered a modification of this Permit).

IV.C.3.

The Permittee shall operate the stabilization unit tanks in accordance with Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083].

IV.C.4.

The Permittee shall maintain at least two feet of freeboard in the stabilization unit tanks at all times. Hazardous waste in the unit, other than residue or stain on the inside of the tank walls, shall not exceed the two-foot freeboard requirement, except as may be necessary during the actual mixing process. Residue or stain on the inside of the tank walls above the two-foot freeboard limit shall not, in itself, result in a freeboard violation.

IV.D. Closure

The Permittee shall close all tank units in accordance with the applicable sections of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] and Section II.J. of this Permit.

IV.E. Subpart CC Air Emission Requirements

The Permittee shall comply with Permit Condition II.U.1.

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V. SURFACE IMPOUNDMENT STORAGE AND TREATMENT

V.A. Surface Impoundments.

V.A.1.

Surface impoundments shall consist of two existing units P-A and P-B.

V.A.2.a

The Permittee may store and treat any wastes, in liquid or semi-solid form, listed under Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the surface impoundments. The Permittee shall not store or treat any hazardous wastes which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard as specified in 40 CFR Part 268 has been achieved prior to placement in the surface impoundments. In addition, as new hazardous wastes are prohibited from land disposal unless the wastes meet the land disposal restriction treatment standards under 40 CFR Part 268, the Permittee shall immediately cease placement of such wastes in any surface impoundment upon the effective date of the 40 CFR Part 268 regulation.

V.A.2.b.

The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii. in the surface impoundments and shall not treat hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i. in the surface impoundments.

V.A.3.

If any waste, or the product of residue of the treatment of such waste, is incompatible with wastes already in a surface impoundment, based on the compatibility assessment as specified in Standalone Document No. 1, Waste Analysis Plan [A.R. 06074], such waste shall not be placed into the surface impoundment.

V.A.4.

The Permittee shall operate all surface impoundments in the manner specified in Standalone Document No. 13, Surface Impoundments Design and Operations Plan [A.R. 06086]. The Permittee shall operate each surface impoundment in a manner to prevent physical barriers (i.e., solid material or sludge) from restricting the mixing of liquid waste.

V.A.5.a.

The Permittee shall maintain freeboard in each surface impoundment as specified in Standalone Document No. 13, Surface Impoundments Design and Operations Plan [A.R. 06086] and shall follow the procedures specified in Surface Impoundments Design and Operations Plan [A.R. 06086] to prevent overtopping.

V.A.5.b.

The Department reserves the right to increase the amount of freeboard required at any surface impoundment if overtopping has occurred. Such a change could occur at any point during the life of this Permit and would be effective upon written notification from the Manager to the Permittee. Such a change would not require a Permit modification in accordance with 40 CFR 270.42.

V.A.6.

Prior to placement of any sludge from the surface impoundments into a landfill unit, the Permittee shall follow the stabilization (when necessary) and analyses procedures outlined in the Waste Analysis Plan [A.R. 06074], Surface Impoundments Design and Operations Plan [A.R. 06086], and Stabilization/Chemical Treatment Plan [A.R. 06083] to ensure that the sludge has been properly stabilized. The Permittee may stabilize the sludge within the surface impoundments as specified in Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078], and Standalone Document No. 13, Surface Impoundments Design and Operations Plan, Response Action Plan [A.R. 06086].

V.A.7.

The Permittee shall follow the requirements of Standalone Document No. 13, Surface Impoundments Design and Operations Plan [A.R. 06086] when emergency repairs are undertaken for an surface impoundment. ‡ **Rev. 3**

V.A.8.

The Permittee shall follow the procedures in Standalone Document 13, Surface Impoundments Design and Operations Plan, Response Action Plan [A.R. 06086], for units P-A and P-B, that require a response action plan.

V.B. Subpart CC Air Emission Requirements

The Permittee shall comply with Permit Condition II.U.1.

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VI. LANDFILL DISPOSAL

VI.A. Existing Closed Landfill Units L-5, L-7, and L-9

VI.A.1.

The Permittee shall inspect the leachate collection system in units L-5, L-7 and L-9 for the presence of liquid at the frequency specified in Standalone Document No. 3, Inspection Plan [A.R. 06076]. The results of the inspection, including the amount of any liquid found, shall be entered in the operating record. Prior to final Facility closure, if liquid is found in the leachate collection system, all pumpable quantities of such liquid shall be removed, to the extent practicable, within 24 hours of the time such liquid is found. The time for removal of liquid shall be 72 hours after finding liquid in the leachate collection system after final Facility closure. In all cases, the liquid shall be managed as hazardous waste.

VI.B. Operating Landfill Units L-12, L-13, and L-14

VI.B.1.

The Permittee may dispose of any wastes listed under Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in landfill units L-12, L-13, or L-14 except that the following restrictions on waste disposal shall apply:

VI.B.2.a.

The Permittee shall not dispose of hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i.

VI.B.2.b.

The Permittee shall not dispose of wastes containing free liquids. Free liquids analyses shall be performed in accordance with the applicable procedures in Waste Analysis Plan [A.R. 06074]. Note: Liquid wastes that are contained in lab packs (packaged in accordance with 40 CFR 264.316) or containers, that are very small such as ampoules, or containers that are designed to hold free liquids for use other than storage, such as capacitors or batteries (in accordance with 40 CFR 264.314), may be disposed without stabilization and related testing and verification procedures, provided other restrictions, as specified in this Permit or by other statutes or regulations, do not prohibit the land disposal of such wastes.

VI.B.2.c.i.

The Permittee shall not dispose of any hazardous waste which was generated as a liquid and was then stabilized by the generator (or another off-site treatment facility) unless the Permittee has conducted testing to ensure that the waste has been properly stabilized, (i.e., achieves the appropriate treatment standard required by 40 CFR Part 268 and does not contain free liquids). Such testing shall be done by the Permittee, using sampling and analytical methods outlined in Waste Analysis Plan [A.R. 06074], and Stabilization/Chemical Treatment Plan [A.R. 06083]. Records of such analyses shall be maintained in the operating record for a minimum period of three years. This Permit Condition [VI.B.2.c.i.] shall not apply if the Permittee complies with Permit Condition VI.B.2.c.ii.

VI.B.2.c.ii.

As an alternative to the testing by the Permittee specified in Permit Condition VI.B.2.c.i., the Permittee shall maintain documentation supplied by the generator (or another off-site treatment facility) that proper stabilization has been achieved. Documentation from the generator (or another off-site treatment facility) shall contain a signed certification that the stabilized hazardous waste achieves the appropriate treatment standard required by 40 CFR Part 268 and does not contain free liquids as specified in this Permit. The Permittee shall maintain such documentation in the operating record for a minimum period of three years.

VI.B.2.d.

The Permittee shall not dispose of any wastes which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard in 40 CFR Part 268 has been achieved. In addition, as new hazardous wastes are prohibited from land disposal unless the wastes meet the land disposal restriction treatment standards under 40 CFR Part 268, the Permittee shall immediately cease disposing of such wastes upon the effective date of the 40 CFR Part 268 regulation, unless the treatment standards for the hazardous wastes in 40 CFR Part 268 have been achieved.

VI.B.2.e.

The Permittee shall not dispose ignitable or reactive hazardous wastes (Environmental Protection Agency Waste numbers D001 or D003, respectively) or any EPA-listed hazardous waste for which the basis for listing is ignitability or reactivity, unless the waste has been treated to render it non-ignitable or nonreactive. For such wastes, the Permittee shall follow testing procedures used to determine ignitability and reactivity as specified in Waste Analysis Plan [A.R. 06074]. This restriction on disposal of ignitable waste does not apply to ignitable waste disposed in accordance with 40 CFR 264.312(b).

Note: Cyanide or sulfide bearing waste as defined in 40 CFR 261.23(a)(5) may be packaged in accordance with 40 CFR §264.316 and disposed without first being treated or rendered nonreactive.

VI.B.3.

The Permittee shall operate landfill units L-12, L-13, and L-14 in accordance with the operating practices in Standalone Document No. 14, Landfill Design and Operations Plan [A.R. 06087].

VI.B.4.

The Permittee shall maintain a permanent accurate record of the approximate three dimensional location of each hazardous waste type, based on grid coordinates, within units L-12, L-13 and L-14 in accordance with 40 CFR 264.309. This record shall include the information necessary to locate a specific hazardous waste type and shall be based on information contained in the manifest (generator identification number, waste code, and date of disposal). This Condition shall apply to all wastes placed in units L-12, L-13 and L-14, irrespective of the date of disposal. Upon final closure of the Facility, the Permittee shall submit copies of these records for units L-12, L-13, and L-14 to the Manager.

VI.B.5.

‡ **Rev. 9** Liquid in the primary leachate collection system of unit L-12, L-13, or L-14 will not exceed 30 cm (one foot) in depth over the primary liner after waste has been placed. (This does

not include the area of the sump used to accumulate sufficient quantities of liquid for pumping). Liquid in the secondary leachate collection system of unit L-12, L-13, and L-14, will be removed, when pumpable quantities exist, to the extent practicable, within 24 hours after those quantities are found. The leachate from both the primary and secondary leachate collection systems will be managed for dust suppression within the footprint of the landfill from which the leachate originated per Standalone Document 14 – Landfill Design and Operations Plan. Leachate application shall be inspected daily to assure that the application is conducted in a controlled manner to prevent ponding and runoff. Leachate not used for dust suppression will be managed as hazardous waste and routed to the wastewater treatment unit. During the post-closure period, after final Facility closure, liquid from the secondary leachate collection systems shall be pumped, as described above, within 72 hours after such liquid is found.

VI.B.6.

For landfills units L-12, L-13, and L-14, the Permittee shall follow the procedures specified in Standalone Document No. 15, Landfill Response Action Plan [A.R. 06088].

VI.B.7.

The Permittee shall close units L-12, L-13, and L-14 in accordance with the applicable sections of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078], Standalone Document No. 16, Construction Quality Assurance Plan [A.R. 06088] and Standalone Document No. 17, Landfill Final Cover Design Plans [A.R. 06090], and Permit Condition II.J.

‡ Rev 28

VI.B.7.a

When implementing the evapotranspiration final cover alternative, the Permittee shall follow the fertilizer and soil amendments recommended by A&L Western Agriculture Laboratories as contained in Appendix B.3 of the Alternative Final Cover Design Report for Landfills L-12, L-13 and L-14 included in standalone 17.

VI.B.8.

The Permittee shall close units L-13, L-12, and L-14 in accordance with 40 CFR 264.19 and Standalone Document No. 16, Construction Quality Assurance Plan [A.R. 06089].

VI.B.9.

The Permittee shall follow the requirements for post-closure care of units L-12, L-13, and L-14 in accordance with the applicable sections of Standalone Document No 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] and Section II.L. of this Permit. The post-closure care period for each unit shall begin at the time of completion of closure of each unit.

VI.B.10.

The landfill units shall be operated and maintained using best management practices designed to prevent fires, pyrophoric events, explosions, combustion, or conflagration within the footprint of any operating landfill. ‡ **Rev. 3**

VI.C. Waste Pile WP-1 ‡ Rev. 23

VI.C.1.

The Permittee is authorized to process and store concrete wastes from the Umatilla Demilitarization Demolition Project in accordance with the provisions of Standalone Document 21 – Waste Pile Operations Plan.

VI.C.2

The Permittee shall inspect the Waste Pile WP-1 in Accordance with Standalone Document 1- Inspection Plan

VI.C.3

The Permittee will monitor the Waste Pile WP-2 in accordance with Standalone Document 7 – Groundwater Monitoring Plan

VI.C.4

The Permittee will close the Waste Pile WP-2 in accordance with Standalone Document 21 – Waste Pile Operations Plan

VI.C.5

The Permittee will maintain Closure Post Closure Financial Assurance for Waste Pile WP-1 in accordance with Standalone Document 5 – C-PC Plan

VI.D. [Reserved]

VI.E. Acceptance, Storage, Treatment, and Disposal of Corrective Action Management Unit [CAMU]-Eligible Wastes

VI.E.1.

The Permittee is authorized to accept, store, treat, and dispose of CAMU-eligible wastes, as defined at 40 CFR 264.552(a)(1), in accordance with Permit Conditions VI.E.2. through VI.E.12.

VI.E.2.a.

In addition to the approved Waste Analysis Plan requirements: For each single-type CAMU remediation waste acceptance, the Permittee shall investigate and determine that the authority that designated the waste as CAMU-eligible waste is authorized for such designation in accordance with either being an US EPA regional office or state authorized by 40 CFR Part 271. The results of the investigation, which may include hand-written notes from phone calls, shall be placed in the operating record.

VI.E.2.b.

In addition to the approved Waste Analysis Plan requirements: For single CAMU remediation wastes, the Permittee shall investigate and determine if the regulatory authority that designated the waste as CAMU-eligible waste provided a public notice and an opportunity for public comment. The results of the investigation, which may include hand-written notes from phone calls, shall be placed in the operating record.

VI.E.3.

The Permittee shall comply with the requirements of 40 CFR 268.7(b)(4) except the certification shall state that the CAMU-eligible wastes meet the treatment standards in 40 CFR 264.555(a)(2).

VI.E.4.

The Permittee shall dispose all CAMU-eligible waste in either landfill L-12, L-13, or, L-14.

VI.E.5.

All CAMU-eligible wastes that are disposed in a landfill shall meet any of the standards in 40 CFR 264.555(a)(2)(i), (ii), or (iii).

VI.E.6.

For new single CAMU-eligible wastes proposed to be received at the Facility, the Permittee shall notify the Department and persons on the Facility's mailing list of the Permittee's intent to receive the waste unless exempted in accordance with Permit Condition VI.E.9. The Permittee shall abide by all conditions in any Department exemption letter.

VI.E.7.

In the notification to the Department and the Facility mailing list regarding the Permittee's intent to receive CAMU-eligible wastes at the Facility, the Permittee shall state the source of the CAMU-eligible waste, the principal hazardous constituents in the waste, and the treatment requirements. The notification shall state that there will be a 15-day period after receipt of the notification for public comment. The notification shall state that any comments should be sent to the Department and that any comment may include an objection to receipt of the CAMU-eligible waste.

VI.E.8.a.

The Permittee may not receive any CAMU-eligible waste within the 15-day comment period specified in Permit Condition VI.E.7., and may not receive CAMU-eligible waste until the Department notifies the Permittee that the Department does not object to placement of the CAMU-eligible waste in the landfill. The Department may take a 30-day review period, with a possible 30-day extension because of public concerns or insufficient information, from the date of the Permittee's notice of intent to receive the CAMU-eligible waste.

VI.E.8.b.

The Department may object to the Permittee's placement of any single-type remediation CAMU-eligible waste stream. If the Department notifies the Permittee that the Department objects, the Permittee may not receive the single CAMU-eligible waste. If, at the end of the review period, the Department has not notified the Permittee that the Department has chosen not to object, the Permittee may not receive the single remediation CAMU-eligible waste until the objection has been resolved, or, the Permittee obtains a permit modification in accordance with 40 CFR 270.42 specifically authorizing receipt of the single remediation CAMU-eligible waste.

VI.E.9.

Upon an approved permit modification submitted by the Permittee, the Department may modify, reduce, or eliminate the notification requirements of Permit Condition VI.E.6. and VI.E.7. The Department's written decision will be based on minimal risk.

VI.E.10.

The Permittee may accept Rhone Poulenc (ORD 990 659 492) granular activated carbon remediation wastes as specifically described in the permit modification request, dated October 4,

2004. Such wastes shall be containerized when disposed of in a landfill. Such containers shall remain intact during disposal and when covered by operational lifts.

VI.E.11.

[Reserved]

VI.E.12.

The Permittee may accept and dispose the single remediation granular activated carbon CAMU-eligible wastes, as described in the permit modification request, dated October 4, 2004, from the Union Pacific Railroad Tie Treating Facility [UPRTTF], EPA ID ORD 982 658 742, The Dalles, Oregon. All CAMU-eligible wastes from the UPRTTF facility shall be disposed by macro encapsulation in accordance with this Permit and Standalone Document No 11, the Debris Treatment Plan [A.R. 06084].

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VII. CONTAINMENT BUILDING STORAGE AND TREATMENT

VII.A.1.a

The Permittee is authorized to store and treat any non-liquid wastes listed under Permit Condition II.C.5 and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in containment buildings B-1, B-2, B-4 B-5, and B-9 including crushing and size reduction.

VII.A.1.b.

The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii. in containment buildings and shall not treat hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i. in containment buildings.

VII.A.2.

The Permittee shall operate and maintain all containment buildings in accordance with Standalone Document No. 12, Containment Buildings Design and Operations Plan [A.R. 06085] and all applicable requirements contained in 40 CFR 264 Subpart DD. Bioremediation in containment buildings authorized for the storage and treatment of hazardous wastes containing free liquids shall be conducted in accordance with Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092].

VII.A.3.

The Permittee may store and treat wastes containing free liquids in containment building B-5.

VII.A.4.

The Permittee is authorized to operate and maintain its Organic Recovery Unit and associated ancillary equipment including tanks, containment and flare in accordance with Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan as approved by the Department. ‡ ‡ **Rev. 12**

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IX. PAST PRACTICE UNITS ‡ Rev. 15

IX.A. Definition of Past Practice Units

IX.A.1

Past practice units at this Facility shall consist of landfill units L-1, L-3, L-5, and L-6.

IX.B. Post-Closure Care of Landfill Units L-1, L-3, L-5, and L-6

IX.B.1.

The Permittee shall implement a detection groundwater monitoring program for the past practice units which complies with the requirements of Section X of this Permit. Monitoring well locations for the past practice units are listed in Table X-1 of this Permit and are displayed on Figure 1 of this Permit. Monitoring well sampling frequencies are specified in Table X-1 of this Permit.

IX.B.2.

The Permittee shall follow the post-closure care maintenance procedures outlined in Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] for past practice units L-1, L-3, L-5, and L-6.

IX.C. Corrective Action for Past Practice Units L-1, L-3, L-5, and L-6

The Permittee shall follow the requirements in Permit Conditions X.D.4. through X.E.5. in response to a confirmed exceedance of the detection monitoring criteria as specified in Permit Conditions X.D.1. through X.D.3.

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X. GROUNDWATER DETECTION MONITORING PROGRAM‡ Rev. 15

X.A. Monitoring Well/Piezometer Locations

X.A.1.

The Permittee shall maintain a groundwater detection monitoring program as specified below at the locations for detection monitoring that are listed in Table X-1 of this Permit and displayed on Figure 1 of this Permit. [40 CFR 264.97 and 264.98]

X.A.2.

The Permittee shall maintain the network of piezometers, for the purpose of determining groundwater elevations, at the locations listed in Table X-2 of this Permit and displayed on Figure 1 of this Permit.

X.A.3.

The point of compliance is the vertical surface located at the hydraulically down gradient boundary of the Waste Management Areas listed in Table X-1. [40 CFR 264.95].

X.B. Well Construction, Maintenance, Replacement and Decommissioning

X.B.1.

The Permittee shall maintain the monitoring wells and piezometers identified in Permit Conditions X.A.1. and X.A.2., in accordance with Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.B.2.

All new and replacement monitoring wells and piezometers shall be drilled and constructed as approved by the Department. A well installation work plan shall be submitted to the Department, for approval, for all new and replacement monitoring wells and piezometers. The Permittee may not begin drilling until Department approval has been granted. All new and replacement monitoring wells and piezometers shall be designed, constructed, and installed in accordance with Oregon Water Resources

Department rules OAR 690-240; and, as appropriate, in general accordance with current guidance from the Department and the Environmental Protection Agency for drilling and construction of groundwater monitoring wells. Minor changes to the well installation work plan shall not be considered a Permit modification.

The Permittee shall take all reasonable precautions during drilling to prevent cross contamination between any water-bearing hydrologic zone and the geologic zones overlying and underlying the water-bearing hydrologic zone.

X.B.3.

The Permittee shall maintain all monitoring wells and piezometers in good working order, making necessary repairs in a timely manner so that sampling activities do not occur outside the sampling timeframes specified in Permit Condition X.C.2.a. The Permittee shall maintain an adequate supply of replacement parts and repair equipment so that each groundwater sampling event [as defined in Permit Condition X.C.2.a.] is not unreasonably delayed. The Permittee shall maintain a list of spare parts and equipment that will fulfill the terms of this Permit Condition.

This list shall be approved by the Department. The Department's approval under this Permit Condition shall not be considered a Permit modification.

X.B.4.

The Permittee shall follow the procedures in Table 3-2 of Standalone Document No. 3, Inspection Plan [A.R. 06076] and in Section 3.4 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] for routine inspection of monitoring wells and piezometers.

X.B.5.

The Permittee shall maintain borehole integrity of each monitoring well and piezometer for any groundwater monitoring program developed to satisfy 40 CFR 264.98, 264.99 and 264.100, as required by 40 CFR 264.97(c). The Permittee shall inspect groundwater wells at the Facility not identified in the previous sentence at least once every five years beginning August 1, 2007 as provided in Section 3.4 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.B.6.

Any replacement monitoring wells or piezometers that may be required during the life of this Permit shall be installed as close as appropriate and practicable to the monitoring well or piezometer being taken out of service. If a monitoring well or piezometer shall be replaced for any reason during the term of this Permit, it shall be replaced within 90 calendar days of the date taken out of service unless the Department approves a longer period of time.

X.B.7. All new or replacement groundwater sampling pumps shall be dedicated bladder pumps unless the Department approves use of another type of pump or sampling device in writing. The Department's approval under this Permit Condition shall not be considered a permit modification.

X.B.8.

All monitoring wells or piezometers that require decommissioning shall be decommissioned in accordance with Oregon Water Resources Department rules OAR 690-240 and, as appropriate, in general accordance with current guidance from the Department and the Environmental Protection Agency for decommissioning groundwater monitoring wells. Written approval for monitoring well or piezometer decommissioning is required from the Department. Monitoring well or piezometer decommissioning documentation, as required by OAR 690-240-0510(6), shall be submitted to the Department within 60 calendar days after completion of decommissioning.

X.B.9.

By written direction from the Department, the Permittee shall decommission monitoring wells or piezometers in the groundwater monitoring program developed to satisfy 40 CFR 264.98, 264.99 and 264.100, that do not meet the requirements in 40 CFR 264.97(c). In determining whether to issue the written direction, the Department will consider the Permittee's evaluation, if any, for whether the monitoring well(s) or piezometer(s) meets the requirements in 40 CFR 264.97(c).

X.B.10.

The Permittee shall submit to the Department within 60 calendar days of installation of any new or replacement monitoring well or piezometer (or group of monitoring wells or piezometers), or decommissioning of an existing monitoring well or piezometer (or group of monitoring wells or piezometers), revised versions of Table X-1, Table X-2, and Figure 1. The Permittee shall obtain a Permit modification for any new or replacement monitoring well.

X.C. Program Operation

X.C.1.

Groundwater Elevations and Flow Direction

X.C.1.a.

The Permittee shall determine the elevation of the groundwater surface at each monitoring well and piezometer listed in Table X-1 and Table X-2 of this Permit, each time the groundwater is sampled. [40 CFR 264.97(f)]

X.C.1.b.

Groundwater level measurements for each monitoring well shall be obtained prior to purging the well. In order to minimize the potential for error caused by temporal variations, the Permittee shall obtain all water level measurements within as short a time as practicable. On each day that water level measurements are being collected under this Permit Condition, the barometric pressure shall be recorded and entered into the operating record.

X.C.1.c.

The Permittee shall use these data to determine the rate and direction of groundwater flow at each Waste Management Area annually, and construct groundwater elevation (or potentiometric surface) contour maps for Level 1 and Level 2 of the Selah Aquifer annually. The contour maps and flow rates shall be submitted to the Department in the second semi-annual monitoring report. The Permittee shall submit, with the contour maps, a written review of the adequacy of the groundwater monitoring system relative to observed groundwater flow directions with respect to each Waste Management Area.

X.C.1.d.

Graphs of groundwater elevation vs. time will be submitted annually, in the second semi-annual monitoring report, for all monitoring wells listed in Table X-1 and all piezometers listed in Table X-2, including all available historical groundwater elevation data.

X.C.2. Groundwater Sampling and Analysis

X.C.2.a.

The Permittee shall obtain water quality samples from each detection monitoring well listed in Table X-1 of this Permit and displayed on Figure 1 of this Permit at the frequencies designated on Table X-1 of this Permit, in accordance with the procedures in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080]. Semiannual groundwater sampling events shall be started and finished in the months of March through May, and September through November, respectively, during each calendar year. For all semiannual, annual, and all other groundwater sampling events, the Permittee shall notify the Department within five (5) working days prior to the sampling event.

X.C.2.b.

The Permittee shall analyze all groundwater samples obtained under Permit Condition X.C.2.a. for the constituents and parameters listed in Table X-3 of this Permit, using procedures specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.C.2.c.

Results of all analyses, including semiannual analyses, verification analyses, and Appendix IX analyses, shall be submitted to the Department within 45 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report. In

no case shall the period between the last date of sampling and the date of submission to the Department of analytical results exceed 90 calendar days unless a written extension is granted by the Department. The Permittee shall document when the analytical laboratory's quality-assured data reports are received. The report submitted to the Department shall contain laboratory quality-assured results (as specified in the Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080] reported down to the method detection limit (MDL), and the reporting limit (RL) as specified in Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080]. The MDL results are for informational purposes and will be discussed in the reports for each sampling event, as described in the Groundwater Monitoring Plan.

X.C.2.d.

Semiannual groundwater monitoring reports shall also include the information listed in Section 7.2 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.C.2.e.

The Permittee shall enter all monitoring, testing, and quality-assured analytical data obtained pursuant to Permit Condition X.C. in the operating record as required by Permit Condition I.M. Upon written request by the Department, these results shall be submitted within 30 calendar days after the Permittee's receipt of the request, provided the Permittee has received the analytical laboratory's quality-assured data report. ‡ **Rev. 16**

X.D. Data Evaluation

X.D.1.

The results of analyses obtained pursuant to Permit Condition X.C.2. shall be compared to the following detection monitoring criteria for the Volatile Organic Constituents (VOCs) listed in Table X-3:

X.D.1.a.

For Chloromethane; Dichlorodifluoromethane; Dichloroethane,1,1-; Methylene chloride; Tetrachloroethene; Toluene; Trichloroethane,1,1,1-; Trichloroethene; and Trichlorofluoromethane in detection monitoring wells 3R-2, 4B-1, 5D-1, and 5Q-1 each detection monitoring criterion listed in Table X-4 multiplied by five; or

X.D.1.b.

For all other detection monitoring wells not included in Permit Condition X.D.1.a., the detection monitoring criteria listed in Table X-4.

X.D.1.c.

For any VOCs detected in detection monitoring wells 3R-2, 4B-1, 5D-1, or 5Q-1 that are degradation products of Chloromethane; Dichlorodifluoromethane; Dichloroethane,1,1-; Methylene chloride; Tetrachloroethene; Toluene; Trichloroethane,1,1,1-; Trichloroethene; and Trichlorofluoromethane, the Permittee may add those VOCs to Permit Condition X.D.1.a. after Department approval.

X.D.2.

Upon determination of VOCs in any monitoring well exceeding the applicable criteria specified in Permit Condition X.D.1. of this Permit, the Permittee shall:

X.D.2.a.

Notify the Department of this finding, in writing, within 7 calendar days after receiving the analytical laboratory's quality-assured data report [40 CFR 264.98(g)(1)]; and,

X.D.2.b.

Within 30 calendar days after this finding, collect two samples from any affected monitoring well(s), following the procedures identified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], and reanalyze the samples for all VOCs specified in Table X-3 of this Permit that exceeded the applicable criteria in Permit Condition X.D.1. In no case shall the period between the date of the determination under Permit Condition X.D.2. and the date of the submission to the Department of the analytical results for the sampling under this Permit Condition exceed 135 calendar days unless a written extension is granted by the Department.

X.D.2.c.

The Permittee may elect to forgo verification sampling activities described under Permit Condition X.D.2.b. and instead follow the requirements of Permit Condition X.D.4.

X.D.3.

If the analytical laboratory's quality-assured data results from the analyses in Permit Condition X.D.2.b. show that:

X.D.3.a.

Neither verification sample confirms the detection of VOCs above the applicable detection monitoring criteria specified in Permit Condition X.D.1., the Permittee shall resume detection monitoring according to the schedule in Permit Condition X.C.2.a. and notify the Department in writing that the detection monitoring program is being resumed; or

X.D.3.b.

One or both verification samples confirm the detection of VOCs above the applicable detection monitoring criteria specified in Permit Condition X.D.1., the Permittee shall follow the requirements of Permit Condition X.D.4.

X.D.4.

Response to Confirmed Exceedance

X.D.4.a.

The Permittee shall notify the Department in writing that the detection monitoring criteria have been exceeded. This notification shall occur within 7 calendar days after receipt of the analytical laboratory's quality-assured data report obtained in Permit Condition X.D.3.b., or within 7 calendar days after receipt of the analytical laboratory's quality-assured data report received under Permit Condition X.C.2. if the Permittee elects to forgo verification sampling as provided in Permit Condition X.D.2.c.; and

X.D.4.b.

The Permittee shall sample the affected monitoring well(s) within 30 calendar days after receipt of the analytical laboratory's quality-assured data report obtained in Permit Condition X.C.2., or

within 30 calendar days of receipt of the analytical laboratory's quality-assured data report received under Permit Condition X.C.2. if the Permittee elects to forgo verification sampling as provided in permit Condition X.D.2.c., and analyze for the constituents identified in 40 CFR Part 264 Appendix IX.

X.D.4.c.i.

If any Appendix IX constituents not listed in Table X-3 of this Permit are detected above the applicable detection monitoring criteria as specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], the Permittee may resample within 30 calendar days after receipt of the analytical laboratory's quality-assured data report and repeat the Appendix IX analysis for any new constituents detected above the applicable detection monitoring criteria. If the second analysis confirms the presence of new constituents above the applicable detection monitoring criteria, the Permittee shall report the concentrations of these detected constituents to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the second analysis.

X.D.4.c.ii.

If the Permittee chooses not to resample, then the Permittee shall report the concentrations of the additional constituents detected above the applicable detection monitoring criteria to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the samples collected under Permit Condition X.D.4.b.

X.D.4.d.

Within 90 calendar days after receipt of the analytical laboratory's quality-assured data report for Appendix IX constituents required under Permit Condition X.D.4.b., the Permittee shall submit either of the following:

X.D.4.d.i.

An application for a permit modification to establish a compliance monitoring program, for the affected monitoring well(s), as specified in 40 CFR 264.98(g)(4), or, if any hazardous constituents are above the groundwater concentration limits, to initiate a corrective action program, as specified in Permit Condition X.E. unless the Permittee has submitted a notice of intent under 40 CFR 264.98(g)(4)(iv) to revise the groundwater concentration limits or,

X.D.4.d.ii.

A report demonstrating that a source other than a regulated unit or the past practice units caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater; and in addition, when required by 40 CFR 264.98(h), an application for a permit modification to make any appropriate changes to the detection monitoring program.

X.D.4.e.

If the Department determines that a report submitted in accordance with condition X.D.4.d.ii. fails to identify a source of contamination other than a regulated unit or past practice unit, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water, then the Permittee shall within 60 days of the Department's determination submit an application for a permit modification to establish a compliance monitoring program, as specified in 40 CFR 264.98(g)4, or, if any hazardous constituents are above the groundwater concentration limits, to initiate corrective action, as specified in Permit

Condition X.E. unless the Permittee has submitted a notice of intent under 40 CFR 264.98(g)(4)(iv) to revise the groundwater concentration limits.

X.D.5.

[Reserved]

X.E. Corrective Action Process

X.E.1.

Upon exceedance of the groundwater concentration limit(s), as determined by Permit Conditions X.D.4.d. or X.D.4.e., the Permittee shall send a written request to the Department's Eastern Region Environmental Cleanup Manager requesting a meeting. The written request shall be sent within 15 calendar days after it is determined that the groundwater protection standard(s) has been exceeded. The written request shall also contain the following information:

X.E.1.a.

Description of release with information known to date,

X.E.1.b.

Description of Permittee's obligation to notify the Environmental Cleanup Manager about the release in accordance with this Permit, and,

X.E.1.c.

Description of Permittee's duty to initiate corrective action in accordance with this Permit if any groundwater concentration limit(s) is exceeded.

X.E.2.

The Permittee shall meet with the Department's Eastern Region Environmental Cleanup Program within 45 calendar days after the date on the written notification sent in accordance with Permit Condition X.E.1. unless the Department approves a longer time period (which approval shall not be considered a modification of this Permit). Such a meeting is intended to initiate development of a corrective action written agreement for the Facility.

X.E.3.

The Permittee shall enter into a written agreement with the Department's Eastern Region Environmental Cleanup Program within 180 calendar days after the date on the written notification sent in accordance with Permit Condition X.E.1. The agreement shall provide that any corrective action be implemented under OAR 340-122 consistent with the requirements of 40 CFR 264.90 to 264.101. The agreement shall also provide that in the event of disagreement between the Permittee and Department regarding whether any action under the agreement is consistent with or exceeds 40 CFR 264.90 to 264.101, the Permittee and Department shall make a good faith effort to resolve the dispute by taking the following actions: (a) discussing the dispute between the Permittee's Environmental Manager and the Department's Project Manager, (b) if necessary, referring the dispute for resolution to the Permittee's Facility Manager and the Department's Cleanup Manager; and (c) if necessary, providing each other their respective positions in writing and referring the dispute for resolution by the Department's Eastern Region Administrator, in consultation with the Permittee's Market Area Manager. ‡ **Rev. 3**

X.E.4.

The agreement entered into under Permit Condition X.E.3. shall be processed as a Class 3 Permit modification and shall be considered an enforceable Condition of this Permit.

X.E.5.

During the course of the corrective action agreement, the Department may determine it necessary to revise the agreement or corrective action activities conducted under the agreement. Changes to the agreement, or corrective action activities conducted under the agreement that are implemented after the effective date of this Permit may require a modification to the Permit. The Permittee shall notify the Manager in writing at least 30 days prior to any planned changes to the agreement or corrective action activities conducted under the agreement. Upon notification by the Permittee, the Manager will determine whether or not a Permit modification will be needed. If a Permit modification is needed, the Manager shall so notify the Permittee, and upon receipt of such notice, the Permittee shall proceed with a Permit modification in accordance with the procedures set forth in 40 CFR 270.41 and 270.42, incorporated by reference under OAR 340-100-0002 and as modified by OAR -105-0041 and OAR 340-106-0005. In accordance with 40 CFR 270.42(e), as incorporated by reference under OAR 340-100-0002, the Permittee may seek, and the Manager may grant, temporary authorization to implement changes to the agreement or corrective action activities conducted under the agreement prior to the final approval of a Permit Modification.

X.E.6.

The agreement or corrective action activities conducted under the agreement, may be modified at any time under the Department's Environmental Cleanup Program authority pursuant to the agreement, provided the Permittee complies with the requirements of X.E.5. The Department's Environmental Cleanup Program authority to implement changes to the agreement, or corrective action activities conducted under the agreement, shall not be restricted or hindered by any requirements to modify this Permit. Changes approved under the Department's Environmental Cleanup program authority and implemented by the Permittee shall not be a violation of any condition of this Permit or any requirement to modify this Permit provided the Permittee complies with the requirements of X.E.5.

X.E.7.

The requirement to modify this Permit to accommodate changes in the agreement or corrective action conducted under the agreement shall not be in any way interpreted or deemed to replace, supersede, supplant, modify, or amend the Permittee's right to dispute resolution under the agreement.

X.E.8.

If, after the conclusion or stabilization of corrective action activities, either the Permittee or the Department determines that the Facility should return to a compliance monitoring program, the Permittee must submit a permit modification request to institute a renewed compliance monitoring program under this Permit.

X.F. Post Closure Monitoring

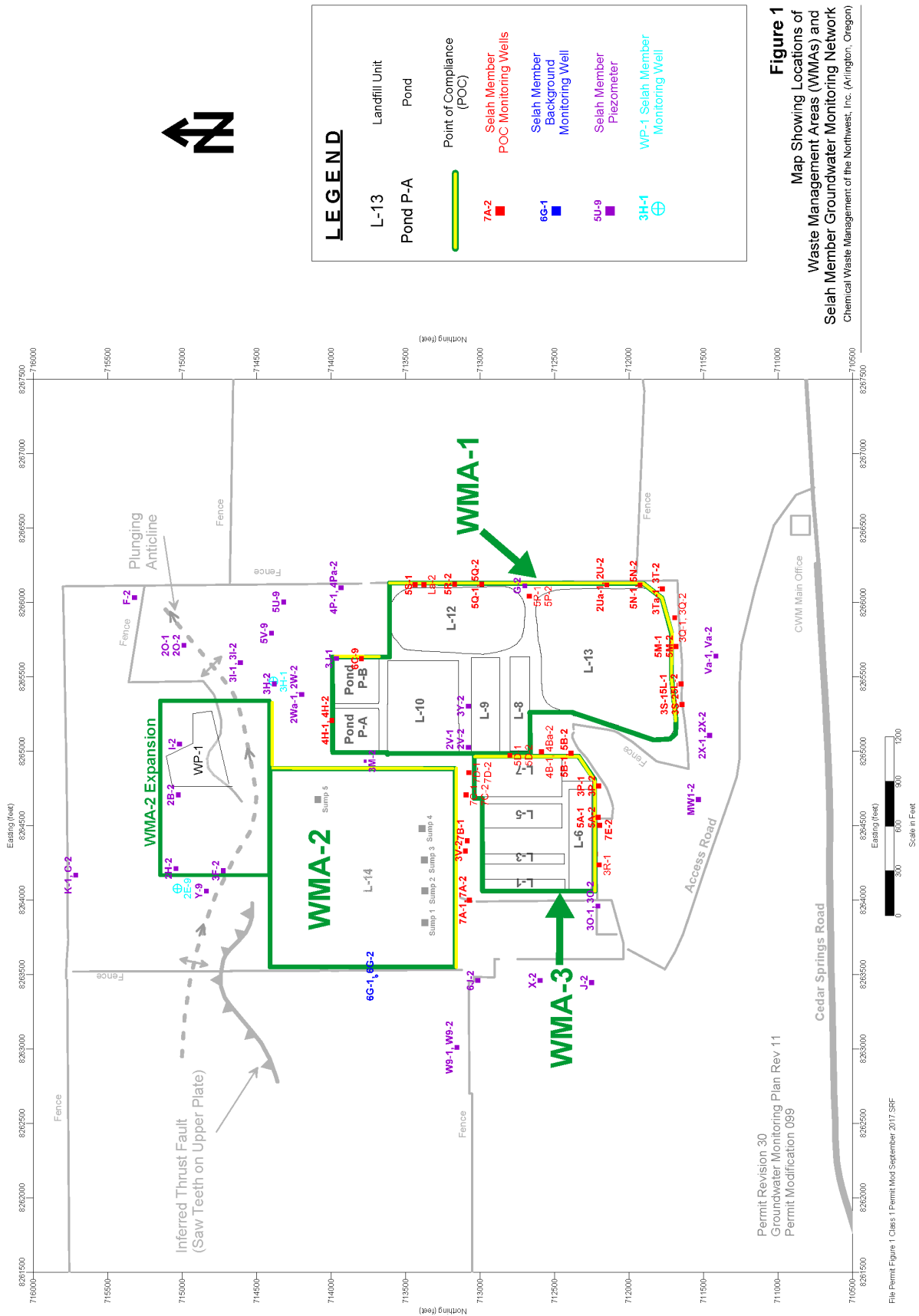
X.F.1.

All procedures described in Section X of this Permit shall apply to the post-closure care period, as well as the active life period of each regulated unit or waste management area.

X.G. Request for Permit Modification

X.G.1.

If the Permittee determines the detection monitoring program no longer satisfies the requirements of 40 CFR 264.98, then within 90 calendar days the Permittee shall submit an application for a permit modification to make any appropriate changes to the detection monitoring program. [40 CFR 264.98(h)]‡ **Rev. 17**



LEGEND

- Landfill Unit
- Pond
- Point of Compliance (POC)
- Selah Member POC Monitoring Wells
- Selah Member Background Monitoring Well
- Selah Member Piezometer
- WP-1 Selah Member Monitoring Well

Figure 1
 Map Showing Locations of
 Waste Management Areas (WMAs) and
 Selah Member Groundwater Monitoring Network
 Chemical Waste Management of the Northwest, Inc. (Arlington, Oregon)

Figure 1 Map of Groundwater Monitoring Program (REV. 29)

TABLE X-1

Table X-1 (REV. 29)						
Detection Monitoring Well Locations and Sampling Frequency						
Monitoring Well ID	Location [a] Northing	Eastings	TOC Elevation (ft) [a,b]	TSCA Monitoring Frequency	RCRA Monitoring Frequency	Post-Closure Monitoring
WASTE MANAGEMENT AREA WMA-1						
La-2	713381.50	8266135.26	1037.74	Annual	Annual	Yes
2Ua-1	712177.95	8266132.81	1031.35	Annual	Semiannual	Yes
2U-2	712168.56	8266133.98	1031.39	Annual	Annual	Yes
3Q-1	711698.46	8265913.55	1027.28	Annual	Semiannual	Yes
3Q-2	711688.30	8265906.11	1027.36	Annual	Annual	Yes
3S-1	711649.76	8265331.87	991.57	Annual	Semiannual	Yes
3S-2	711649.23	8265321.93	990.86	Annual	Annual	Yes
3Ta-1	711780.29	8266107.22	1029.90	Annual	Semiannual	Yes
3T-2	711783.71	8266096.76	1030.26	Annual	Annual	Yes
5L-1	711656.26	8265469.62	1002.39	Annual	Semiannual	Yes
5L-2	711655.68	8265480.21	1002.85	Annual	Annual	Yes
5M-1	711689.41	8265721.27	1021.38	Annual	Semiannual	Yes
5M-2	711666.90	8265719.81	1019.23	Annual	Annual	Yes
5N-1	711930.00	8266133.57	1031.72	Annual	Semiannual	Yes
5N-2	711938.57	8266133.94	1031.92	Annual	Annual	Yes
5P-1	712673.72	8266058.07	1025.56	Annual	Semiannual	Yes
5P-2	712686.52	8266049.02	1024.90	Annual	Annual	Yes
5Q-1	712993.93	8266138.51	1035.65	Annual	Semiannual	Yes
5Q-2	713005.74	8266139.00	1035.81	Annual	Annual	Yes
5R-2	713176.05	8266137.78	1037.33	Annual	Annual	Yes
5S-1	713441.01	8266134.93	1037.87	Annual	Semiannual	Yes
6C-9	713801.00	8265639.00	1018.66	Not Required	Semiannual	No
WASTE MANAGEMENT AREA WMA-2						
3V-2	713104.08	8264349.12	1001.26	Annual	Annual	Yes
4H-1	714000.38	8265225.41	1021.43	Annual	Semiannual	Yes
4H-2	713999.85	8265214.75	1021.29	Annual	Annual	Yes
7A-1	713074.69	8264024.77	990.47	Annual	Semiannual	Yes
7A-2	713076.45	8264015.95	990.11	Annual	Annual	Yes
7B-1	713091.15	8264418.42	1003.59	Annual	Semiannual	Yes
7C-1	713103.22	8264745.81	1018.13	Annual	Semiannual	Yes
7C-2	713102.18	8264733.31	1017.38	Annual	Annual	Yes
7D-1	713082.85	8264881.81	1022.18	Annual	Semiannual	Yes
7D-2	713085.44	8264870.37	1021.72	Annual	Annual	Yes
2E-9	714386.23	8265469.54	1017.96	Not Required	Semiannual	No
3H-1	715031.29	8264077.75	1016.62	Not Required	Semiannual	No

Table X-1 (Cont.) (REV. 29)
Detection Monitoring Well Locations and Sampling Frequency

WASTE MANAGEMENT AREA WMA-3

Monitoring Well ID	Location [a] Northing	Easting	TOC Elevation (ft) [a,b]	TSCA Monitoring Frequency	RCRA Monitoring Frequency	Post- Closure Monitoring
3P-1	712209.42	8264785.41	1025.84	Not Required	Semiannual	Yes
3P-2	712211.09	8264794.07	1026.65	Not Required	Annual	Yes
3R-1	712204.75	8264256.48	1010.90	Not Required	Semiannual	Yes
4B-1	712592.50	8265015.07	1027.88	Annual	Semiannual	Yes
4Ba-2	712581.78	8265015.06	1028.29	Annual	Annual	Yes
5A-1	712212.18	8264574.73	1017.04	Not Required	Semiannual	Yes
5A-2	712190.02	8264593.74	1017.41	Not Required	Annual	Yes
5B-1	712395.18	8265005.39	1026.36	Annual	Semiannual	Yes
5B-2	712321.89	8264986.63	1026.72	Annual	Annual	Yes
5D-1	712805.20	8264991.15	1033.34	Annual	Semiannual	Yes
5D-2	712825.81	8264994.29	1033.38	Annual	Annual	Yes
7E-2	712210.5	8264497.2	1013.94	Not Required	Annual [c]	Yes

BACKGROUND WATER QUALITY WELLS

6G-1	713699.93	8263511.11	995.70	Annual	Semiannual	Yes
6G-2	713709.26	8263512.21	995.87	Annual	Semiannual	Yes

Notes:

[a] RUST 1994 Survey; Oregon State Plane, North American Datum 1983-1991

[b] Top of casing elevation relative to mean sea level

[c] Quarterly for first 2 years of monitoring, then annual

[d] Quarterly for first 2 years of monitoring, then semiannual

TABLE X-2

Table X-2 (REV. 29)				
Piezometer Locations				
Monitoring Well ID	Location [a]		TOC Elevation [b]	Aquifer Level
	Easting	Northing		
K-1	8264181.39	715712.29	1003.48	1
Va-1	8265656.61	711421.45	794.30	1
W9-1	8263032.76	713160.82	998.14	1
2Na-1	8264648.44	714468.80	983.89	1
2O-1	8265728.62	714993.49	1032.92	1
2Vb-1	8265035.42	713079.27	1030.23	1
2Wa-1	8265398.81	714177.28	1020.03	1
2X-1	8265124.28	711463.38	915.94	1
3G-1	8264947.14	714300.29	1018.55	1
3I-1	8265611.36	714614.22	1009.28	1
3J-1	8265639.57	713970.21	1019.13	1
3O-1	8263981.08	712213.62	995.17	1
4P-1	8266115.12	713939.21	1038.98	1
Y-9	8264080.53	714843.09	1022.03	1 & 2
5U-9	8266018.49	714324.88	1037.76	1 & 2
5V-9	8265809.45	714405.50	1029.43	1 & 2

Table X-2 (cont.) (REV. 29)
Piezometer Locations

Monitoring Well ID	Location [a]		TOC Elevation [b]	Aquifer Level
	Easting	Northing		
C-2	8264187.28	715720.88	1004.45	2
F-2	8266048.01	715326.01	1048.33	2
G-2	8266127.52	712704.47	1024.31	2
I-2	8265065.70	715023.96	1010.78	2
J-2	8263466.71	712256.68	982.91	2
MW1-2	8264694.07	711538.99	930.84	2
Va-2	8265662.57	711426.10	912.25	2
W9-2	8263032.76	713160.82	998.19	2
X-2	8263481.30	712602.86	986.73	2
2B-2	8264724.72	715031.73	1008.12	2
2H-2	8264231.15	715047.16	1012.10	2
2I-2	8263904.32	714471.40	970.87	2
2O-2	8265728.62	714993.49	1032.95	2
2V-2	8265043.25	713084.27	1030.23	2
2W-2	8265398.63	714203.30	1018.37	2
2X-2	8265124.28	711463.38	915.95	2
3F-2	8264216.78	714729.31	966.97	2
3G-2	8264947.47	714310.85	1018.31	2
3H-2	8265470.60	714396.38	1016.34	2
3I-2	8265610.45	714624.44	1010.16	2
3M-2	8264951.31	713766.84	1022.7	2
3O-2	8263990.41	712212.00	995.45	2
3Y-2	8265321.14	713083.81	1030.44	2
4Pa-2	8266105.95	713933.82	1037.78	2
6J-2	8263481.40	713020.15	994.58	2

Notes:
[a] RUST 1994 Survey; Oregon State Plane, North American Datum 1983-1991
[b] Top of casing elevation relative to mean sea level

TABLE X-3

Table X-3 Detection Monitoring Program Groundwater Sampling Constituents and Parameters			
Volatile Organic Constituents	CAS #		
Benzene	71-43-2		
Bromodichloromethane	75-27-4		
Bromoform	75-25-2		
Bromomethane	74-83-9		
Carbon disulfide	75-15-0		
Carbon tetrachloride	56-23-5		
Chlorobenzene	108-90-7		
Chlorodibromomethane	124-48-1		
Chloroethane	75-00-3		
Chloroform	67-66-3		
Chloromethane	74-87-3		
Dichlorodifluoromethane	75-71-8		
Dichloroethane, 1,1-	75-34-3		
Dichloroethane, 1,2-	107-06-2		
Dichloroethene, 1,1-	75-35-4		
Dichloroethene, trans-1,2-	156-60-5		
Dichloropropane, 1,2-	78-87-5		
Dichloropropene, cis-1,3-	10061-01-5		
Dichloropropene, trans-1,3-	10061-02-6		
Dioxane, 1,4	123-91-1		
Ethyl benzene	100-41-4		
Hexachlorobutadiene	87-68-3		
Methylene chloride	75-09-2		
Tetrachloroethane, 1,1,2,2-	79-34-5		
Tetrachloroethene	127-18-4		
Toluene	108-88-3		
Trichloroethane, 1,1,1-	71-55-6		
Trichloroethane, 1,1,2-	79-00-5		
Trichloroethene	79-01-6	TSCA Constituents	
Trichlorofluoromethane	75-69-4	Aroclor 1016	12674-11-2
Vinyl chloride	75-01-4	Aroclor 1221	11104-28-2
Field Parameters		Aroclor 1232	11141-16-5
pH	NA	Aroclor 1242	53469-21-9
Specific Conductance	NA	Aroclor 1248	12672-29-6
Temperature	NA	Aroclor 1254	11097-69-1
Depth to Water	NA	Aroclor 1260	11096-82-5

Samples shall be collected, analyzed, and evaluated in accordance with the Permit and Standalone Document No.7, Groundwater Monitoring Plan.

TABLE X-4

Table x-4 (REV.19)	
Detection Monitoring Criteria	
Volatile Organic Constituents	Criterion (µg/L)¹
Benzene	1
Bromodichloromethane	1
Bromoform	1
Bromomethane	2
Carbon disulfide	1
Carbon tetrachloride	1
Chlorobenzene	1
Chlorodibromomethane	1
Chloroethane	2
Chloroform	1
Chloromethane	2
Dichlorodifluoromethane	2
Dichloroethane, 1,1-	1
Dichloroethane, 1,2-	1
Dichloroethene, 1,1-	1
Dichloroethene, trans-1,2-	1
Dichloropropane, 1,2-	1
Dichloropropene, cis-1,3-	1
Dichloropropene, trans-1,3-	1
Dioxane, 1,4	20
Ethyl benzene	1
Hexachlorobutadiene	1
Methylene chloride	5
Tetrachloroethane, 1,1,2,2-	1
Tetrachloroethene	1
Toluene	1
Trichloroethane, 1,1,1-	1
Trichloroethane, 1,1,2-	1
Trichloroethene	1
Trichlorofluoromethane	2
Vinyl chloride	1

Table X-4 (cont) Detection Monitoring Criteria	
TSCA Constituents	Criterion (µg/L) ¹
Aroclor 1016	1 µg/L
Aroclor 1221	1 µg/L
Aroclor 1232	1 µg/L
Aroclor 1242	1 µg/L
Aroclor 1248	1 µg/L
Aroclor 1254	1 µg/L
Aroclor 1260	1 µg/L

Samples shall be collected, analyzed, and evaluated in accordance with the Permit and Standalone Document No.7, Groundwater Monitoring Plan.

¹The criterion listed in this table for each constituent is the reporting limit specified in Standalone Document No. 7. Reporting limits shown in this table assume that no sample dilution is necessary. Actual reporting limits may be higher if dilution is necessary or blank contamination is detected.

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XI. GROUNDWATER COMPLIANCE MONITORING PROGRAM‡ Rev. 15

XI.A. Monitoring Well Locations

XI.A.1.

If a groundwater compliance monitoring program is established as provided in Article X, the Permittee shall maintain a groundwater compliance monitoring program as specified below at the locations for compliance monitoring that are listed in Table XI-1 of this Permit and displayed on Figure 1 of this Permit.

XI.B Well Construction, Maintenance, Replacement and Decommissioning

XI.B.1.

The Permittee shall maintain the monitoring wells identified in Permit Condition XI.A.1. in accordance with the Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] .

XI.B.2.

All new and replacement monitoring wells shall be drilled and constructed as approved by the Department. A well installation work plan shall be submitted to the Department, for approval, for all new and replacement monitoring wells. The Permittee may not begin drilling until Department approval has been granted. All new and replacement monitoring wells shall be designed, constructed, and installed in accordance with Oregon Water Resources Department rules OAR 690-240; and as appropriate, in general accordance with current guidance from the Department and the EPA for drilling and construction of groundwater monitoring wells. Minor changes to the well installation work plan shall not be considered a Permit modification. The Permittee shall take all reasonable precautions during drilling to prevent cross contamination between any water-bearing hydrologic zone and the geologic zones overlying and underlying the hydrologic zone.

XI.B.3.

The Permittee shall maintain all monitoring wells in good working order, making necessary repairs in a timely manner so that sampling activities do not occur outside the sampling timeframes specified in Permit Condition XI.C.1.a. The Permittee shall maintain an adequate supply of replacement parts and repair equipment so that each groundwater sampling event [as defined in Permit Condition XI.C.1.a.] is not unreasonably delayed. The Permittee shall maintain a list of spare parts and equipment that will fulfill the terms of this Permit Condition. This list shall be approved by the Department. The Department's approval under this Permit Condition shall not be considered a permit modification.

XI.B.4.

The Permittee shall follow the procedures in Table 3-2 of the Standalone Document No. 3, Inspection Plan [A.R. 06080], and in Section 3.4 of Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080], for routine inspection of monitoring wells.

XI.B.5.

The Permittee shall maintain borehole integrity of each monitoring well identified in Permit Condition XI.A.1, as required by 40 CFR 264.97(c).

XI.B.6.

Any replacement monitoring wells that may be required during the life of this Permit shall be installed as close as appropriate and practicable to the monitoring well being taken out of service. If a monitoring well shall be replaced for any reason during the term of this Permit, it shall be replaced within 90 calendar days of the date taken out of service unless the Department approves a longer time period.

XI.B.7.

All new or replacement groundwater sampling pumps shall be dedicated bladder pumps unless the Department approves use of another type of pump or sampling device in writing. The Department's approval under this Permit Condition shall not be considered a permit modification.

XI.B.8.

All monitoring wells that require decommissioning shall be decommissioned in accordance with Oregon Water Resources Department rules OAR 690-240 and, as appropriate, in general accordance with current guidance from the Department and Environmental Protection Agency for decommissioning of groundwater monitoring wells. Written approval for monitoring well decommissioning is required from the Department. Monitoring well decommissioning documentation, as required by OAR 690-240-0510(6), shall be submitted to the Department within 60 calendar days after completion of decommissioning.

XI.B.9.

By written direction from the Department, the Permittee shall decommission monitoring wells identified in Permit Condition XI.A.1. that do not meet the requirements in 40 CFR 264.97(c). In determining whether to issue the written direction, the Department will consider the Permittee's evaluation, if any, for whether the monitoring well meets the requirements in 40 CFR 264.97(c).

XI.B.10.

The Permittee shall submit to the Department within 60 calendar days of installation of any new or replacement monitoring well (or group of monitoring wells), or decommissioning of an existing monitoring well (or group of monitoring wells), revised versions of Table XI-1 and Figure 1. The Permittee shall obtain a Permit modification for any new or replacement monitoring well.

XI.C. Program Operation

XI.C.1. Groundwater Sampling and Analysis

XI.C.1.a.

The Permittee shall obtain water quality samples from each compliance monitoring well listed in Table XI-1 of this Permit and displayed as a compliance monitoring well on Figure 1 of this Permit, at the frequencies designated on Table XI-1 of this Permit, in

accordance with the procedures in the Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080]. Semiannual groundwater sampling events shall be started and finished in the months of March through May, and September through November, respectively, during each calendar year. The Permittee shall notify the Department within five (5) working days prior to the sampling event.

XI.C.1.b.

The Permittee shall analyze all groundwater samples obtained under Permit Condition

XI.C.1.a. for the constituents and parameters listed in Tables XI-2 and XI-3 of this Permit, using procedures specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.c.

The Permittee shall triennially analyze the groundwater sampled from the compliance monitoring well with the highest total VOC concentration during the previous sampling event for all 40 CFR 264, Appendix IX constituents. Triennial sampling shall occur upon the commencement of compliance monitoring and every third year thereafter during the compliance period.

XI.C.1.c.i.

If any Appendix IX constituents are detected above the applicable detection monitoring criteria as specified in Permit Conditions X.D.1.a. and X.D.1.b. and these constituents are not already designated for compliance monitoring and listed in Tables XI-2 or XI-3 of this Permit, the Permittee may resample within 30 calendar days after receipt of the analytical laboratory's quality-assured data report and repeat the Appendix IX analysis for any new constituents not listed in Tables XI-2 or XI-3 that are detected above the applicable detection monitoring criteria. If the second analysis confirms the presence of new constituents above the applicable detection monitoring criteria, the Permittee shall report the concentrations of these detected constituents to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the second analysis.

XI.C.1.c.ii.

If the Permittee chooses not to resample, then the Permittee shall report the concentrations of the additional constituents detected above the applicable detection monitoring criteria to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the initial Appendix IX samples collected under Permit condition XI.C.1.c.

XI.C.1.c.iii.

The Permittee shall add any newly identified Appendix IX constituents under Permit Conditions XI.C.1.c.i. and XI.C.1.c.ii. to Table XI-3, if the concentration is above the applicable detection monitoring criteria, and submit the revised Table XI-3 to the Department for inclusion into the Permit. For any new Appendix IX constituents without a groundwater concentration limit in Table XI-4, the Permittee shall develop a groundwater concentration limit modifying the Permit in accordance with 40 CFR 270.42.

XI.C.1.d.

Results of all analyses, including semiannual analyses, annual analyses, verification analyses, and Appendix IX analyses, shall be submitted to the Department within 45 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report. In no case shall the period between the last date of sampling and the date of submission to the Department of analytical results exceed 90 calendar days unless the Department approves a longer time period. The Permittee shall document when the analytical laboratory's quality-assured data reports are received. The report submitted to the Department shall contain laboratory quality-assured results (as specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080]) reported down to the method detection limit (MDL), and the reporting limit (RL) as specified in

Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080]. The MDL results are for informational purposes and will be discussed in the reports for each sampling event, as described in Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.e.

Semiannual groundwater monitoring reports shall also include the information listed in Section 7.2 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.f.

The Permittee shall enter all monitoring, testing, and quality-assured analytical data obtained pursuant to Permit Condition XI.C. in the operating record as required by Permit Condition I.M. Upon written request by the Department, these results shall be submitted within 30 calendar days after the Permittee's receipt of the request, provided the Permittee has received the analytical laboratory's quality-assured data report.

XI.D. Data Evaluation

XI.D.1.

Groundwater Concentration Limit - For each hazardous constituent detected above the applicable detection monitoring criterion from results of analyses obtained pursuant to Permit Condition XI.C.1., the Permittee shall determine if the groundwater - concentration limit has been exceeded at any compliance monitoring well at the point of compliance using the following procedures:

XI.D.1.a.

Determine if the observed concentration of any constituent listed in Tables XI-2 and XI-3 of the Permit exceeds the groundwater concentration limit listed in Table XI-4 of the Permit for that constituent;

XI.D.1.b.

[Reserved]

XI.D.1.c.

Cumulative Carcinogenic Risk Evaluation - Determine if the carcinogenic health risk associated with those detected hazardous constituents listed in Tables XI-2 and XI-3 of the Permit that are denoted as carcinogens ("C" Risk Category) contribute a cumulative risk greater than 1×10^{-5} . For the purposes of determining compliance with this condition, the Permittee shall compute the ratio of the detected concentration of the hazardous constituent divided by the risk based concentration for the hazardous constituent shown in Table XI-4. The Permittee shall determine if the Risk Index exceeds ten using Equation 1; and

XI.D.1.d.

Cumulative Toxicity Risk Evaluation - Determine if the toxicity associated with those detected hazardous constituents listed in Tables XI-2 and XI-3 of the Permit that are denoted as non-carcinogenic ("Tox" Risk Category) systemic toxicants contribute an aggregate hazard quotient (HQ) greater than one. For the purposes of determining compliance with this condition, the Permittee shall compute the individual constituent hazard index (HI) for those detected hazardous constituents by dividing the detected concentration of the hazardous constituent by the risk-based concentration for the hazardous constituent shown in Table XI-4. The Permittee shall determine if the Risk Index exceeds one using Equation 1.

Equation 1

$$RI = \frac{C_1}{RBC_1} + \frac{C_2}{RBC_2} + \bullet \bullet \bullet + \frac{C_n}{RBC_n}$$

where,

RI = Risk Index

C_n = Concentration of the nth constituent in groundwater (mg/L)

RBC_n = Risk-based concentration for the nth constituent in groundwater (mg/L)

With Department approval, the Permittee may group detected hazardous constituents by similar toxic endpoints and perform the determination in Equation 1 separately for each group of detected hazardous constituents with similar toxic endpoints.

XI.D.2.

[Reserved]

XI.D.3.

[Reserved]

XI.D.4.

Upon a determination of hazardous constituents in any monitoring well exceeding the groundwater concentration limits as specified in Permit Condition XI.D.1., the Permittee shall:

XI.D.4.a.

Notify the Department of this finding in writing, within 7 calendar days after receipt of the analytical laboratory's quality-assured data report [40 CFR 264.99(h)1]; and,

XI.D.4.b.

Within 30 calendar days after this finding, collect two verification samples from any affected monitoring well(s), following the procedures identified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], and reanalyze the samples for all constituents that exceeded the limits as specified in Permit Condition XI.D.1. In no case shall the period between the date of the determination under Permit Condition XI.D.4. and the date of the submission to the Department of the analytical results for the sampling under this Permit Condition exceed 135 calendar days unless a written extension is granted by the Department.

XI.D.4.c.

The Permittee may elect to forgo verification sampling activities described under Permit Condition XI.D.4.b. and instead follow the requirements of Permit Condition XI.D.6.

XI.D.5.

If the analytical laboratory's quality-assured data results from the analyses in Permit Condition XI.D.4.b. show that:

XI.D.5.a.

The verification samples do not confirm the detection of hazardous constituents above the limits as specified in Permit Condition XI.D.1., the Permittee shall resume compliance monitoring according to the schedule in Permit Condition XI.C.1., need take no action under Permit

Condition XI.D.6., and shall notify the Department in writing that the compliance monitoring program is being resumed; or

XI.D.5.b.

One or both verification samples confirm the detection of constituents above the limits as specified in Permit Condition XI.D.1, the Permittee shall follow the requirements of Permit Condition XI.D.6.

XI.D.6.

The Permittee shall either:

XI.D.6.a.

Notify the Department in writing within 7 calendar days of determining that the groundwater concentration limit as specified in Permit Condition XI.D.1. has been exceeded at any compliance monitoring well as determined by Permit Condition XI.D.4. or XI.D.5.b., as appropriate. The notification shall indicate which limits have been exceeded. [40 CFR 264.99(h)(1)] The Permittee shall also follow the requirements specified in Permit Condition XI.D.8. or XI.E., as appropriate; or,

XI.D.6.b.

Submit to the Department a report demonstrating that a source other than a regulated unit or past practice unit caused the exceedance, or that the exceedance is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater; and in addition, when required or as provided by 40 CFR 264.99(i), an application for a permit modification to make any appropriate changes to the compliance monitoring program including changes to the groundwater concentration limits for which there was an exceedance. If the Permittee has performed verification sampling under Permit Condition XI.D.4.b., then the report shall be submitted within 90 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report under Permit Condition XI.D.5.b. If the Permittee has elected to forgo verification sampling in accordance with Permit Condition XI.D.4.c., the report shall then be submitted within 90 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report for the samples collected under Permit Condition XI.C.1.a.

XI.D.7.

If the Department determines that a report submitted in accordance with Permit Condition XI.D.6.b. fails to identify a source of contamination other than a regulated unit or past practice unit, or that the exceedance is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater or that any application for a permit modification to make changes to the groundwater concentration limits for which there was an exceedance has been denied, then the Permittee shall follow the requirements in Permit Condition XI.E. if the groundwater concentration limit(s) as specified in Permit Condition XI.D.1. is exceeded.

XI.E. Corrective Action Process

XI.E.1.

Upon exceedance of the groundwater concentration limit(s), as determined under the process in Permit Conditions XI.D.4. through XI.D.7., the Permittee shall send a written request to the Department's Eastern Region Environmental Cleanup Manager requesting a meeting. The

written request shall be sent within 15 calendar days after the notification date in Permit Condition XI.D.6.a. or the determination of the Department in Permit Condition XI.D.7. The written request shall also contain the following information:

XI.E.1.a.

Description of release with information known to date,

XI.E.1.b.

Description of Permittee's obligation to notify the Environmental Cleanup Manager about the release in accordance with this Permit, and

XI.E.1.c.

Description of Permittee's duty to initiate corrective action in accordance with this Permit if any groundwater concentration limit(s) is exceeded.

XI.E.2.

The Permittee shall meet with the Department's Eastern Region Environmental Cleanup Program within 45 calendar days after the date on the written notification sent in accordance with Permit Condition XI.E.1. unless the Department approves a longer time period. Such a meeting is intended to initiate development of a corrective action written agreement for the Facility.

XI.E.3.

The Permittee shall enter into a written agreement with the Department's Eastern Region Environmental Cleanup Program within 180 calendar days after the date on the written notification sent in accordance with Permit Condition XI.E.1. The agreement shall provide that any corrective action be implemented under OAR 340-122. The agreement shall also provide that in the event of disagreement between the Permittee and Department regarding whether any action under the agreement is consistent with or exceeds 40 CFR 264.90 to 264.101, the Permittee and Department shall make a good faith effort to resolve the dispute by taking the following actions: a) discussing the dispute between the Permittee's Environmental Manager and the Department's Project

Manager, b) if necessary, referring the dispute for resolution to the Permittee's Facility Manager and the Department's Cleanup Manager; and c) if necessary, providing each other their respective positions in writing and referring the dispute for resolution by the Department's Eastern Region Administrator, in consultation with the Permittee's Market Area Manager ‡ **Rev. 3.**

XI.E.4.

The agreement entered into under Permit Condition XI.E.3. shall be processed as a Class 3 Permit modification and shall be considered an enforceable Condition of this Permit.

XI.E.5.

During the course of the corrective action agreement, the Department may determine it necessary to revise the agreement or corrective action activities conducted under the agreement. Changes to the agreement, or corrective action activities conducted under the agreement that are implemented after the effective date of this Permit may require a modification to the Permit. The Permittee shall notify the Manager in writing at least 30 days prior to any planned changes to the agreement or corrective action activities conducted under the agreement. Upon notification by

the Permittee, the Manager will determine whether or not a Permit modification will be needed. If a Permit modification is needed, the Manager shall so notify the Permittee, and upon receipt of such notice, the Permittee shall proceed with a Permit modification in accordance with the procedures set forth in 40 CFR 270.41 and 270.42, incorporated by reference under OAR 340-100-0002 and as modified by OAR -105-0041 and OAR 340-106-0005. In accordance with 40 CFR 270.42(e), as incorporated by reference under OAR 340-100-0002, the Permittee may seek, and the Manager may grant, temporary authorization to implement changes to the agreement or corrective action activities conducted under the agreement prior to the final approval of a Permit Modification.

XI.E.6.

The agreement or corrective action activities conducted under the agreement may be modified at any time under the Department's Environmental Cleanup Program authority pursuant to the agreement, provided the Permittee complies with the requirements of XI.E.5. The Department's Environmental Cleanup Program authority to implement changes to the agreement, or corrective action activities conducted under the agreement, shall not be restricted or hindered by any requirements to modify this Permit. Changes approved under the Department's Environmental Cleanup program authority and implemented by the Permittee shall not be a violation of any condition of this Permit or any requirement to modify this Permit provided the Permittee complies with the requirements of X.E.5.

XI.E.7

The requirement to modify this Permit to accommodate changes in the agreement or corrective action conducted under the agreement shall not be in any way interpreted or deemed to replace, supersede, supplant, modify, or amend the Permittee's right to dispute resolution under the agreement.

XI.E.8.

If, after the conclusion or stabilization of corrective action activities, either the Permittee or the Department determines that the Facility should return to a compliance monitoring program, the Permittee must submit a permit modification request to institute a renewed compliance monitoring program under this Permit.

XI.E.9.

For any specific compliance monitoring program that has demonstrated an exceedance of the groundwater concentration limit(s), as determined under the process in Permit Conditions XI.D.4. through XI.D.7., the Permittee shall continue with that specific groundwater compliance monitoring program as specified in Section XI of this Permit until there is a written agreement for corrective action in effect. Unless the corrective action written agreement provides otherwise, the Permittee shall continue the groundwater compliance monitoring program as set forth in Section XI of this Permit after the corrective action agreement is in place.

XI.F. Post Closure Monitoring

XI.F.1.

All procedures described in Section XI of this Permit shall apply to the post-closure care period, as well as the active life period of each regulated unit or waste management area.

XI.G. Request for Permit Modification

XI.G.1.

If the Permittee determines the compliance monitoring program no longer satisfies the requirements of 40 CFR 264.99, then within 90 calendar days the Permittee shall submit an application for a permit modification to make any appropriate changes to the compliance monitoring program. [40 CFR 264.99(j)]

XI.G.2.

If the Permittee demonstrates that concentrations at all compliance monitoring wells identified in Table XI-1 of the Permit are below the detection monitoring criteria as specified in Permit Condition IX.D.1. for a period of three consecutive years, the Permittee may submit an application for a permit modification to modify the groundwater compliance monitoring program.

TABLE XI-1

Table XI-1 <u>[Reserved]</u> Compliance Monitoring Program Compliance Monitoring Wells					
Point of Compliance	Location		Frequency of Sampling and Analysis		
Well Name	Northing	Easting	Table XI-2 Analysis	Table XI-3 Analysis	Appendix IX Analysis*
Notes:					
See Permit Condition XI.C. for compliance monitoring requirements. Datum is the Oregon State Plane Coordinate System. *Sampling for Appendix IX constituents is required triennially at one compliance well, the well that had the highest total VOC concentration during the most recent sampling event.					

TABLE XI-4

Table XI-4 Compliance Monitoring Program Constituent-Specific Groundwater Concentration Limits [in (mg/l)]				
Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Acenaphthene	83-32-9	0.0424	Tox	1,825
Acetone	67-64-1	10,000	Tox	27,400
Acetophenone	98-86-2	61	Tox	3,040
Acetonitrile	75-05-8	5,150	Tox	515
Acrolein	107-02-8	2.1	Tox	0.2100
Acrylonitrile	107-13-1	1.915	C, Tox	0.1915
Aldrin	309-00-2	0.0018	C, Tox	0.0167
Allyl Chloride	107-05-1	36	Tox	9,125
Aniline	62-53-3	0.01**	C, Tox	49.8051
Anthracene	120-12-7	0.01**	Tox	9,125
Aramite	140-57-8	0.001	C, Tox	11.3556
Benzene	71-43-2	17.5	C, Tox	25
Benzo[a]anthracene	56-55-3	0.01**	C	0.3889
Benzo[b]fluoranthene	205-99-2	0.01**	C	0.3889
Benzo[k]fluoranthene	207-08-9	0.01**	C	3.8889
Benzo[a]pyrene	50-32-8	0.01**	C	10
Benzyl Alcohol	100-51-6	429	Tox	54,750
Bis(2-Chloroethyl) Ether	111-44-4	0.5006	C	0.0501
Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.0129	C	0.0013
Bis(2-ethylhexyl) Phthalate (DEHP)	117-81-7	0.01**	C, Tox	20.2778
Bromodichloromethane	75-27-4	67.4	C, Tox	400
Bromoform	75-25-2	31	C, Tox	400
Bromomethane	75-83-9	152	Tox	43.3500
Butyl Benzyl Phthalate	85-68-7	0.0269	Tox	36,500
Carbon Disulfide	75-15-0	11.9	Tox	5,214.2857

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Carbon Tetrachloride	56-23-5	7.93	C, Tox	25
Chlordane	57-74-9	0.00056	C, Tox	10
Chloroaniline, p- (4-Chloroaniline)	106-47-8	53	Tox	730
Chlorobenzene	18-90-7	4.72	Tox	500
Chlorobenzilate	510-15-6	0.10	C, Tox	1.0514
Chlorodibromomethane (Dibromochloromethane)	124-48-1	26	C, Tox	400
Chloroethane	75-0-3	57	C, Tox	19.75
Chloroform	67-66-3	79.2	C, Tox	400
Chloromethane	74-87-3	64.5	C, Tox	11.40
Chloronaphthalene, 2- (beta-Chloronaphthalene)	91-58-7	0.12	Tox	2,435
Chlorophenol, 2-	95-57-8	220	Tox	152
Chloroprene (2-Chloro-1,3-Butadiene)	126-99-8	220	Tox	71.5
Chrysene	218-01-9	0.01**	C	38.8890
Cresol, o-(2-Methylphenol)	95-48-7	260	Tox	9,125
Cresol, m- (3-Methylphenol)	108-39-4	180	Tox	9,125
Cresol, p- (4-Methylphenol)	106-44-5	180	Tox	915
DDD	72-54-8	0.0009	C	1.1829
DDE	72-55-9	0.0012	C	0.835
DDT	50-29-3	0.00025	C, Tox	0.835
Diallate	2303-16-4	0.14	C	4.6539
Dibenz[a,h]anthracene	53-70-3	0.01**	C	0.0389
Dibenzofuran	132-64-9	0.031	Tox	61
Dibromo-3-Chloropropane, 1,2-(DBCP)	96-12-8	10.0*	C, Tox	1.0

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Dibromoethane, 1,2- (Ethylene Dibromide, EDB)	106-93-4	2.5	C,Tox	0.25
Dichlorobenzene, 1,2- (o-Dichlorobenzene)	95-50-1	1.56	Tox	3,000
Dichlorobenzene, 1,3- (m-Dichlorobenzene)	541-73-1	1.56	Tox	72.5
Dichlorobenzene, 1,4- (p-Dichlorobenzene)	106-46-7	0.74	C,Tox	375
Dichlorobenzidine, 3,3-	91-94-1	0.05**	C	0.6309
Dichlorodifluoromethane	75-71-8	2.8	Tox	1,970
Dichloroethane, 1,1-	75-34-3	50.6	Tox	3,990
Dichloroethane, 1,2-	107-6-2	85.2	C, Tox	25
Dichloroethene, 1,1-	75-35-4	22.5	Tox	35
Dichloroethene, cis-1,2	156-59-2	35	Tox	350
Dichloroethene, trans-1,2	156-60-5	63	Tox	500
Dichlorophenol, 2,4-	120-83-2	45	Tox	547.5
Dichlorophenoxyacetic Acid, 2,4- (2,4-D)	94-75-7	4	Tox	350
Dichloropropane, 1,2-	78-87-5	28	C, Tox	25
Dichloropropane, cis-1,3-	10061-1-5	18.25	C, Tox	1.825
Dichloropropane, trans- 1,3-	10061-2-6	18.25	C,Tox	1.825
Dieldrin	60-57-1	0.00195	C, Tox	0.0177
Diethyl Phthalate	84-66-2	10.80	Tox	146,000
Dimethoate	60-51-5	238	Tox	36.5
Dimethylbenzidine, 3,3'-	119-93-7	1.2343	C	0.1234
Dimethylphenethylamine, alpha, alpha-	122-09-8	180	Tox	182.5
Dimethylphenol, 2,4-	105-67-9	78.7	Tox	3,650
Dimethyl Phthalate	131-11-3	42.9	Tox	1,825,000

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Di-n-Butyl Phthalate (Dibutyl Phthalate)	84-74-2	0.112	Tox	18,250
Di-n-Octyl Phthalate	117-84-0	0.01**	Tox	7,300
Dinitrobenzene, 1,3-	99-65-0	4.69	Tox	18.25
Dinitro-o-Cresol, 4,6- (4,6-Dinitro-2-methylphenol)	534-52-1	1.28	Tox	18.25
Dinitrophenol, 2,4-	51-28-5	27.9	Tox	365
Dinitrotoluene, 2,4-	121-14-2	2.70	Tox	365
Dinitrotoluene, 2-6-	606-20-2	1.82	Tox	182.5
Dinoseb	88-85-7	0.52	Tox	35
Dioxane, 1,4-	123-91-1	52*	C	5.2
Diphenylamine	122-39-4	0.53	Tox	4,565
Disulfoton	298-04-4	0.163	Tox	7.3
Endrin	72-20-8	0.0025	Tox	10
Ethylbenzene	100-41-4	1.69	Tox	3,500
Ethyl Methacrylate	97-63-2	0.20	Tox	2,740
Fluoranthene	206-44-0	0.01**	Tox	7,300
Fluorene	86-73-7	0.0198	Tox	1,215
HCH alpha (alpha-BHC)	319-84-6	0.05**	C, Tox	0.0451
HCH beta (beta-HCH)	319-85-7	0.05**	C, Tox	0.1577
HCH gamma (gamma-BHC, Lindane)	58-89-9	0.068	C, Tox	1.0
Heptachlor	76-44-8	0.0018	C, Tox	0.25
Heptachlor Epoxide	1024-57-3	0.002	C, Tox	1.0
Hexachlorobenzene	118-74-1	0.062	C, Tox	5.0
Hexachlorobutadiene	87-68-3	0.0323	C, Tox	55
Hexachlorocyclopentadiene	77-47-4	0.018	Tox	250
Hexachloroethane	67-72-1	0.50	C, Tox	20.2778
Hexachlorophene	70-30-4	1.40	Tox	55

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Indeno [1,2,3-cd]pyrene	193-39-5	0.01**	C	0.3889
Isobutyl Alcohol (Isobutanol)	78-83-1	850	Tox	9,125
Isophorone	78-59-1	120	C, Tox	289.8304
Kepone	143-50-0	0.3549	C, Tox	0.0355
Methacrylonitrile	126-98-7	52	Tox	5.2
Methoxychlor	72-43-5	0.00045	Tox	200
Methyl Ethyl Ketone (2-Butanone)	78-93-3	2200	Tox	34,840
Methyl Methacrylate	80-62-6	141	Tox	7,100
Methyl Parathion	298-00-0	0.55	Tox	4565
Methyl-2-Pentanone, 4-	108-10-1	190	Tox	9,950
Methylene Bromide (Dibromomethane)	74-95-3	117	Tox	304
Methylene Chloride	75-09-2	130	C, Tox	25
Naphthalene	91-20-3	0.31	Tox	31
Nitroaniline, 2-Methyl-5-(5-Nitro-o-toluidine)	99-55-8	86.0269	C	8.6027
Nitroaniline, 2- (o-Nitroaniline)	88-74-4	12.6	Tox	550
Nitroaniline, 3- (m-Nitroaniline)	99-09-2	8.90	C, Tox	13.5185
Nitroaniline, 4- (p-Nitroaniline)	100-01-6	8.0	C, Tox	13.5185
Nitrobenzene	98-95-3	20.9	Tox	17
Nitrophenol, 4-(p-Nitrophenol)	100-02-7	0.0804	Tox	1,460
N-Nitrosodi-n-butylamine	924-16-3	0.1030	C	0.0103
N-Nitroso di-n-propylamine	621-64-7	0.4056	C	0.0406
N-Nitrosodiethylamine	55-18-5	0.0189	C	0.0019
N-Nitrosodimethylamine	62-75-9	0.0557	C, Tox	0.0056

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
N-Nitrosodiphenylamine	86-30-6	0.351	C, Tox	57.9365
N-Nitroso-N-methylethylamine (N-Nitrosomethylethylamine)	10595-95-6	0.1290	C	0.0129
N-Nitrosopyrrolidine	930-55-2	1.3519	C	0.1352
Parathion	56-38-2	0.103	Tox	1,095
PCB Aroclor 1016	12674-11-2	0.007	C, Tox	2.5
PCB Aroclor 1221	11104-28-2	0.007	C, Tox	2.5
PCB Aroclor 1232	11141-16-5	0.007	C, Tox	2.5
PCB Aroclor 1242	53469-21-9	0.007	C, Tox	2.5
PCB Aroclor 1248	12672-29-6	0.007	C, Tox	2.5
PCB Aroclor 1254	11097-69-1	0.007	C, Tox	2.5
PCB Aroclor 1260	11096-82-5	0.007	C, Tox	2.5
Pentachlorobenzene	608-93-5	2.40	Tox	146
Pentachloronitrobenzene	82-68-8	0.05**	Tox	1.0919
Pentachlorophenol	87-86-5	19.5	C, Tox	5
Phenol	108-95-2	828	Tox	54,750
Phenylenediamine, p- (4-Phenylenediamine)	106-50-3	380	Tox	34,675
Phorate	298-02-2	0.50	Tox	36.5
Pronamide	23950-58-5	0.15	Tox	13,690
Pyrene	129-00-0	0.01**	Tox	915
Pyridine	110-86-1	1,825	Tox	182.5
Silvex; 2-(2,4,5-Trichlorophenoxy) Propionic Acid	93-72-1	1.40	Tox	1,460
Styrene	100-42-5	3.10	Tox	500
T, 2,4,5- (2,4,5-Trichlorophenoxyacetic Acid)	93-76-5	2.20	Tox	1,825

Table XI-4 Compliance Monitoring Program Constituent-Specific Groundwater Concentration Limits [in (mg/l)]				
Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
TCDD 2,3,7,8- (Dioxin)	1746-01-6	0.000193	C	0.0002
Tetrachlorobenzene, 1,2,4,5-	95-94-3	0.003	Tox	55
Tetrachloroethane, 1,1,1,2-	630-20-6	22.0914	C, Tox	2.2091
Tetrachloroethane, 1,1,2,2-	79-34-5	2.83*	C, Tox	0.283
Tetrachloroethene	127-18-4	2	C, Tox	25
Tetrachlorophenol, 2,3,4,6-	58-90-2	10	Tox	5,475
Tetraethyl Dithiopyrophosphate (Sulfotepp)	3689-24-5	0.25	Tox	91.5
Toluene	108-88-3	5.26	Tox	5,000
Toluidine, o-(2-Methylaniline)	95-53-4	11.8287	C	1.1829
Toxaphene	8001-35-2	0.0074	C	15
Trichlorobenzene, 1,2,4-	120-82-1	3	Tox	350
Trichloroethane, 1,1,1-	71-55-6	13.3	Tox	1,000
Trichloroethane, 1,1,2-	79-0-5	44.2	C, Tox	25
Trichloroethene	79-1-6	11	C, Tox	25
Trichlorofluoromethane	75-69-4	11	Tox	6,441
Trichlorophenol, 2,4,5-	95-95-4	12	Tox	250
Trichlorophenol, 2,4,6-	88-06-2	8	C, Tox	18.25
Trichloropropane, 1,2,3-	96-18-4	0.0818	C, Tox	0.0082
Trinitrobenzene, 1,3,5- (sym-trinitrobenzene)	99-35-4	3.50	Tox	5,475
Vinyl Acetate	108-05-4	200	Tox	2,060
Vinyl Chloride	75-1-4	27.6	C, Tox	10
Xylenes	1330-20-7	1.10	Tox	50,000
Antimony	7440-36-0	300	Tox	30
Arsenic	7440-38-2	500	C, Tox	50

Table XI-4
Compliance Monitoring Program
Constituent-Specific Groundwater Concentration Limits [in (mg/l)]

Hazardous Constituent	CAS ¹ Number	Groundwater Concentration Limit ²	Risk Category ³	Risk-Based Concentration for Cumulative Risk Evaluation ⁴
Barium	7440-39-3	100,000	Tox	10,000
Beryllium	7440-41-7	200	Tox	20
Cadmium	7440-43-9	250	Tox	25
Chromium VI	18540-29-9	5,000	Tox	500
Cobalt	7440-48-4	36,500	Tox	3,650
Copper	7440-50-8	65,000	Tox	6,500
Cyanide (free)	57-12-5	10,000	Tox	1,000
Lead	7439-92-1	750	Tox	75
Mercury	7487-94-7	100	Tox	10
Nickel	7440-02-0	36,500	Tox	3,650
Selenium	7782-49-2	2,500	Tox	250
Silver	7440-22-4	9,125	Tox	913
Thallium	7440-28-0	100	Tox	10
Tin	7440-31-5	1,000,000	Tox	109,500
Vanadium	7440-62-2	1,825	Tox	183
Zinc	7440-66-6	547,500	Tox	54,750

Notes:

¹CAS = Chemical Abstract Services

²These groundwater concentration limits for organic hazardous constituents are based on one percent of the aqueous solubility limit for each hazardous constituent and are used as alternate concentration limits (ACLs) under 40 CFR 264.98. Where one percent of the aqueous solubility limit for a hazardous constituent exceeds the ACL (without the 10 percent safety factor) as determined in *Demonstration Report: Development of Site-wide Alternate Concentration Limits in Groundwater* (CWM and CH2M Hill 2007), the determined ACL is used (shown with an asterisk * in the table). Also, where one percent of the aqueous solubility limit for a hazardous constituent is less than the reporting limit for the hazardous constituent, the reporting limit is used (shown with two asterisks** in the table). The groundwater concentration limits for inorganic hazardous constituents are the ACLs (without the 10 percent safety factor and capped at one million parts per million where necessary).

³ C = Carcinogenic; Tox = Noncarcinogenic (i.e., systemic toxicant)

⁴The risk-based concentrations for the Selah Member are based on the RBC for carcinogenic and non-carcinogenic ACLs, whichever is the lower concentration limit, times the 10 percent safety factor. These values will be used, if compliance monitoring becomes necessary, to assess the cumulative risk posed by detected constituents in groundwater. The values are not artificially capped because doing so would bias the cumulative risk calculation and not allow an accurate evaluation of cumulative risk to be completed.

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XII. CORRECTIVE ACTION

All historic hazardous waste operations at Permittee's Facility have been authorized and regulated by the Department pursuant to permits. Both EPA and the Department have investigated and evaluated the Permittee's Facility for the presence of any unidentified solid waste management unit (SWMU) including from December 1985 through April 1989 and in 2002. Neither EPA nor the Department has identified the presence of a SWMU that has not been regulated by this Permit or previous permit issuance. Permit Conditions in this Section XII are included as a precautionary matter should a new SWMU be identified in the future. ‡ **Rev. 3**

XII.A Standard Conditions

XII.A.1.

ORS 466.105(10) and 40 CFR 264.101 require that hazardous waste Permits address corrective action for releases of hazardous wastes including hazardous constituents from any solid waste management unit (SWMU) at the Facility, regardless of when the waste was placed in the unit.

XII.A.2.

All future plans and schedules required by this section of this Permit, including plans and schedules pursuant to Permit Condition XII.A.5., are upon approval by the Department, incorporated into this Permit by reference. Extensions of the due dates for submittals may be granted by the Manager either in writing or in accordance with 40 CFR 270.41 or 40 CFR 270.42.

XII.A.3.

[Reserved]

XII.A.4.a.

Any release of a hazardous constituent into the environment from any solid waste management units (SWMUs) which is not a Permitted unit or a past practice unit, as defined in Permit Condition IX.A, shall require the Permittee to notify in writing the Department's Eastern Region Hazardous Waste Program Manager within 15 days of discovery.

XII.A.4.b.

The Department shall review the notification and provide an opportunity for the Permittee to comment before deciding if the release should be referred to the Department's Eastern Region Clean-up program. ‡ **Rev. 3**

XII.A.5.

All referred corrective action activity initiated from Permit Condition XII.A. 4. shall be implemented by the Department's Clean-up Program pursuant to an agreement with provisions as set forth in Permit Condition IX.E.3. ‡ **Rev. 3**

XII.B NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-- IDENTIFIED SOLID WASTE MANAGEMENT UNITS

XII.B.1.

The Permittee shall notify the Hazardous Waste Program Manager of any newly-identified SWMU found at the Facility which is not a SWMU previously identified in the administrative record. Such written notification shall be made within 15 days of discovery.

XII.B.2.

After such notification, the Hazardous Waste Manager may request in writing that the Permittee prepare a SWMU Assessment Plan and a proposed schedule of implementation and completion of the Plan for any newly-identified SWMU discovered after the effective date of this Permit. The Permittee shall submit the SWMU Assessment Plan to the Department's Eastern Region Hazardous Waste Manager.

XII.B. 3.

After the Permittee submits the SWMU Assessment Plan, the Eastern Region Hazardous Waste Manager shall either approve or disapprove the Plan in writing. If the Manager approves the Plan, the Permittee shall begin to implement the Plan within 30 calendar days after receiving such written approval. If the Manager disapproves the Plan, the Manager shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan. If the Manager approves the revised Plan the Permittee shall implement the Plan after 30 calendar days of receiving written approval. The Manager's approval of a plan shall not be considered a modification of this Permit.

XII.C. Additional Corrective Action Permit Conditions

XII.C.1.

Unless otherwise approved by the Department after consultation with the Permittee, prior to decommissioning any monitoring well or piezometer that is not routinely sampled in the detection or compliance monitoring programs at the Facility, the Permittee shall assess the potential for the monitoring well or piezometer to have acted as a vertical conduit for migration of contamination from the vadose zone to groundwater. This assessment shall consider, at a minimum, the proximity of the monitoring well or piezometer to unlined landfill areas and previously closed Solid Waste Management Units. If the Department reasonably determines based on the above assessment that a potential exists for migration of contamination from the vadose zone to groundwater, the Permittee shall collect a groundwater sample from the monitoring well or piezometer to be decommissioned in accordance with procedures in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] and analyze the sample for the constituents and parameters listed in Table IX-3 and report the analytical results to the Department.

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XIII. AMENDMENTS TO STANDALONE DOCUMENTS

XIII.A. Amendments to the Waste Analysis Plan [Standalone No. 1] ‡ Rev. 4

**XIII.B. Amendments to the Security Procedures, Hazard Prevention, Training Plan
[Standalone No. 2]**

[Reserved]

XIII.C. Amendments to the Inspection Plan [Standalone No. 3]

XIII.C.1. ‡ Rev. 4

XIII.D. Amendments to the Contingency Plan [Standalone No. 4]

[Reserved]

**XIII.E. Amendments to the Closure/Post-Closure Plan, Cost Estimates, Financial
Assurance, Insurance [Standalone No. 5]**

[Reserved]

XIII.G. Amendments to the Groundwater Monitoring Plan [Standalone No. 7]

[Reserved]

XIII.H. Amendments to the Bulk Liquid Storage/Treatment Plan, [Standalone No. 8]

[Reserved]

**XIII.I. Amendments to the Container Storage Design and Operations Plan [Standalone
No. 9]**

[Reserved]

XIII.J. Amendments to the Stabilization/Chemical Treatment Plan [Standalone No. 10]

[Reserved]

XIII.K. Amendments to the Debris Treatment Plan [Standalone No. 11]

[Reserved]

**XIII.L. Amendments to the Containment Building Design and Operations Plan
[Standalone No. 12]**

XIII.L.1. ‡ Rev. 4

XIII.L.2. ‡ Rev. 4

**XIII.M. Amendments to the Surface Impoundments Design and Operations Plan
[Standalone No. 13]**

[Reserved]

XIII.N. Amendments to the Landfill Design and Operations Plan [Standalone No. 14]

[Reserved]

XIII.O. Amendments to the Landfill Response Action Plans [Standalone No. 15]

[Reserved]

XIII.P. Amendments to the Construction Quality Assurance Plan [Standalone No. 16]

XIII.P.1.

Before any additional landfill L-14 cells are constructed, or and new lined hazardous waste unit is constructed, the Permittee shall submit a project-specific Quality Assurance Plan (QAP), as described in Section 1.1 in Standalone Document No. 16, in accordance with 40 CFR 270.42. No construction may begin until the Department approves the modification.

XIII.P.2.

The Permittee may only use a Geosynthetic Installer, as described in section 1.2.5 of Standalone Document No. 16, that has a minimum experience of installing 10,000,000 ft² of geosynthetic material.

XIII.P.3.

Before the Permittee constructs an engineered soil liner, using soils that are different, or characteristically different, than the soil liners at landfill L-12 or L-13, the Permittee shall submit for Department approval an in-situ permeability test in accordance with 40 CFR 270.42. The Permittee may not begin emplacement of the soil liner until the Department approves in writing the results of the in-situ test.

XIII.P.4.

Regardless of any statement in Standalone Document No. 16, the Permittee shall include in project-specific QAPs (as described in section 1.1 of Standalone Document No. 16) mandatory conformance testing for all geosynthetic materials used in the project.

XIII.P.5.

Section 9.7.4A on page 9-11A of Standalone Document No. 16 Construction Quality Assurance Plan, first paragraph, second sentence, shall read, “Such trial seams shall be made at the beginning of each seaming period, and at least once each five hours, for each production seaming apparatus and for each seaming personnel used that day.”

XIII.P.6.

Section 9.9.2A on page 9-16A of Standalone Document No. 16, Construction Quality Assurance Plan, first bulleted item, shall read, “A minimum frequency of one test location per 500 ft (152 m) of production seam length performed by each welding machine. This frequency is to be determined as an average taken throughout the entire facility.”

XIII.P.7.

Section 13.7 on page 13.7 of Standalone Document No. 16 Construction Quality Assurance Plan, last paragraph, third sentence, shall read, “The hydrated material shall be covered with new dry GCL material, removed and replaced with new dry GCL material.”

XIII.Q. Amendments to the Landfill Final Cover Design Plan [Standalone No. 17]

[Reserved]

XIII.R. Amendments to the Landfill Design Drawings [Standalone No. 18]

[Reserved]

XIII.S. Amendments to the Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [Standalone No. 19]

XIII.S.1‡ Rev. 4

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XIV. PCB DISPOSAL PERMIT

XIV.A. PCB Disposal Permit Facility Establishment

This section of the hazardous waste document is a separate PCB disposal facility permit from the hazardous waste Permit in Sections I through XII. Attached to the Hazardous Waste Permit, this Section XIV is the Permit for PCB storage, treatment and disposal at the Chemical Waste Management of the Northwest, Inc., facility located near Arlington in Gilliam County. This PCB disposal facility permit could have been issued as a separate document, but, for efficiency, it is attached to the hazardous waste permit so that the requirements for storage, treatment and disposal of hazardous waste and storage, treatment and disposal of PCB are in one volume.

This PCB disposal facility Permit is issued in accordance with ORS 466.065 and 466.250 through 466.355, and the rules promulgated at OAR Chapter 340 Division 110 and consistent with the Toxic Substance Control Act and the regulations promulgated at 40 CFR Part 761. This permit issuance terminates permit license HW-1 issued in 1980.

This Permit shall be identified as PCB-1 and is effective as of August 21, 2006, and shall remain in effect until August 21, 2016, unless revoked and reissued, terminated, or continued in accordance with OAR 340-105-0051.

Issued To:

Chemical Waste Management of the Northwest, Inc.

17629 Cedar Springs Lane

Arlington, OR 97812

Issued By:

Lynn Hampton, Chair

Date

Oregon Environmental Quality Commission

Joni Hammond, Regional Administrator

Date

Oregon Department of Environmental Quality



State of Oregon
Department of
Environmental
Quality

XIV.B. Standard Conditions

XIV.B.1. Effect of Permit

The Permittee is authorized to store, to treat and to dispose PCB or PCB items in accordance with the Conditions of this Permit. Any disposal of PCB or PCB items by the Permittee at this Facility that is not authorized by this Permit and for which a Permit is required under Section 6 of TSCA and ORS 466.255 is prohibited. The definitions found in OAR 340-100-0010 and OAR 340-110-0003 are incorporated into this Permit.

XIV.B.2. Personal and Property Rights

This Permit does not convey any property rights of any sort, or any exclusive privilege, nor does this Permit authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations.

XIV.B. 3. Permit Actions

XIV.B.3.a.

This Permit may be modified, revoked and reissued, or terminated for cause by the Department as specified in 40 CFR 270.41, 270.42, 270.43, and OAR 340 Divisions 105 and 106.

XIV.B.3.b.

The filing of a request for a Permit modification, or revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance on the part of the Permittee shall not stay the applicability or enforceability of any Permit Condition except as provided in 40 CFR 270.41, 270.42, 270.43, and OAR Divisions 105 and 106.

XIV.B.4. Severability

XIV.B.4.a.

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. Invalidation of any state or federal statutory or regulatory provision, which forms the basis for any condition of this Permit, does not affect the validity of any other state or federal statutory or regulatory basis for said condition.

XIV.B.4.b.

In the event that a Condition of this Permit is stayed for any reason, the Permittee shall continue to comply with the related applicable and relevant conditions found in the previously expired permit until final resolution of the stayed Condition unless compliance with the related applicable and relevant conditions in the previously expired-permit would be technologically incompatible with compliance with other conditions of this Permit, which have not been stayed.

XIV.B.5. Duty to Comply

XIV.B.5.a.

The Permittee shall comply with all Conditions of this Permit, except that the Permittee need not comply with the Conditions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit issued by the Department or Environmental Protection Agency. Any Permit noncompliance, except under the terms of an emergency permit, constitutes

a violation of the applicable provision of Oregon State law or rule and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, or denial of a Permit renewal application.

XIV.B.5.b.

Compliance with the terms of the Permit does not constitute a defense to any action brought under ORS 459, 465, 466.180, 466.185, 466.190, 466.200, 466.210, 466.225,, or Sections 3007, 3008, 3013 and 7003 of RCRA (42 U.S.C. 6934 and 6973), Section 7 of the Toxic Substances Control Act (TSCA), or Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. 9606(a)], as amended by the Superfund Amendments and Reauthorization Act of 1986, or any other federal or state law governing protection of public health or the environment from any imminent and substantial endangerment to human health or the environment.

However, compliance with the terms of this Permit does constitute a defense to any action alleging failure to comply with the applicable law upon which this Permit is based. ‡ **Rev. 3**

XIV.B.6. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new Permit, utilizing 40 CFR 270.30(b). The Permittee shall submit such Permit application at least 180 calendar days prior to the expiration date of this Permit, unless the Manager has granted permission for a later date (but no later than the expiration date of the existing Permit) in accordance with 40 CFR 270.10(h).

XIV.B.7. Continuation of Expiring Permit

This Permit, all Conditions herein and Standalone Documents No. 20, PCB Operations Plan, shall continue in force until the effective date of a new Permit if the Permittee has submitted a timely, complete application, and, through no fault of the Permittee, the Commission does not issue a new Permit under 40 CFR 124.15 on or before the expiration date of the previous Permit.

XIV.B.8. Need to Halt or Reduce Activity Not Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the Conditions of this Permit.

XIV.B.9. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

XIV.B.10. Proper Operation and Maintenance

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee so as to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This Condition requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit.

XIV.B.11. Duty to Provide Information

The Permittee shall furnish to the Manager, or his designee, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager and Inspector, upon request, copies of records required to be kept by this Permit.

XIV.B.12. Inspection and Entry

The Permittee shall allow the Department, or its authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

XIV.B.12.a.

Enter at reasonable times upon the Permittee's premises where regulated PCB management units or activities are located or conducted, or where records shall be kept under the Conditions of this Permit;

XIV.B.12.b.

Have access to and copy, at reasonable times, any records that shall be kept under the Conditions of this Permit;

XIV.B.12.c.

Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

XIV.B.12.d.

Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by TSCA or Oregon Law, any substances or parameters at any PCB Disposal Facility location.

XIV.B.13. Monitoring and Records

The Permittee will monitor and record PCB disposal activities in accordance with 40 CFR 761.75(b)(8)(iv) and 40 CFR 761.180(b), (d) and (f) and Standalone Document No. 20, PCB Operations Plan [A.R. 06093].

XIV.B.14. Reporting Planned Changes

The Permittee shall give notice to the Manager, as soon as possible of any planned physical alterations or additions to the permitted PCB Disposal Facility.

XIV.B.15. Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the permitted PCB Disposal Facility or activity that might result in noncompliance with Permit requirements.

XIV.B.16. Transfer of Permit

This Permit is personal to the Permittee and is transferable only in accordance with OAR 340-110-0075.

XIV.B.17. Twenty-four Hour Reporting

XIV.B.17.a.

The Permittee shall verbally report to the Manager or Inspector, any PCB noncompliance with this Permit which may endanger health or the environment, within 24 hours from the time the Permittee becomes aware of the noncompliance. The report shall include:

XIV.B.17.b.

Information concerning release of any PCB waste that might cause an endangerment to public drinking water supplies; and,

XIV.B.17.c.

Any information of a release or discharge of PCB waste or of a fire or explosion from the PCB Disposal Facility that might threaten human health or the environment. The description of the occurrence shall include the information requirements in Permit Condition I.T.2.

XIV.B.18. Other Noncompliance

The Permittee shall report to the Manager all other instances of PCB noncompliance with this Permit not otherwise reported at the time monitoring reports are submitted.

XIV.B.19. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant PCB facts in the Permit application, or submitted incorrect information in the Permit application or in any report to the Manager or Inspector, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

XIV.B.20. Signature and Certification

All written applications, reports required by this Permit and other information requested by the Manager, when submitted to the Manager, or Inspector, by the Permittee shall be signed and certified as required by 40 CFR Part 761 in accordance with 40 CFR 761.3.

XIV.B.21 Confidential Information

Information submitted by the Permittee to the Manager or Inspector that is claimed as trade secret, confidential, or confidential business information by the Permittee will be handled in accordance with the applicable provisions of OAR 340-100-0003.

XIV.B.22. Fees

The Permittee shall pay fees as required under ORS 466.325, 466.345, 466.350 and as promulgated at OAR 340-105, and other state statutes and related rules. This Condition does not preclude the Permittee from challenging any future promulgation or adoption of a statute, rule, or administrative action imposing any fee on the Permittee.

XIV.C. Storage, Treatment, And Disposal Standards

XIV.C.1.

This Permit hereby incorporates into this PCB Permit by reference Standalone Document No. 20 PCB Operation Plan [A.R. 06093].

XIV.C.2.

All notifications and correspondence sent to the Environmental Protection Agency, in accordance with the PCB Operation Plan, shall also be sent to the Department of Environmental Quality Eastern Region Hazardous Waste Manager.

XIV.D. Requirement for Groundwater Monitoring or Waiver

The Permittee shall not place PCB or PCB items into landfill L-14 until there is an in-place groundwater monitoring system unless a waiver has been issued by the Department in accordance with 40 CFR 761.75(c)(4).

XIV.E. Additional Disposal Requirements

XIV.E.1.

The Permittee may dispose of PCB or PCB items only in Landfills L-12, L-13, and L-14.

XIV.E.2.

In the event of a PCB spill, the Permittee shall comply with Standalone Document No. 4, Contingency Plan [A.R. 06077].

XIV.E.3.

The Permittee shall comply with OAR 340-110-0061(6) regarding waste oils containing PCB.

XIV.E.4.

If the Permittee uses containers described in 40 CFR 761.65(c)(7)(i), the Permittee shall have and implement a Spill Prevention Control and Countermeasure plan in accordance with OAR 340-110-0065(2).

XIV.F. Groundwater Monitoring

XIV.F.1.

Groundwater monitoring requirements found in Section X of the Hazardous Waste Permit are incorporated and made part of this PCB Permit.

XIV.F.2.

The Permittee shall perform the groundwater tasks and procedures as set forth in Section X of the Hazardous Waste Permit in a manner consistent with 40 CFR 761.75(b)(6).

XIV.F.3.

The Permittee shall sample and analyze for PCBs, pH, and specific conductance in the groundwater in accordance with Section X of the Hazardous Waste Permit in a manner consistent with 40 CFR 761.75(b).

XIV.G. ORS 466.065 Conditions

XIV.G.1.

The Permittee shall not accept for treatment or disposal during the ten-year term of this Permit an amount of PCB more than 110 percent of the PCB treated or disposed by the Facility under any permit without approval of the Department in accordance with ORS 466.065.

XIV.G.2.

The Permittee shall comply with all applicable federal and Oregon technological requirements for treating and disposing of PCB.

XIV.G.3.

The Permittee shall comply with all applicable Oregon and federal requirements for financial and technical capability to properly construct and operate the PCB disposal Facility [ORS 466.065(4).]

XIV.G.4.

The Permittee shall own, or contract with, an emergency response provider or coordinator that can provide for timely response to a PCB spill or release in Oregon of PCB being transported to the Facility by a motor vehicle owned by the Permittee [ORS 466.065(5).]

XIV.G.5.

The Permittee shall require that any transporter of PCB hired by the Permittee, owns, or has a contract with, an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of PCB being transported by a motor vehicle to the Facility [ORS 466.065(6).]

XIV.G.6.

Upon arrival at the facility of any motor vehicle transporting PCB not described in Permit Conditions XIV.G.5. and XIV.G.4., the Permittee shall request to review the transporter's authorization to transport PCB in Oregon and the driver's authorization to drive a motor vehicle transporting PCB in Oregon. The Permittee shall report to the Department the name of any transporter or driver failing to demonstrate the requested authorization [ORS 466.065(7).]

XIV.H. Equivalent Materials/Information

If certain equipment, materials, procedures, and administrative information (such as names, phone numbers, addresses, obsolete forms, addition of new forms and to forms, deletion from forms of units certified as closed, etc.) are specified in this Permit, the Permittee is allowed to use an equivalent or superior substitute or deletion. Use of such equivalent or superior substitute or deletion shall not be considered a modification of the Permit, but the Permittee shall present the proposed change to the Department, and then with Department approval that the item is equivalent or superior (such approval may be verbal or written) submit to the Department by written letter the revision, accompanied by a narrative explanation, and the date the revision becomes effective which may be the date of the submittal or a later date. The Department may judge the soundness of the revision as to whether the item is equivalent or superior. If the Department determines that the change is not in accordance with the approval, the Department will by letter direct the Permittee to submit the change again. The format of tables or forms is not subject to the requirements of this Permit and may be revised at the Permittee's discretion.

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x:\chem waste 2006 permit\permit\current permit\cwm aug 2006 final permit.doc

APPENDIX C

Assessor's Data for Subject Parcels



Gilliam County Property Summary Report

Report Date: 3/30/2022 8:15:17 PM

Disclaimer

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Account Summary

Account Information

Mailing Name: CWM OF THE NORTHWEST INC
Map and Taxlot: 02N20E0000-02313
Account: 1310
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 240.00
Property Class: 303

Ownership

Mailing Address:
CWM OF THE NORTHWEST INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$756,000
Structures \$266,120
Total \$1,022,120

Current Assessed Values:

Maximum Assessed \$1,033,080
Assessed Value \$1,022,120
Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

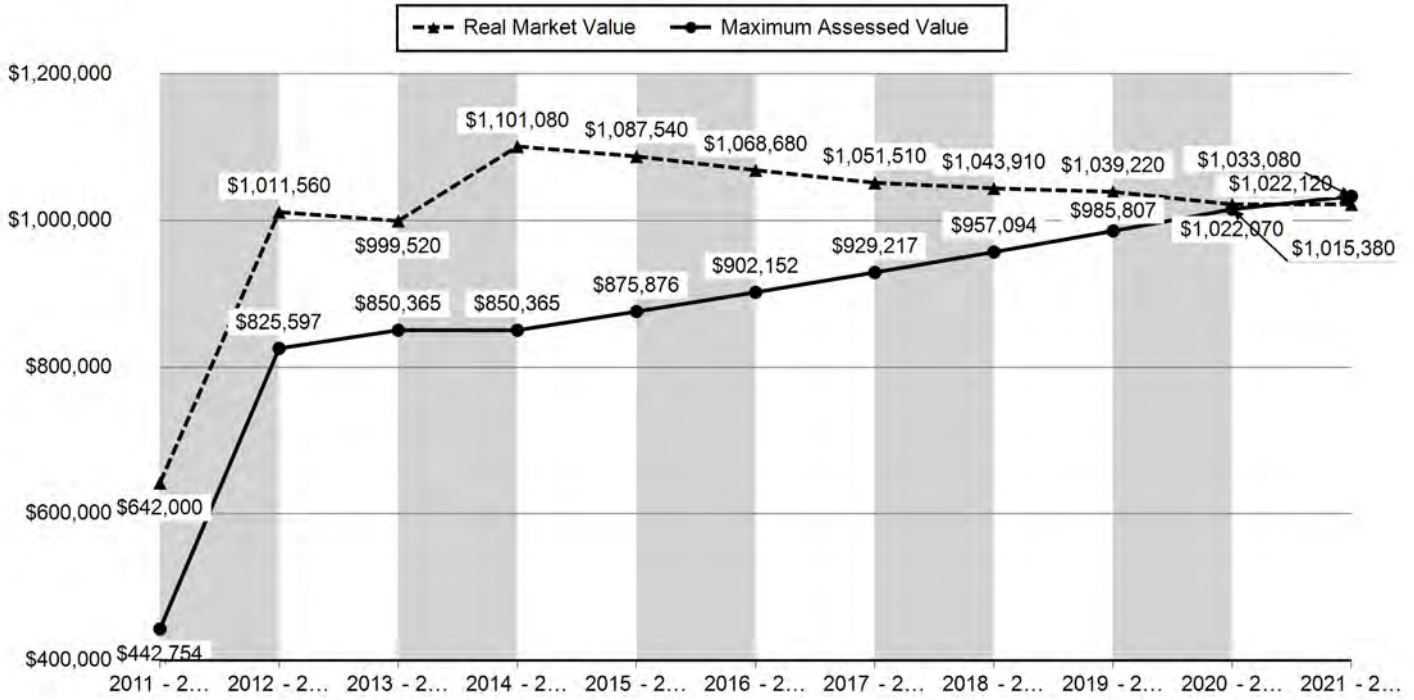
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	16.80	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$642,000	\$642,000	\$642,000	\$756,000	\$756,000
Real Market Value - Structures	\$0	\$369,560	\$357,520	\$345,080	\$331,540
Total Real Market Value	\$642,000	\$1,011,560	\$999,520	\$1,101,080	\$1,087,540
Maximum Assessed Value	\$442,754	\$825,597	\$850,365	\$850,365	\$875,876
Total Assessed Value	\$442,754	\$825,597	\$850,365	\$850,365	\$875,876
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$756,000	\$756,000	\$756,000	\$756,000	\$756,000	\$756,000
\$312,680	\$295,510	\$287,910	\$283,220	\$266,070	\$266,120
\$1,068,680	\$1,051,510	\$1,043,910	\$1,039,220	\$1,022,070	\$1,022,120
\$902,152	\$929,217	\$957,094	\$985,807	\$1,015,380	\$1,033,080
\$902,152	\$929,217	\$957,094	\$985,807	\$1,015,380	\$1,022,120
\$0	\$0	\$0	\$0	\$0	\$0



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Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
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Structures

Stat Class/Description	Improvement Description	Code Area	Year Built	Eff Year Built	Total Sq Ft
517 FARM BLDG - : GP BUILDING	GP BUILDING	0004	1980		0

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Land Characteristics

Land Description	Acres	Land Classification
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Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

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Gilliam County Property Summary Report

Report Date: 3/30/2022 8:12:10 PM

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Account Summary

Account Information

Mailing Name: CWM OF THE NORTHWEST INC
Map and Taxlot: 02N20E0000-02703
Account: 1316
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 77.39
Property Class: 303

Ownership

Mailing Address:
CWM OF THE NORTHWEST INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$243,780

Structures

Total \$243,780

Current Assessed Values:

Maximum Assessed \$191,860

Assessed Value \$191,860

Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

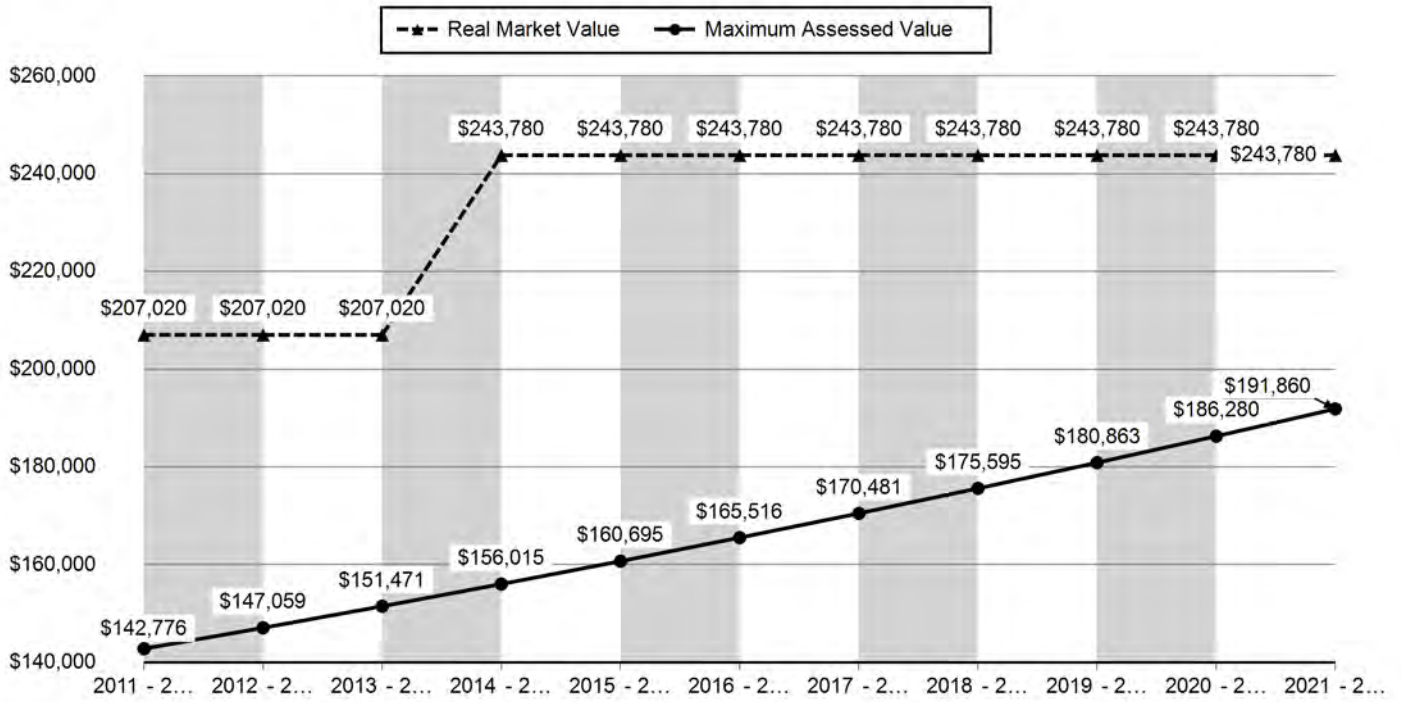
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	5.41	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$207,020	\$207,020	\$207,020	\$243,780	\$243,780
Real Market Value - Structures	\$0	\$0	\$0	\$0	\$0
Total Real Market Value	\$207,020	\$207,020	\$207,020	\$243,780	\$243,780
Maximum Assessed Value	\$142,776	\$147,059	\$151,471	\$156,015	\$160,695
Total Assessed Value	\$142,776	\$147,059	\$151,471	\$156,015	\$160,695
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$243,780	\$243,780	\$243,780	\$243,780	\$243,780	\$243,780
\$0	\$0	\$0	\$0	\$0	\$0
\$243,780	\$243,780	\$243,780	\$243,780	\$243,780	\$243,780
\$165,516	\$170,481	\$175,595	\$180,863	\$186,280	\$191,860
\$165,516	\$170,481	\$175,595	\$180,863	\$186,280	\$191,860
\$0	\$0	\$0	\$0	\$0	\$0



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Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
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Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

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Gilliam County Property Summary Report

Report Date: 3/30/2022 8:15:57 PM

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Account Summary

Account Information

Mailing Name: CWM OF THE NORTHWEST INC
Map and Taxlot: 02N20E0000-02317
Account: 3478
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 157.35
Property Class: 300

Ownership

Mailing Address:
CWM OF THE NORTHWEST INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$577,080

Structures

Total \$577,080

Current Assessed Values:

Maximum Assessed \$3,780

Assessed Value \$3,780

Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

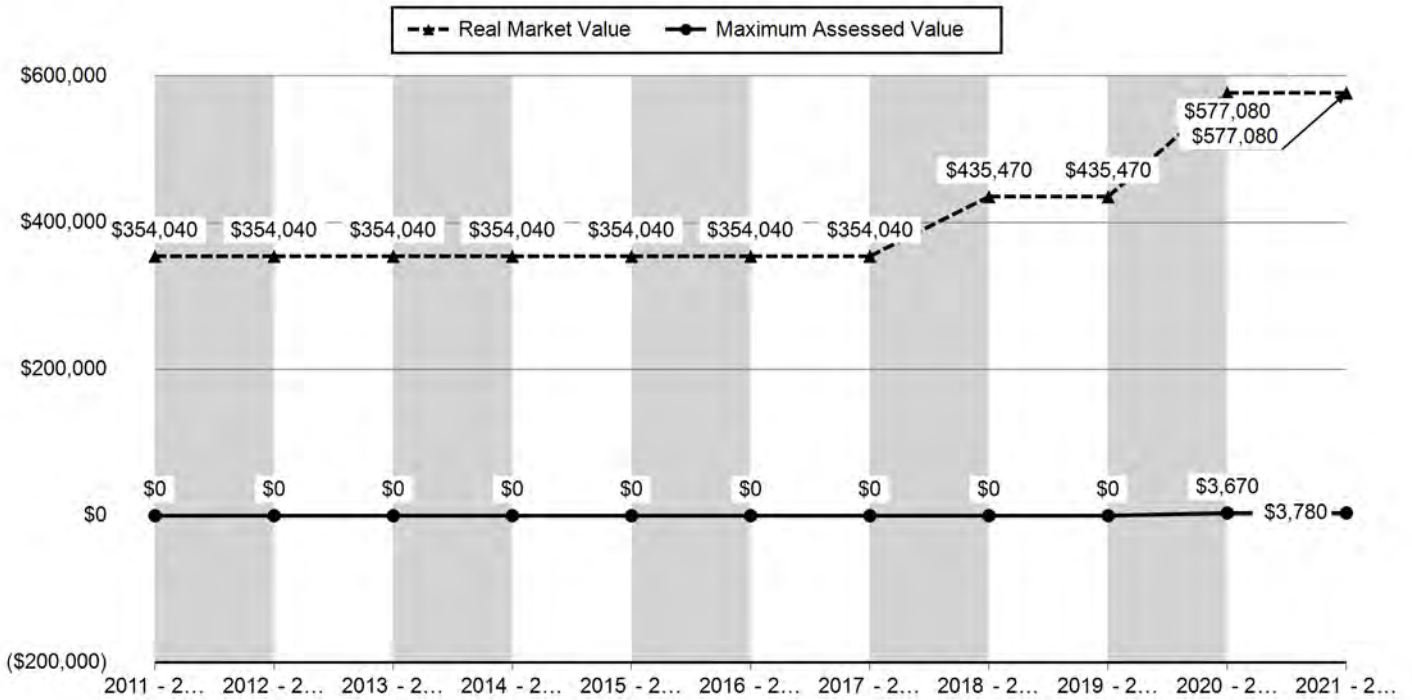
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	11.01	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$354,040	\$354,040	\$354,040	\$354,040	\$354,040
Real Market Value - Structures	\$0	\$0	\$0	\$0	\$0
Total Real Market Value	\$354,040	\$354,040	\$354,040	\$354,040	\$354,040
Maximum Assessed Value	\$0	\$0	\$0	\$0	\$0
Total Assessed Value	\$2,830	\$2,880	\$2,990	\$3,060	\$3,060
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$354,040	\$354,040	\$435,470	\$435,470	\$577,080	\$577,080
\$0	\$0	\$0	\$0	\$0	\$0
\$354,040	\$354,040	\$435,470	\$435,470	\$577,080	\$577,080
\$0	\$0	\$0	\$0	\$3,670	\$3,780
\$3,480	\$3,480	\$3,570	\$3,570	\$3,670	\$3,780
\$0	\$0	\$0	\$0	\$0	\$0



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Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
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Structures

Error: Subreport could not be shown.

Land Characteristics

Land Description	Acres	Land Classification
Industrial Site	57.23	7-R
Industrial Site	99.79	7R

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

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Gilliam County Property Summary Report

Report Date: 3/30/2022 8:20:06 PM

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Account Summary

Account Information

Mailing Name: CWM OF THE NORTHWEST INC
Map and Taxlot: 02N21E0000-01206
Account: 3479
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 6.53
Property Class: 300

Ownership

Mailing Address:
CWM OF THE NORTHWEST INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$23,950

Structures

Total \$23,950

Current Assessed Values:

Maximum Assessed \$150

Assessed Value \$150

Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

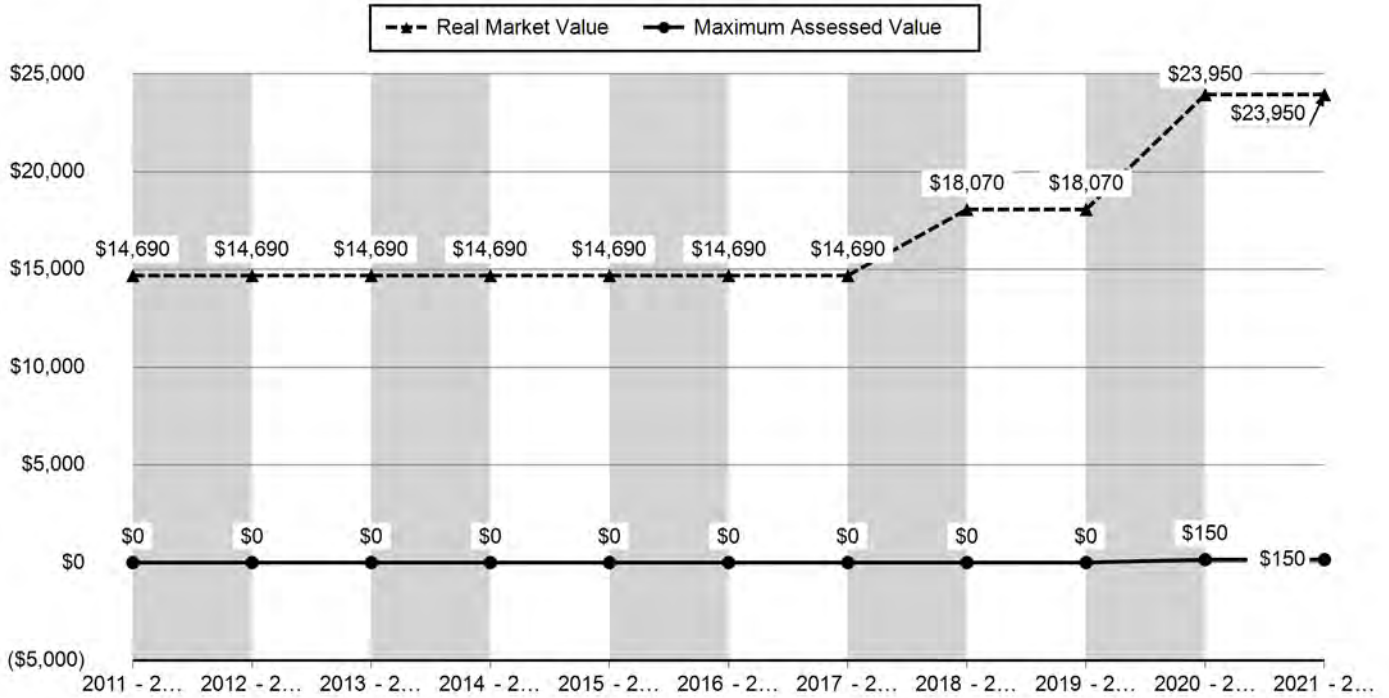
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	1.00	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$14,690	\$14,690	\$14,690	\$14,690	\$14,690
Real Market Value - Structures	\$0	\$0	\$0	\$0	\$0
Total Real Market Value	\$14,690	\$14,690	\$14,690	\$14,690	\$14,690
Maximum Assessed Value	\$0	\$0	\$0	\$0	\$0
Total Assessed Value	\$120	\$130	\$130	\$140	\$140
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$14,690	\$14,690	\$18,070	\$18,070	\$23,950	\$23,950
\$0	\$0	\$0	\$0	\$0	\$0
\$14,690	\$14,690	\$18,070	\$18,070	\$23,950	\$23,950
\$0	\$0	\$0	\$0	\$150	\$150
\$140	\$140	\$150	\$150	\$150	\$150
\$0	\$0	\$0	\$0	\$0	\$0



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Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
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Structures

Error: Subreport could not be shown.

Land Characteristics

Land Description	Acres	Land Classification
Industrial Site	6.52	7R

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Error: Subreport could not be shown.



Gilliam County Property Summary Report

Report Date: 3/30/2022 8:16:38 PM

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Account Summary

Account Information

Mailing Name: CWM OF THE NORTHWEST INC
Map and Taxlot: 02N21E0000-01205
Account: 3481
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 482.59
Property Class: 303

Ownership

Mailing Address:
CWM OF THE NORTHWEST INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$1,085,830
Structures \$62,560
Total \$1,148,390

Current Assessed Values:

Maximum Assessed \$92,570
Assessed Value \$96,559
Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

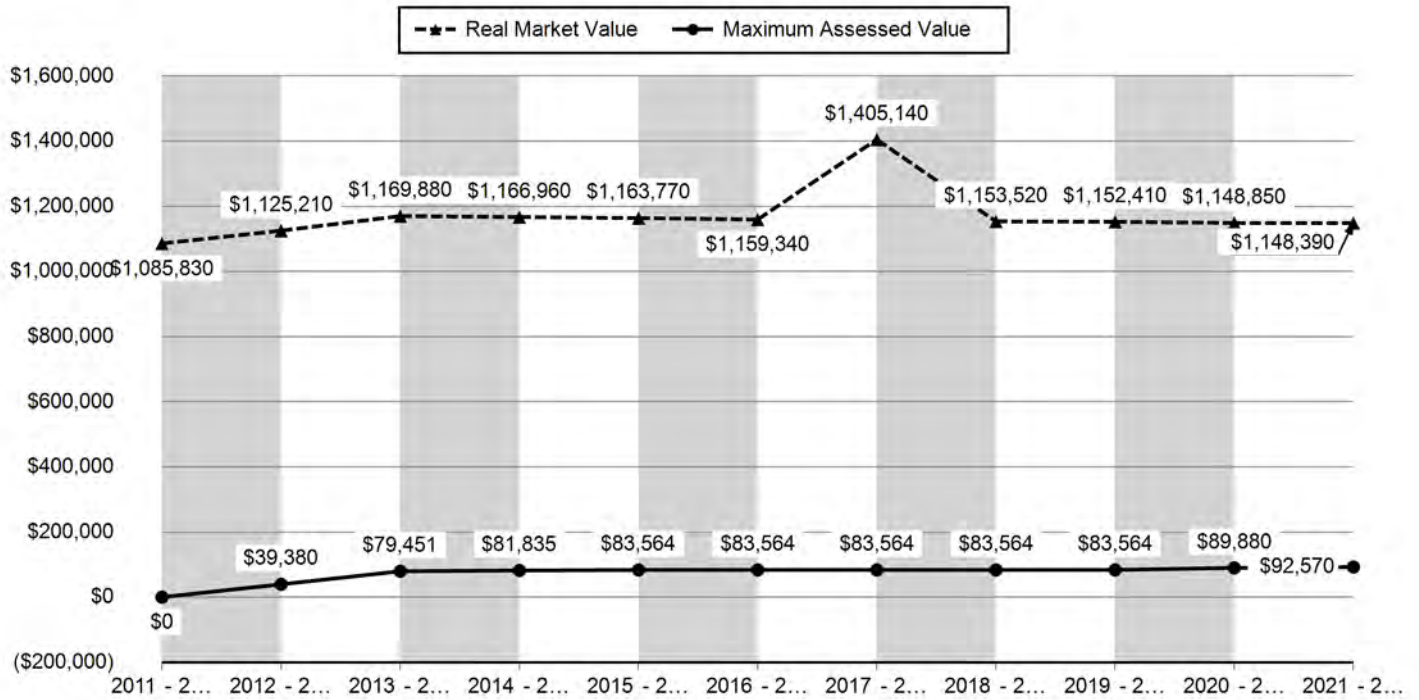
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	33.78	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$1,085,830	\$1,085,830	\$1,085,830	\$1,085,830	\$1,085,830
Real Market Value - Structures	\$0	\$39,380	\$84,050	\$81,130	\$77,940
Total Real Market Value	\$1,085,830	\$1,125,210	\$1,169,880	\$1,166,960	\$1,163,770
Maximum Assessed Value	\$0	\$39,380	\$79,451	\$81,835	\$83,564
Total Assessed Value	\$20,500	\$60,500	\$101,201	\$103,540	\$100,670
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$1,085,830	\$1,335,580	\$1,085,830	\$1,085,830	\$1,085,830	\$1,085,830
\$73,510	\$69,560	\$67,690	\$66,580	\$63,020	\$62,560
\$1,159,340	\$1,405,140	\$1,153,520	\$1,152,410	\$1,148,850	\$1,148,390
\$83,564	\$83,564	\$83,564	\$83,564	\$89,880	\$92,570
\$97,400	\$93,800	\$91,580	\$90,820	\$93,753	\$96,559
\$0	\$0	\$0	\$0	\$0	\$0



Error: Subreport could not be shown.

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
-----------	--------	-------	-------------	-----------	-----------

Structures

Stat Class/Description	Improvement Description	Code Area	Year Built	Eff Year Built	Total Sq Ft
535 FARM BLDG - : SILOS	SILOS	0004	1980		0

Error: Subreport could not be shown.

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	160.26	7R

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Error: Subreport could not be shown.



Gilliam County Property Summary Report

Report Date: 3/30/2022 8:18:45 PM

Disclaimer

The information and maps presented in this report are provided for your convenience. Every reasonable effort has been made to assure the accuracy of the data and associated maps. Gilliam County makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. Gilliam County explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Gilliam County shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. Gilliam County assumes no liability for any decisions made or actions taken or not taken by the user of this information or data furnished hereunder.

Account Summary

Account Information

Mailing Name: OREGON WASTE SYSTEMS INC
Map and Taxlot: 02N21E0000-01101
Account: 3490
Tax Status: Taxable
Situs Address: 18177 CEDAR SPRINGS LN, ARLINGTON OR 97812

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 1262.41
Property Class: 550

Ownership

Mailing Address:
OREGON WASTE SYSTEMS INC
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$156,020
Structures
Total \$156,020

Current Assessed Values:

Maximum Assessed \$0
Assessed Value \$35,346
Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

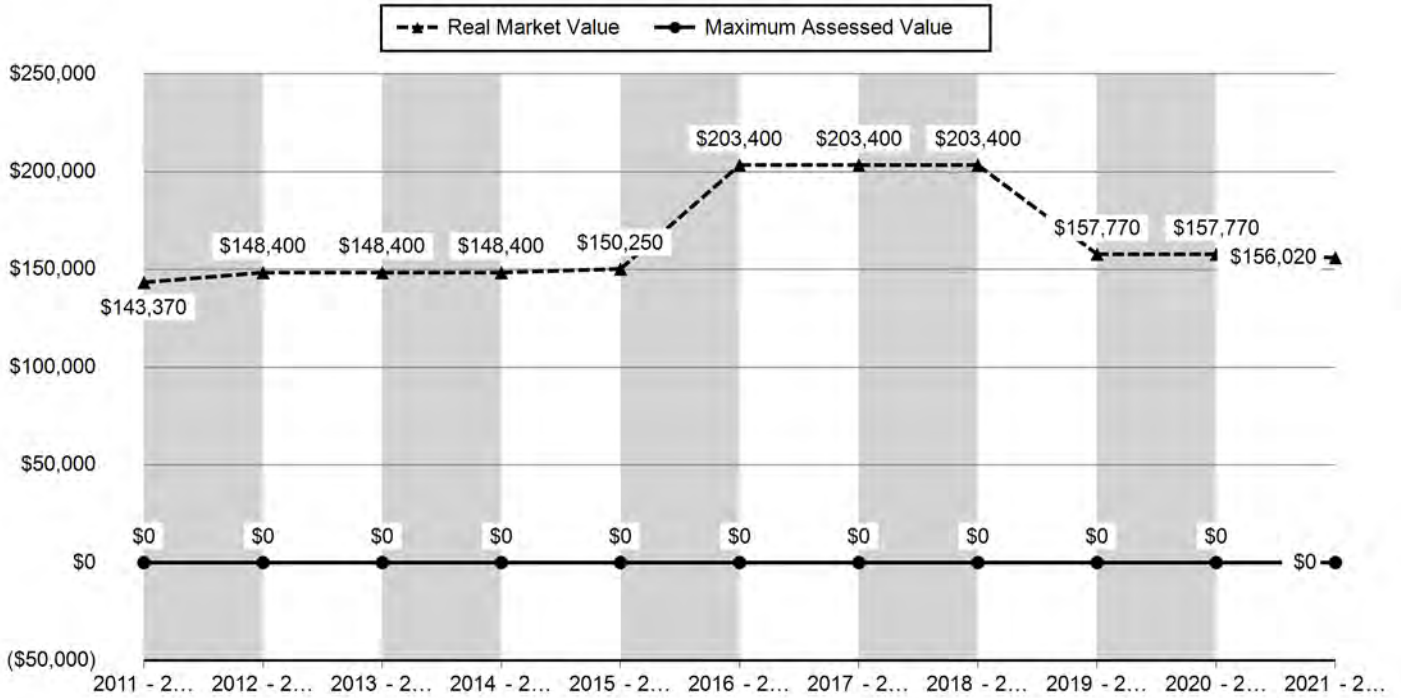
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	92.35	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$143,370	\$148,400	\$148,400	\$148,400	\$150,250
Real Market Value - Structures	\$0	\$0	\$0	\$0	\$0
Total Real Market Value	\$143,370	\$148,400	\$148,400	\$148,400	\$150,250
Maximum Assessed Value	\$0	\$0	\$0	\$0	\$0
Total Assessed Value	\$46,380	\$47,760	\$49,190	\$50,680	\$52,190
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$203,400	\$203,400	\$203,400	\$157,770	\$157,770	\$156,020
\$0	\$0	\$0	\$0	\$0	\$0
\$203,400	\$203,400	\$203,400	\$157,770	\$157,770	\$156,020
\$0	\$0	\$0	\$0	\$0	\$0
\$53,750	\$55,360	\$57,030	\$32,350	\$34,322	\$35,346
\$0	\$0	\$0	\$0	\$0	\$0



Error: Subreport could not be shown.

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
-----------	--------	-------	-------------	-----------	-----------

Structures

Error: Subreport could not be shown.

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	571.42	627-
Farm Use Zoned	658.45	627
Farm Use Zoned	29.94	624

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Error: Subreport could not be shown.



Gilliam County Property Summary Report

Report Date: 3/30/2022 8:20:44 PM

Disclaimer

The information and maps presented in this report are provided for your convenience. Every reasonable effort has been made to assure the accuracy of the data and associated maps. Gilliam County makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. Gilliam County explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Gilliam County shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. Gilliam County assumes no liability for any decisions made or actions taken or not taken by the user of this information or data furnished hereunder.

Account Summary

Account Information

Mailing Name: WASTE MANAGEMENT
Map and Taxlot: 02N21E0000-01209
Account: 3639
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0004

Assessment

Subdivision:
Lot:
Block:
Assessor Acres: 17.06
Property Class: 550

Ownership

Mailing Address:
WASTE MANAGEMENT
PO BOX 1450
CHICAGO, IL 60690

Valuation

Real Market Values as of Jan. 1, 2021

Land \$1,670

Structures

Total \$1,670

Current Assessed Values:

Maximum Assessed \$0

Assessed Value \$325

Veterans Exemption \$0.00

Warnings, Notations, and Special Assessments

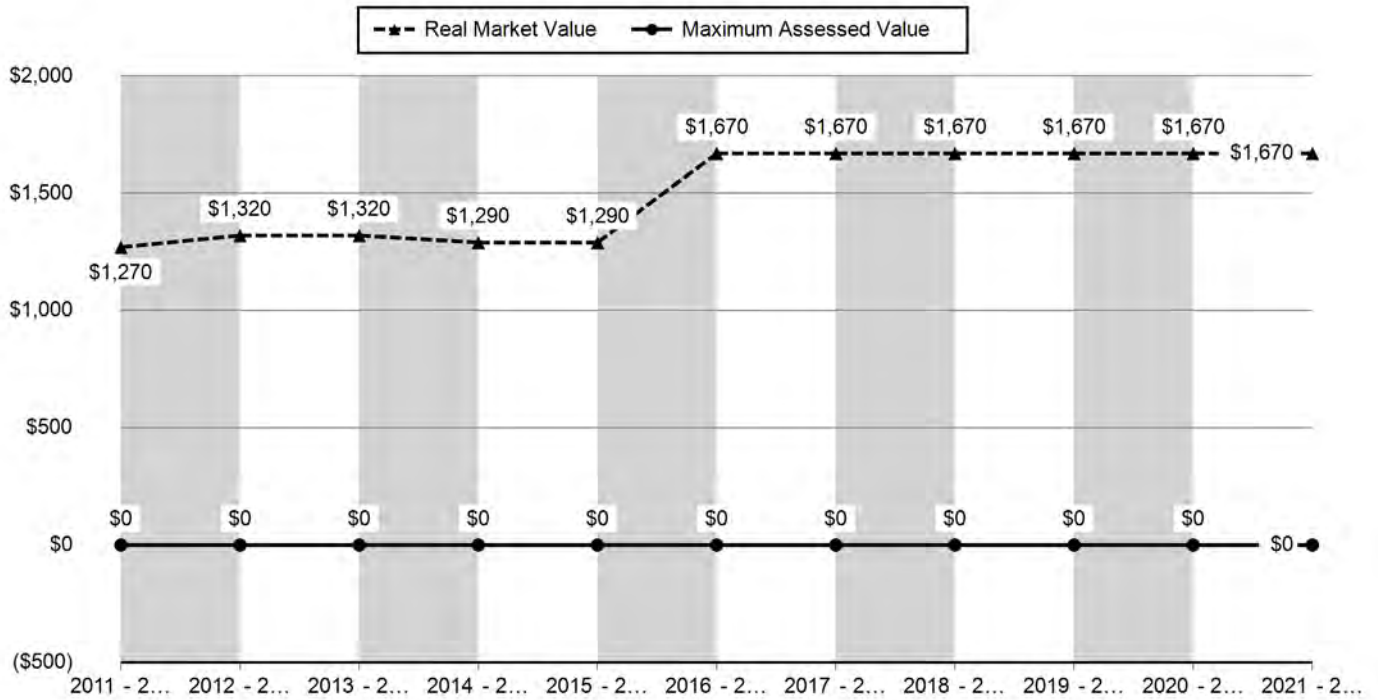
Assessor's Office Special Assessments

	Amount	Year
Weed Control Principal	1.19	2021

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	\$1,270	\$1,320	\$1,320	\$1,290	\$1,290
Real Market Value - Structures	\$0	\$0	\$0	\$0	\$0
Total Real Market Value	\$1,270	\$1,320	\$1,320	\$1,290	\$1,290
Maximum Assessed Value	\$0	\$0	\$0	\$0	\$0
Total Assessed Value	\$240	\$250	\$250	\$270	\$280
Exemption Value	\$0	\$0	\$0	\$0	\$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
\$1,670	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670
\$0	\$0	\$0	\$0	\$0	\$0
\$1,670	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670
\$0	\$0	\$0	\$0	\$0	\$0
\$280	\$290	\$300	\$300	\$315	\$325
\$0	\$0	\$0	\$0	\$0	\$0



Error: Subreport could not be shown.

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
-----------	--------	-------	-------------	-----------	-----------

Structures

Error: Subreport could not be shown.

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	6.04	628
Farm Use Zoned	10.99	627

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Error: Subreport could not be shown.

APPENDIX D

Property Line Adjustments



CSA Planning, Ltd

4497 Brownridge, Suite 101
Medford, OR 97504

Telephone 541.779.0569
Fax 541.779.0114

Seth@CSAplanning.com

Technical Memorandum

To: Gilliam County

Date: March 30, 2022

Subject: Property Line Adjustment Applications

Two separate applications for property line adjustments involving parcels within the proposed TSDf expansion area were prepared by CSA Planning, Ltd. and submitted by the Applicant, Oregon Waste Systems, Inc. The first application (2022-PLA-01) was submitted in late December 2021, and the second (2022-PLA-02) was submitted in early March 2022. The applications are currently under review and decisions on both are expected to be forthcoming.

CSA Planning, Ltd.

A handwritten signature in blue ink, appearing to read 'S. Adams', is written over a horizontal line.

Seth Adams
Associate

APPENDIX E

Previous Approvals Listed In Section 4.2.2

GILLIAM COUNTY, OREGON
County Planning Commission

APPLICATION FOR AMENDMENT TO THE GILLIAM COUNTY ZONING MAP
OF 1969 (APPLICATION FOR ZONE CHANGE)

Application No. A(M)- 002

CHEM-NUCLEAR SERVICES, INC.

I, by Bruce W. Johnson, hereby request that the Gilliam County
Planning Commission recommend, and that the County Court adopt, the following
proposed ordinance, which would amend the Gilliam County Zoning Map of 1969.

IN THE MATTER OF an order amending)
the Gilliam County Zoning Ordinance of) O R D E R
1969)

~~SECTION~~ A(M)-002. Zone Change. Section 3.020 of the Gilliam County
Zoning Ordinance of 1969 is hereby amended by adding thereto the following
subsection:

() The territory within the boundaries indicated by a red line on
Gilliam County Zoning Map Amendment No. A(M)- 002 as approved by
the Planning Commission on February 7, 19 73, and which map
amendment bears the signatures of the Chairman and Secretary of the
Planning Commission, is hereby reclassified from A-E to M-G.

The interest that I have in such a zone change is as follows:

The establishment of a hazardous waste disposal center.

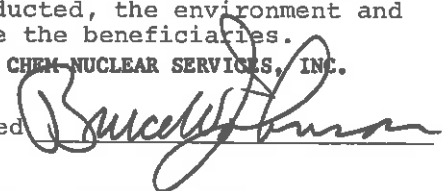
I believe that the public interest would be served by this zone change for the
following reasons:

Industrial creation of environmentally hazardous waste is a
fact of life. To dispose of these materials in an organized,
scientific fashion is a requirement which is not presently
being met in Oregon. Properly conducted, the environment and
the population of the state will be the beneficiaries.

CHEM-NUCLEAR SERVICES, INC.

Dated Dec. 1, 1972

Signed



Suite 118, Century I Bldg.
13401 Bellevue-Redmond Road
Mailing Address
Bellevue, Washington 98005

By:

His authorized agent

Receipt of Application and Fee, Setting of Public Hearing

I hereby certify that a completed application for a zone change, Application No. AM-002
~~AM-002~~, submitted by the above applicant, was received by me for
filing with the Gilliam County Planning Commission on this, the 11th day of
December, 19 72. A public hearing, as required by
Section 9.020 of the zoning ordinance has been set for February 7, 19 73
at the hour of 2:00 p.m., at Gilliam County Courthouse, in Condon, Oregon,
Gilliam County, Oregon. At this time, the Planning Commission will hear
proponents and opponents of said application. Receipt of a fee in the amount of
\$ 10.00, as established by the Gilliam County Court, is hereby acknowledged.

Dated January 16, 1973


Marianne Anderson, Gilliam County Clerk

Certificate of Published Notice

I hereby certify that on the 19th day of January, 1973, notice of hearing by the Gilliam County Planning Commission in the matter of an application for an amendment to the Gilliam County Zoning Ordinance of 1969, Application No. A(M)-002 was published in The Condon Globe Times, a newspaper of general circulation in the county, a printed copy of which notice is hereto affixed. I further certify that such notice was published at least ten (10) days prior to the date of the hearing set for this purpose, as provided by Section 10.060 of the zoning ordinance.

Affix
printed copy
here

Dated February 6, 1973


Marianne Anderson Secretary

Certificate of Mailed Notice

I hereby certify that on the 19th day of January, 1973, notices of a hearing by the Gilliam County Planning Commission in the matter of an application for an amendment to the Gilliam County Zoning Map of 1969, application number A(M)-002, were mailed to all property owners whose names and addresses are listed below. I further certify that the attached is a true and accurate copy of said notice, and that the persons listed below represent all owners of property located within 250 feet of the exterior boundary of the property for which said application for amendment was made, as provided by Section 10.060 of the zoning ordinance.

Dated February 6, 1973


Marianne Anderson Secretary


Jerald F. Holzapfel
Box 1027
Willows, California

Big Sky Ranch, Inc.
Roy O. Burnett, President
113 Foothills Road
Lake Oswego, Oregon 97034

Lila Lee Osborne
Arlington, Oregon 97812

Notice of this hearing was also mailed to none, City Recorder of the City of _____, as provided by Section 10.060 of the Zoning Ordinance.

Dated _____


Marianne Anderson Secretary

Information Report--Zone Change

IN THE MATTER OF an application for a zone change, Application No.
A(M)- 002 _____:

I have examined the site and area involved in the proposed amendment to the Gilliam County Zoning Map of 1969, and submit the following information to assist the Commission in formulating its recommendation to the County Court.

The area is currently zoned A-E. The proposed change would rezone the area to M-G. The Comprehensive Plan for Land Use does _____ does not XX contemplate such a change in this area, **however it does not preclude such a change.**

There are _____ are no XX areas in the general vicinity of the proposed change that would allow such activity without a zone change.

The general character of the area is as follows:

generally flat agricultural area.

Since the area was last zoned, the following changes in circumstances and conditions affecting the area have occurred:

The 320 acres located in S $\frac{1}{2}$ of NE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 25 and N $\frac{1}{2}$ of NE $\frac{1}{4}$, Sec. 36, T2N, R20EWM, Gilliam County, purchased by Chem-Nuclear Services, Inc. with plans to establish a hazardous waste disposal center.

The site is suitable for activities that such a change would permit, for the following reasons:

geological studies establish safety of the operation.

The site is unsatisfactory for the activities that such a change would permit, for the following reasons:

_____ alternatives to the proposal submitted by the applicant would be as follows:

_____ February 7, 1973 _____

Signed _____

Record of Hearing on Application for Amendment

Application No. A(M)- 002 .

On the 7th day of February, 19 73, at the hour of 2:10 P.M., the Gilliam County Planning Commission convened a public hearing in Gilliam County Circuit Court Room, in Gilliam County, Oregon, in the matter of an application for an amendment to the ~~xxxx~~ map XX of the Gilliam County Zoning Ordinance of 1969. Application No. A(M)- 002. Members of the Planning Commission present were:

Carl Myers
Floyd LaRue
Ed Bates
Kenneth Walters
Robert Hulden
Tom Sumner

Ex-Officio Members:
James O. Burns, County Judge
Clarence Potter, County Commissioner
Lester Brooks, County Commissioner

Marianne Anderson, Ex-Officio Secretary

their presence therefore constituting a quorum.

The following is a record of that hearing, including the names of all those speaking before the Commission, and including such written material as may have been submitted for incorporation into the record.



Marianne Anderson
Secretary



James O. Burns
Chairman

The following were present at the hearing:

Walter Jaeger
Ken Flaig
John Re

John Weimar
Ron Davis

Ron Davis said he thought area should have been rezoned at outset, 1970. Ron Davis spoke in opposition to the existence of Chem-Nuclear's proposed operation. He lives close to the area and fears the chance of water contamination and other problems as the facility is too close to farmsteads and our major industry, agriculture, should not be threatened. He felt that we should stop such industries from coming at the outset, that it was probably too late now to do anything but he would like to see us stop other such industries from coming in. Robert Hulden spoke in opposition because of his fears regarding safety factors and cast a "Nay" vote as member of the Planning Commission. He felt that 50-100 years from now, we may have problems. Ron Davis stated that we should require all industries to restore area to natural state when they leave the area referring to problem with Kaiser at its pozzolan plant site. John Weimar urged that we look long and hard at each application for a change from exclusive agriculture to industrial zone when requests for changes come in because we shouldn't make it too easy for our valuable agricultural area to be over-run with industrial complexes. After full discussion, was moved by Carl Myers, seconded by Ed Bates to change the zone as proposed from A-E to M-G and carried with five members of the Planning Commission in favor and one member opposed.

It was pointed out to those present by the County Court and the Planning Commission that a temporary permit to proceed with applications for the Chem-Nuclear plant was granted in 1970 and that at the present time Chem-Nuclear has only a permit to store chemicals. There is still a hold-up by DEQ on the storage permit/approval for storage of low level radioactive waste, and there will probably not be a decision until after the legislature completes this session. The Planning Commission and the County Court have reviewed the geological studies completed on behalf of Chem-Nuclear as part of their applications for approval of necessary permit applications, and they feel that they have acted in the best interest of Gilliam County.

Recommendation of the Planning Commission

IN THE MATTER OF an application for an amendment to the text _____ map XX
of the Gilliam County Zoning Ordinance of 1969, Application No. A(M) - 002 :

Having first received an application for an amendment to the Gilliam County
Zoning Ordinance of 1969, and having given notice and held hearing as provided
for by the zoning ordinance, the Gilliam County Planning Commission
recommends to the Gilliam County Court that the following proposed
amendment be approved XX, disapproved __, modified ____.

Modification, if recommended, of the proposed amendment should be
as follows:

The Planning Commission recommends the above action for the following
reasons:

Dated on this, the 7th day of February, _____, 1973.

Voting "aye" on the recommendation

Voting "no" on the recommendation

Carl Myers

Robert Hulden

Ed Bates

Tom Sumner

Kenneth Walters

Floyd LaRue

Recommendation of the Planning Commission

IN THE MATTER OF an application for an amendment to the text map XX
of the Gilliam County Zoning Ordinance of 1969, Application No. A(M)-002 :

Having first received an application for an amendment to the Gilliam County Zoning Ordinance of 1969, and having given notice and held hearing as provided for by the zoning ordinance, the Gilliam County Planning Commission recommends to the Gilliam County Court that the following proposed amendment be approved XX, disapproved , modified .

Proposed that zone be changed on 320 acres located in S $\frac{1}{2}$ of NE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 25 and N $\frac{1}{2}$ of NE $\frac{1}{4}$, Sec. 36, T2N, R20EWM, Gilliam County, Oregon from exclusive agriculture (A-E) zone to a general industrial (M-G) zone effective as soon as possible, such change to be part of the Gilliam County Zoning Map.

Modification, if recommended, of the proposed amendment should be as follows:

The Planning Commission recommends the above action for the following reasons:

The owners of the property proposed for zone change plan to carry on an industrial waste disposal operation, and the exclusive agriculture zone no longer applies.

Dated on this, the 7th day of February, 19 73.

Gilliam County Planning Commission

By 
Secretary Marianne Anderson

COUNTY COURT COPY

Advice of the County Court

To: Gilliam County Planning Commission
Re: Application for Amendment to the Gilliam County Zoning Ordinance
of 1969.

Application No. A(M)- 002

Please be advised that on the 7th day of February, 1973, acting in accordance with the provisions of the laws of the State of Oregon, the County Court adopted XX rejected _____ the following order amending the Gilliam County Zoning Ordinance of 1969:

IN THE MATTER OF PROPOSED ZONE CHANGE FROM A-E TO M-G FOR 320 ACRES OWNED BY CHEM NUCLEAR SERVICES, INC.:

Acting upon the recommendation of the Gilliam County Planning Commission, IT WAS THEREFORE ORDERED BY THE GILLIAM COUNTY COURT that the zone be changed on 320 acres located in S $\frac{1}{2}$ of NE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 25 and N $\frac{1}{2}$ of NE $\frac{1}{4}$, Sec. 36, T2N, R20EWM, Gilliam County, Oregon from its former exclusive agriculture (A-E) zone to a general industrial zone (M-G) effective immediately, and that the change be made a part of the Gilliam County Zoning Map.


The action taken by the County Court constitutes an acceptance XX modification _____ rejection _____ of your recommendation dated February 7, _____, 1973. The basis for this action is as follows:

ATTEST:


Marianne Anderson, Clerk

Dated February 8, 1973

GILLIAM COUNTY COURT

Signed 
James O. Burns, County Judge

Certification of Maintenance of Map Amendment

I, MARIANNE ANDERSON, County Clerk of Gilliam County, Oregon, do hereby certify that the map amendment adopted by the Gilliam County Court on February 7, 1973, identified by Map No. A(M)- 002, and bearing the signatures of the members of the Gilliam County Court, has been filed in my office and will there remain unchanged as long as the Gilliam County Zoning Ordinance of 1969 remains in effect.

Dated February 7, 1973


Marianne Anderson
County Clerk

The above certification is inappropriate because:

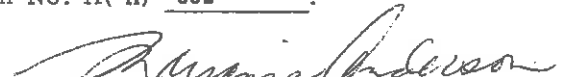
No map amendment was involved in the proceedings _____
The proposed map amendment was not adopted _____

Dated _____

County Clerk

I, Marianne Anderson, Secretary of the Gilliam County Planning Commission, do hereby certify that the documents contained and referred to herein constitute a complete and accurate record of the proceedings in the matter of the application for an amendment to the Gilliam County Zoning Ordinance of 1969, Application No. A(M)- 002.

Dated February 7, 1973


Marianne Anderson
Secretary

AFFIDAVIT OF PUBLICATION

STATE OF OREGON, COUNTY OF GILLIAM, ss:

I, James W. Madaffey
being first duly sworn, depose and say that I am the
Publisher of the
CONDON GLOBE-TIMES, a newspaper of general cir-
culation as defined by Sections 1-509, 1-510, Oregon Code
printed and published at Condon in the aforesaid county
and state; that the Notice of Hearing, a printed
copy of which is hereto annexed, was published in the
entire issue of said newspaper for 1 successive
and consecutive weeks in the following issues:

January 19, 1973

James W. Madaffey

Subscribed and sworn to before me this 1st
day of February, 1973.

Marian Anderson
Notary Public for Oregon
County Clerk
(My commission expires Jan, 1975.)

NOTICE OF HEARING
NOTICE IS HEREBY GIV-
EN that the Gilliam County
Planning Commission will
hold a public hearing on the
question of proposed zone
change from Exclusive Farm
Use Zone to General Indus-
trial Zone for a hazardous
waste disposal center known
as Chem Nuclear Services,
Inc., as provided in the Gil-
liam County Zoning Ordina-
nance of 1969, Section 10.060,
on Wednesday, February 7,
1973, at 2:00 p.m. at the Gil-
liam County Court House,
Condon.
At the hearing the public
shall be entitled to appear
and be heard on the question
of the proposed zone change
for the following described
property:
320 acres located in S½
of NE¼, SE¼, Sec. 25
and N½ of NE¼, Sec. 36,
T2N, R20EWM, Gilliam
County, Oregon.
Dated this 16th day of Jan-
uary, 1973.
Gilliam County Planning
Commission
By M. Anderson,
Ex-Officio Secretary
Published January 19, 1973.
GT-8

Received \$....., payment in full for publication of
above notice.

CONDON GLOBE-TIMES
By

GILLIAM COUNTY, OREGON
County Planning Commission

APPLICATION FOR AMENDMENT TO THE GILLIAM COUNTY ZONING MAP
OF 1969 (APPLICATION FOR ZONE CHANGE)

Application No. A(M)-007

Frank G. Dement representing
I, Chem-Nuclear Systems, Inc., hereby request that the Gilliam County
Planning Commission recommend, and that the County Court adopt, the following
proposed ordinance, which would amend the Gilliam County Zoning Map of 1969.

IN THE MATTER OF an order amending)
the Gilliam County Zoning Ordinance of) O R D E R
1978)

Section 3.020. Zone Change. Section 3.020 of the Gilliam County
Zoning Ordinance of 1978 is hereby amended by adding thereto the following
subsection:

(4) The territory within the boundaries indicated by ~~a red line on~~ ^{the following legal descri}
Gilliam County Zoning Map Amendment No. A(M)-007 as approved by
the Planning Commission on October 16, 1978, and which map
amendment bears the signatures of the Chairman and Secretary of the
Planning Commission, is hereby reclassified from AE to MG.

Legal Description: See attached.

The interest that I have in such a zone change is as follows:

To improve our site access road by reducing the grade.

I believe that the public interest would be served by this zone change for the
following reasons:

This change will prevent mud and rock washes onto the
county road during the season of rainy weather.

Dated 10-5-78
Star Route
Arlington, Oregon 97812
Mailing Address

Signed, Chem-Nuclear Systems, Inc.
By: Frank G. Dement
His authorized agent

Receipt of Application and Fee, Setting of Public Hearing

I hereby certify that a completed application for a zone change, Application No. A(M)-007, submitted by Chem Nuclear, was received by me for filing with the Gilliam County Planning Commission on this, the 6 day of October, 1978. A public hearing, as required by Section 9.020 of the zoning ordinance has been set for October 16, 1978 at the hour of 8:00 pm, at Arlington City Hall, in Arlington, Gilliam County, Oregon. At this time, the Planning Commission will hear proponents and opponents of said application. Receipt of a fee in the amount of \$ 25.00, as established by the Gilliam County Court, is hereby acknowledged.

Dated Oct 6, 1978

Madlene J. Dawson

RECORD OF THE GILLIAM COUNTY PLANNING

COMMISSION HEARING FOR ZONE CHANGE AM-007

October 16, 1978

The Gilliam County Planning Commission zone change hearing was opened by George Jamieson, Chairman, in the Arlington City Hall at 8:00 p.m. Members present were Louis Rucker, Frank Bettencourt, Jake Grossmiller, Jan Turpin and George Jamieson. Others Present were: Lila Lee Hoag Osborne, TD; Leo Barnett, County Judge; Frank Dement, Chem Nuclear Systems; Bob Maginnis, Condon; Rocky Wilson, The Times Journal, Condon.

The hearing notice was read and proponent Frank Dement was identified, with no opponants being present.

Abstentions were asked for and none found.

The zone application and staff report was given by the secretary.

Hearing rules were outlined to be as those duly adopted by the commission.

Proponent Frank Dement was asked to make his presentation to the commission and is given as follows:

Considerable difficulty was had last winter on their present road as it is so steep that water would run down the middle of the road carrying rocks, water and mud out onto the County Highway making hazardous and inconvenient situation. Engineers reported that they will have better control with the new proposed road and can maintain the access to their site for trucks. Last year they were closed 2 to 3 days because of road problems. Reducing the grade will require purchase of the adjacent property east of their own. A culvert will be installed at Chem Nuclear Expense, across the county road and will take care of water by channeling it out to the flat.

The two main items to justify the change are better truck access in the winter time to help the customers, and Prevent reaccurance of material depositing on the county highway which the neighbors were quite upset about.

Questions by the commissioners:

Bettencourt: Have you made arrangements to install the culvert and determined the cost?

Dement: We have talked, but nothing definate.

B: Have you determined the cost?

D: No but we are prepared to stand the cost.

B: Are the engineers for the new road the same as the engineers for the old road?

D: I don't believe so. I couldn't say. I'd have to find out, this one is done by Tennesson Engineering in The Dalles.

B: Do you know if they are the engineers that did the engineering on the site itself?

D: Yes, they did a lot of the surveying.

Rucker: It was mentioned at the beginning of the hearing that there was more probabilities besides the road for better access. Is there plans in the future for rail sidings on this site?

D: Off and on we have two customers that keep changing their mind.

R: The piece below the road is not large enough for an industrial site but it may be for a rail siding.

D: The rail siding would be across the County road closer to the site. It is possible, but we are not sure, there could be a pumping station or warehouse. We would never be allowed to dispose of the material on the property down in the canyon. It will probably be a parking lot or structure of that nature.

Jamieson: I am not entirely clear on your long range plan.

D: There aren't any. We would like to have all of the property in the same category, to be simpler to use for what arises. We have to deed to the State as part of our agreement, all roads and disposal areas. It just will be more uniform.

R: You go this way rather than easement?

D: Yes.

J: Do you own the property at the present time?

D: For the road? No, we are negotioating with Stone for the property.

J: When do you expect to receive the deed or clear title? In the very near future?

D: Yes. The sale of the Property is contingent on rezoning.

J: Can you give me a rough idea of how many man hours were spent by the County road crew, in maintenance in clearing the road last winter concerning the problems created by the existing road.

D: We did it.

J: How may hours were involved by your people?

D: Close to 100 or 150 man hours.

GILLIAM COUNTY PLANNING COMMISSION
ZONE CHANGE HEARING AM-007
October 16, 1978
Page 2

Jamieson: In essence, you have done as the County Road department would have done. I assume you took care of this because you feel you created the problem and it was your responsibility.

Dement: Yes.

Bettencourt: Who owns on the south side of the county road where the water excess will be run?

D: It would be our own property which extends to the other side of the County Road and where it will be draining is between our property and Holzapfel's property.

B: Would it just extend where the road takes off the County road?

D: No, the property we have now extends 100 feet South of the Highway, and the same situation will exist on the property we acquire here.

Rucker: The property line is actually on the other side, the road is not the property line?

D: No.

B: Are you only purchasing property from one individual.

D: I understand that Hoag and another owns the property and Stone is buying it and agreed for us to buy some.

Osborne: I am the former owner of the property.

J: Would you identify your self to this commission please.

O: I am Lila Lee Hoag Osborne, the former owner of this property. I purchased it from my father and he has my permission to dispose of that much of the property to help these people out. It is immaterial to me, it would not support more than one or two cows. I only came because Marlene mailed this notice of the meeting.

J: Looking at this map provided, the scale according to the engineer being 1 inch to 100 feet it is then approximately 650 feet on the road and 450 feet fronting on your property back up. I assume this is the elevation map?

D. Yes.

Having no additional questions from the commission, opponents were called and it was duly noted that none were in attendance.

J: Can you tell me just offhand when you will have the deed to this property in your Name.

D: Talking to our lawyers and Stones lawyers within the month. We have earnest money in the hands of Mr. Stones lawyers.

A short recess was called so that the commission could be called in executive session. Discussion centered upon the safety with the current road in conjunction with the county road as being hazardous for traffic in specific, school bus traffic; And safety of the current road itself in conjunction with the trucks that must use it.

No more comments or questions were asked when the hearing was resumed and the chairman then called for a roll call vote on the zone change.

Frank Bettencourt, yes

Louis Rucker, yes

Jake Grossmiller, Yes

Jan Turpin, Yes

The chairman then declared the zone change approved for recommendation to the Gilliam County Court with himself in full approval as well. The hearing was officially closed.

The regular meeting was called to order and the minutes of the lengthy minutes of the previous hearing were dispensed by motion made by Frank Bettencourt and seconded by Jake Grossmiller and given unanimous approval.

The maintenance grant was discussed briefly concerning plans to make new maps and revise the old permits. (Copies will be made available and discussed at the next meeting)

Comprehensive Plan Review material was made available to the commissioners to study for further discussion at the November 20 meeting in Condon.

The meeting was adjourned.


Marlene Davison, Secretary

George Jamieson, Chairman

Recommendation of the Planning Commission

IN THE MATTER OF an application for an amendment to the text map X
of the Gilliam County Zoning Ordinance of 1976, Application No. A(M)-007:

Having first received an application for an amendment to the Gilliam County Zoning Ordinance of 1976, and having given notice and held hearing as provided for by the zoning ordinance, the Gilliam County Planning Commission recommends to the Gilliam County Court that the following proposed amendment be approved X, disapproved , modified .

Zone change as per application by Chem Nuclear Systems be changed from A-E to MG on property as per legal description.

Modification, if recommended, of the proposed amendment should be as follows:

None

The Planning Commission recommends the above action for the following reasons:

- 1. Road access needs to be improved for road safety, by lessening the grade to 6%*
- 2. Improved road will ~~prevent~~ road wash onto the county road in winter*
- 3. New road entrance will require gate control (changed from present gate)*
- 4. Change of zoning will allow moving the office closer to gate control.*
- 5. Will make a continuous zone for property owners.*

Dated on this, the 16 day of October, 1978.

Voting "aye" on the recommendation

Voting "no" on the recommendation

Frank Belencourt

Jake Oresmiller

Louis Rucker

Jon Turpin

George Jamieson

Recommendation of the Planning Commission

IN THE MATTER OF an application for an amendment to the text ___ map X
of the Gilliam County Zoning Ordinance of 1976, Application No. A(M)-C07 :

Having first received an application for an amendment to the Gilliam County Zoning Ordinance of 1976, and having given notice and held hearing as provided for by the zoning ordinance, the Gilliam County Planning Commission recommends to the Gilliam County Court that the following proposed amendment be approved X, disapproved ___, modified ___.

Zone change as per application by Chem Nuclear Systems be changed from AE to MG on property as per legal description

Modification, if recommended, of the proposed amendment should be as follows:

None

The Planning Commission recommends the above action for the following reasons:

1. Road access needs to be improved for road safety by lessening the grade to 6
2. Improved road will ~~prevent~~ road wash onto the county road on wet snow
3. New road entrance will require gate control changed from present gate
4. Change of zoning will allow moving the office closer to the gate for control
5. The zone change will make a continuous zone for property owners

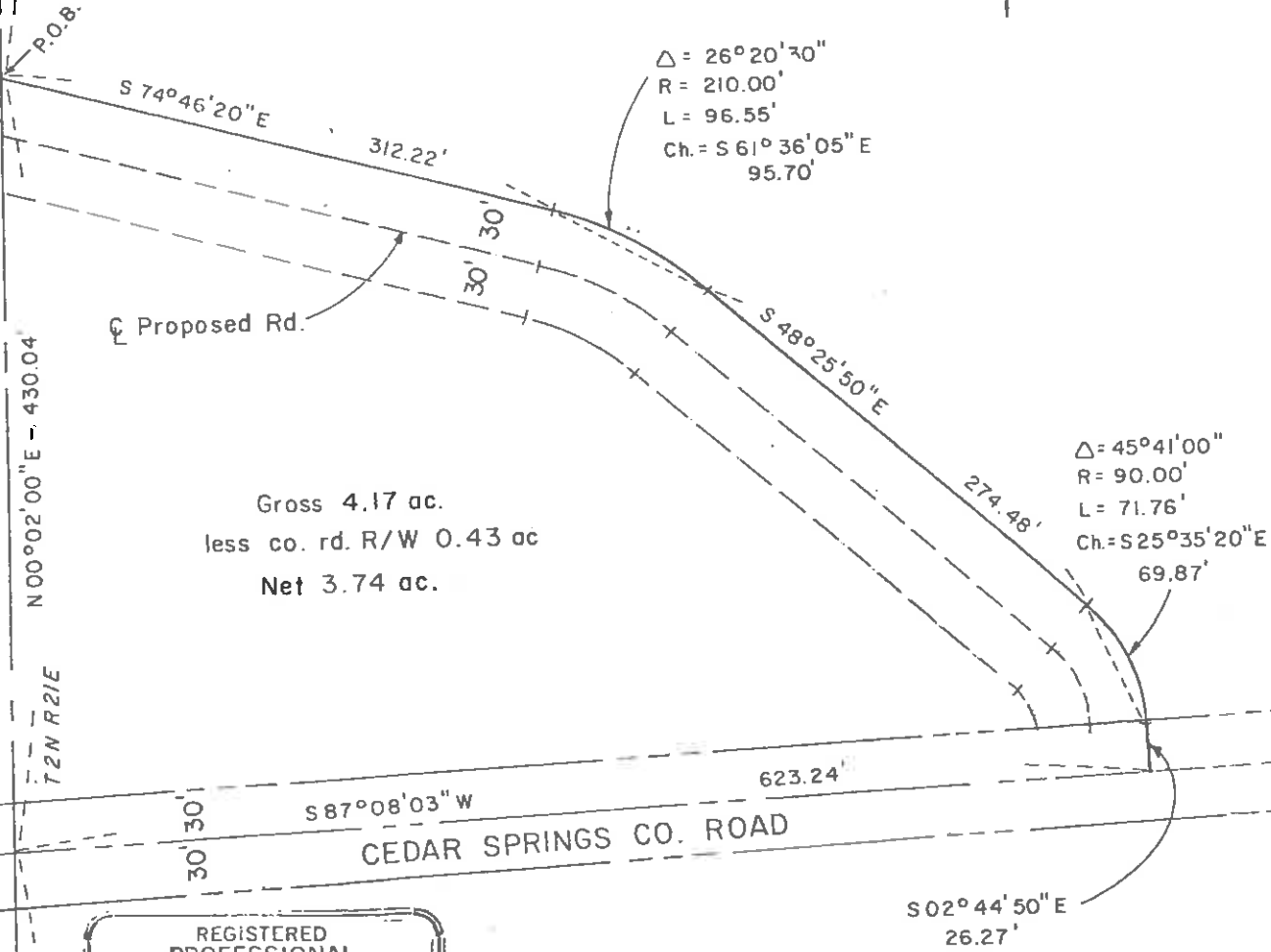
Dated on this, the 16 day of October, 19 78.

Gilliam County Planning Commission

By Margaret Anderson
Secretary

NORTH

674
1316.91'
N 00°02'00"E - 430.04'
T2N R20E
T2N R21E
212.24'



Gross 4.17 ac.
less co. rd. R/W 0.43 ac
Net 3.74 ac.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Donald J. Rohde

OREGON
SEPT. 23, 1977
DONALD J. ROHDE
1313

1/16 COR.
5/8" IRON ROD

Date	No.	Revisions	By	App.
Design		Scale 1"=100'		
Survey	TEC	Date 9-12-78		
Drawn	D.E.B	Sheet 1 of 1		
Appd.	<i>DJR</i>	Wk. Or. No. 5240		

TRACT of LAND
in NW 1/4 NW 1/4 Sec.31, T2N,R21E,W.M
for CHEM-NUCLEAR SYSTEMS
Gilliam Co., Ore.

TENNESON ENGINEERING CORP. - CONSULTING ENGINEERS - The Dalles - Bend - Oregon

NOTIFICATION OF CHANGE
TO THE ASSESSORS OFFICE
(ORS 308.342)

I hereby certify that on the 1 day of Nov, 1978, the Gilliam County Court approved the recommendation from the Gilliam County Planning Commission to:

 A change in the Comprehensive Land Use Plan.

 A change in the zoning ordinance.

X A change in a zoning designation, from a zone of AE to M-G

 An adoption of a new zone

 Other:

By permit number AM - 007

Property affected by this change or adoption:

See Attachment.

Petitioner for this zone change is: Chem Nuclear Systems Inc
address: R. Route, Or
Bevington, Ore 97812

Landowner of the described property is: Lila Lee drag Osborne (Mr & Mrs) 160
address: 2515 Mill Creek Rd W
The Dalles, Ore 97058
(include all landowners)

The change or the purpose of the change is: to permit safer truck
access to the dumping site and improve the road
grade to 6%

Dated: 11/1/78 Signed Marlene L. Davison
Secretary

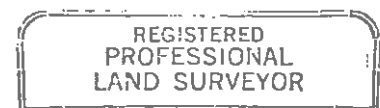
PROPERTY DESCRIPTION
FOR CHEM-NUCLEAR SYSTEMS, INC.
PROPOSED ACCESS ROAD AND ADJACENT PARCEL

A tract of land in the Northwest one quarter (N.W. 1/4) of the Northwest one quarter (N.W. 1/4) Section Thirty One (Sec. 31), Township Two North (T.2 N.), Range Twenty One East (R. 21 E.), Willamette Meridian (W.M.), Gilliam County, Oregon, more particularly described as follows:

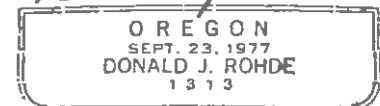
Commencing at the northwest corner of said Sec. 31, thence S. 00°02'00" W. 674.63 feet along west line of said Section 31 to the point of beginning of this description; thence leaving said section line S. 74°46'20" E. 312.22 feet; thence along the arc of a 210.00 foot radius curve right 96.55 feet (the long chord of which bears S. 61°36'05" E 95.70 feet); thence S. 48°25'50" E. 274.48 feet; thence along the arc of a 90 foot radius curve right 71.76 feet (the long chord which bears S. 25°35'20" E. 69.87 feet); thence S. 02°44'50" E. 26.27 feet, more or less, to the centerline of Cedar Springs County Road; thence S. 87°08'03" W. along the centerline of said Cedar Springs County Road 623.24 feet, more or less, to the west line of said Section 31; thence N. 00°02'00" 430.04 feet, more or less, along the west line of said Section 31 to the point of beginning and terminus of this description.

SUBJECT TO: The right-of-way of Cedar Springs County Road along the southerly line of the above described tract of land.

Gross area	4.17 acres
less County Road right-of-way	0.43 acres
Net area	3.74 acres, more or less



Donald J. Rohde



25 30
36 31

12" x 8" x 6" STONE
and IRON ROD

674.63

P.O.B.

S 74°46'20"E

312.22'

$\Delta = 26^\circ 20' 30''$
R = 210.00'
L = 96.55'
Ch. = S 61° 36' 05" E
95.70'

Proposed Rd.

S 48°25'50"E

274.48'

$\Delta = 45^\circ 41' 00''$
R = 90.00'
L = 71.76'
Ch. = S 25° 35' 20" E
69.87'

Gross 4.17 ac.
less co. rd. R/W 0.43 ac.
Net 3.74 ac.

1316.91'
N 00°02'00"E - 430.04'

T2N R20E
T2N R21E

S 87°08'03"W

623.24'

CEDAR SPRINGS CO. ROAD

S 02°44'50"E
26.27'

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Donald J. Rohde
OREGON
SEPT. 23 1977
DONALD J. ROHDE
1313

212.24'
1/16 COR.
5/8" IRON ROD

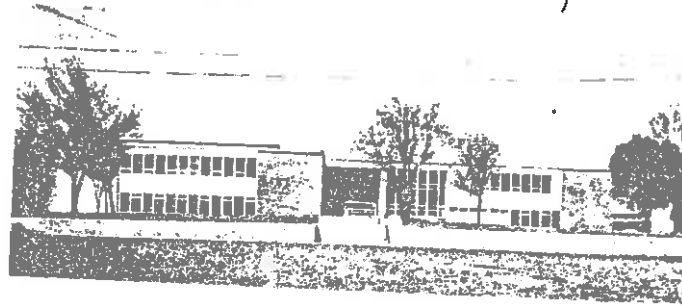
Date	No.	Revisions		By	App.
Design		Scale	1" = 100'		
Survey	TEC	Date	9-12-78		
Drawn	D.E.B.	Sheet	1 of 1		
Appd.	<i>DJR</i>	Wk. Or. No.	5240		

TRACT of LAND
in NW 1/4 NW 1/4 Sec.31, T2N,R21E,W.M
for CHEM-NUCLEAR SYSTEMS
Gilliam Co., Ore.



GILLIAM COUNTY

CONDON, OREGON 97823



October 17, 1978

-COUNTY OFFICIALS-

COUNTY JUDGE

Leo Barnett
384-2791
384-3461

COMMISSIONERS

Lester Brooks
William D. Hardie, Jr.

ASSESSOR

Judy Griffith
384-3781

CLERK-RECORDER

Christopher N. Childs
384-2311

DISTRICT ATTORNEY

William A. Bennett
384-3352

JUSTICES OF THE PEACE

Marvin A. Albee
Condon, 384-5821
William Marshall
Arlington, 454-2923

SHERIFF

Volney Thomas
384-2851

TREASURER/TAX COLLECTOR

Margaret Grabenhorst
384-6321

ROAD DEPARTMENT

384-2381

PLANNING DEPARTMENT

384-4243

NOTICE IS HEREBY GIVEN that the Gilliam County Court will hear proponents and opponents of an Application for Amendment to the Gilliam County Zoning Map of 1976, submitted by the Chem Nuclear Systems and recommended by the Gilliam County Planning Commission for approval.

This hearing would change the exclusive agriculture zoning to General Industrial in T 2 N, R 21 E, Section 31. Approximately 4 acres adjacent to the Chem Nuclear Systems, North of the Gilliam County road is the property in question and will be used as improved access for the Chem Nuclear Property.

The hearing will be held in the Gilliam County Courtroom on November 1, 1978, at 2:00 p.m.

Dated this 17th day of October, 1978, by

Gilliam County Clerk
Christopher Childs

Printed

October 19 and 26 in the Times Journal

GILLIAM COUNTY, OREGON
COUNTY PLANNING COMMISSION

APPLICATION FOR AMENDMENT TO THE GILLIAM COUNTY ZONING MAP OF 1977
(APPLICATION FOR ZONE CHANGE)

APPLICATION NO. A(M)-008

X I, Chem-Security Systems, Inc., hereby request that the Gilliam County Planning Commission recommend, and that the County Court adopt, the following proposed ordinance, which would amend the Gilliam County Zoning Map of 1977.

IN THE MATTER OF an order amending)
the Gilliam County Zoning Ordinance of) ORDER
1977)

AMENDMENTS:

Section 9.010. Zone Change. Section 3.020 of the Gilliam County Zoning Ordinance of 1977 is hereby amended by adding thereto the following subsection:

X () The territory with the boundaries indicated by a red line on Gilliam County Zoning Map Amendment No. A(M)-008, as approved by the Planning Commission on _____, 1981, and which map amendment bears the signatures of the Chairman and Secretary of the Planning Commission, is hereby reclassified from OE to M-G.

The interest that I have in such a zone change is as follows:

Applicant has Option to Purchase the property from Big Sky Ranch, Inc. Applicant wants to develop site for recovery, treatment, storage and disposal of chemical waste. Exercise of Option to Purchase depends upon zoning change.

I believe that the public interest would be served by this zone change for the following reasons:

Additional property will increase capacity of chemical waste management site, prolong life of site and thereby increase and preserve employment opportunities in Gilliam County. Applicant has drilled on property; results show that property is ideal as chemical waste site.

Dated 12/1/80

Signed Patricia Hunk

PO Box 1866
BELLEVIEW, WA 98009
Mailing Address

By: _____
His authorized agent

RECEIPT OF APPLICATION AND FEE, SETTING OF PUBLIC HEARING

I hereby certify that a completed application for a zone change, Application No. A(M)-008, submitted by Chem-Security, was received by me for filing with the Gilliam County Planning Commission on this, the 3 day of December, 1980. A public hearing, as required by Section 9.020 of the zoning ordinance has been set for December 15, 1980, at the hour of 8:00pm, at Arlington City Hall, in Arlington, Gilliam County, Oregon. At this time, the Planning Commission will hear proponents and opponents of said application. Receipt of a fee in the amount of \$25.00, as established by the Gilliam County Court, is hereby acknowledged.

Dated December 3, 1980

Synda Ferris

CERTIFICATE OF PUBLISHED NOTICE

I hereby certify that on the 4 day of December, 1980, notice of hearing by the Gilliam County Planning Commission in the matter of an application for an amendment to the Gilliam County Zoning Ordinance of 1977, Application No. A()-008 was published in Times-Journal, a newspaper of general circulation in the county, a printed copy of which notice is hereto affixed. I further certify that such notice was published at least ten (10) days prior to the date of the hearing set for this purpose, as provided by Section 10.060 of the zoning ordinance.

Affix
printed copy
here

Dated December 4, 1980

Lynnda Ferris

Secretary

CERTIFICATE OF MAILED NOTICE

I hereby certify that on the 1 day of December, 1980, notices of a hearing by the Gilliam County Planning Commission in the matter of an application number A(M)-008, were mailed to all property owners whose names and addresses are listed below. I further certify that the attached is a true and accurate copy of said notice, and that the persons listed below represent all owners of property located within 250 feet of the exterior boundary of the property for which said application for amendment was made, as provided by Section 10.060 of the zoning ordinance.

Dated December 1, 1980

Lynnda Ferris

Secretary

Jerald F. Holzapfel
P. O. Box 1027,
Willows, California 95988

Big Sky Ranch, Inc.
Roy Burnett
113 Foothills Road,
Lake Oswego, Oregon 97034

Notice of this hearing was also mailed to Carol Von Der Ahe, City Recorder of the City of Arlington, as provided by Section 10.060 of the Zoning Ordinance.

Dated December 4, 1980

Lynnda Ferris

Secretary

INFORMATION REPORT - ZONE CHANGE

IN THE MATTER OF an application for a zone change, Application No.
A(M)- 008 :

I have examined the site and area involved in the proposed amendment to the Gilliam County Zoning Map of 1979, and submit the following information to assist the Commission in formulating its recommendation to the County Court.

The area is currently zoned AE. The proposed change would rezone the area to MG. The Comprehensive Plan for Land Use does X does not contemplate such a change in this area, and thus will X will not be in compliance with Land Use policies.

There are are no X areas in the general vicinity of the proposed change that would allow such activity without a zone change.

The general character of the area is as follows:

Farmland and the existing Chem-Security Systems waste disposal site

Since the area was last zoned, the following changes in circumstances and conditions affecting the area have occurred:

The site is suitable for activities that such a change would permit, for the following reasons:

Chem-Security Systems, Inc. already has a waste disposal site adjacent to the property in question. The zone change would allow them to extend their disposal site.

The site is unsatisfactory for the activities that such a change would permit, for the following reasons:

Alternatives to the proposal submitted by the applicant would be as follows:

Dated December 4, 1980

Signed Lynda Ferris

RECORD OF HEARING ON APPLICATION FOR AMENDMENT

APPLICATION No. AC)- 008

On the 15 day of December, 19 80, at the hour of 8:00 P.M., the Gilliam County Planning Commission convened a public hearing in Burlington, in Gilliam County, Oregon, in the matter of an application for an amendment to the text (Map) AM-008 of the Gilliam County Comprehensive Plan of 1977, Application No. AC (M) 008. Members of the Planning Commission present were:

Tom Hanning *Carl Myers*
Louis Reicher *Kay West*
Sam Seal *Joel Frost*
Frank Botten Court

their presence therefore constituting a quorum.

The attached is a record of that hearing, including the names of all those speaking before the Commission, and including such written material as may have been submitted for incorporation into the record.

The following findings were listed in reaching the decision:

- Possibility of increased employment in County
- Best area for this type of waste disposal, according to studies.
- Would just be an extension of existing site.
- Area would be under control State standards.
- Same type of waste disposal as presently being stored.

Linda Ferris
Secretary

Tom Hanning
Chairman

RECOMMENDATION OF THE PLANNING COMMISSION

IN THE MATTER OF an application for an amendment to the text _____ map ✓
of Gilliam County Zoning Ordinance, Application No. A(M) - 008 :

Having first received an application for an amendment to the Gilliam County Zoning Ordinance of 1977, and having given notice and held hearing as provided for by the zoning ordinance, the Gilliam County Planning Commission recommends to the Gilliam County Court that the following proposed amendment be approved ✓, disapproved _____, modified _____.

Modification, if recommended, of the proposed amendment should be as follows:

The Planning Commission recommends the above action, listing the following findings in support of their decision:

- Possibility of increased employment in County
 - Most suitable area for this type of waste disposal, according to studies
 - Would just be an extension of existing site.
 - Area would be under State critical standards
 - Same type of waste disposal as presently being stored
- Dated on this, the 16 day of December, 19 80.

Voting "aye" on the recommendation

Voting "no" on the recommendation

Carl Myers
James Leake
Frank Bollen Court
Ray Heat
B. B. Frost
Louis Rucker

ADVICE OF THE COUNTY COURT

TO: Gilliam County Planning Commission
RE: Application for Amendment to the Gilliam County Zoning Ordinance
of 1977.

Application No. AM- 008

Please be advised that on the 7th day of January, 1981,
acting in accordance with the provisions of the laws of the State of Oregon,
the County Court adopted X ~~rejected~~ the following order amending
the Gilliam County Zoning Ordinance of 1977:

Change property in question from an Exclusive Agricultural zone
to a General Industrial zone.

The action taken by the County Court constitutes an acceptance xx
~~modification~~ ~~rejection~~ of your recommendation dated
December 16, 1980. The basis for this action is as
follows:

Dated Jan 7, 1981

Signed James O. Burns

RECORD OF THE GILLIAM COUNTY PLANNING COMMISSION, DECEMBER 15, 1980

THE GILLIAM COUNTY PLANNING COMMISSION HEARING WAS CALLED TO ORDER BY CHAIRMAN TOM HASSING, IN THE ARLINGTON CITY HALL, ARLINGTON, OREGON, 8:00 P.M. MEMBERS PRESENT WERE: SAM SEALE, FRANK BETTENCOURT; LOUIE RUCKER, KAY WEST, G. B. FROST, CARL MYERS, AND SECRETARY LYNDA FERRIS. ALSO PRESENT WERE: FRANK DEMENT, WILLIAM JOHNSON AND MOLLY HEANY, ALL REPRESENTING CHEM-SECURITY SYSTEMS, INC.

The hearing opened at 8:00 p.m., on the Map Amendment for a zone change from Exclusive Agriculture to General Industrial. William Johnson presented Chem-Security's reasons for wanting to increase their existing location, thereby needing the zone change. He mentioned their desire to not only increase their storage capacity, but to also add their own transportation system. He went on to mention that the studies they have show their present and surrounding area to be the best known for their intended purpose.

Carl Myers made a motion and Louie Rucker seconded, that the zone change be allowed. All were in favor and motion passed.

The hearing was closed.

A discussion followed the hearing regarding the nomination of a new chairman. It was determined that any decisions should be made after the first of the year when the new members were on the commission.

Meeting adjourned.


Lynda Ferris, Secretary


Tom Hassing, Chairman

THE FOLLOWING WERE IN ATTENDANCE AT THE HEARING
FOR:

Chem- Security Systems, Inc.

NO. AM-008

DATE: 12-15-80

Name	Address
<u>Tom Saffaring</u>	<u>Condon Ore.</u>
<u>Lynnda Ferris</u>	<u>Condon Ore.</u>
<u>Tom Ruck</u>	<u>Aslington</u>
<u>Sidney Seal Jr.</u>	<u>Condon, Oregon</u>
<u>Frank Bethencourt</u>	<u>Ore Ore.</u>
<u>Carl Myers</u>	<u>Condon Or</u>
<u>Jay Spet</u>	<u>Aslington</u>
<u>Mr. [unclear]</u>	<u>"</u>
<u>Molly [unclear]</u>	<u>"</u>
<u>Frank Demery</u>	<u>"</u>
<u>William B Johnson</u>	<u>Rickland, Washington</u>

Affidavit of Publication

STATE OF OREGON, COUNTY OF GILLIAM, ss;

I, Janet L. Stinchfield

being first duly sworn, depose and say that I am the

Publisher of the

Gilliam-Wheeler Times-Journal, a newspaper of

general circulation as defined by Sections 1-509,

1-510, Oregon Code; printed and published at Condon

in the aforesaid county and state; that the Notice of

Planning Commission Hearing, a printed

copy of which is hereto annexed, was published in the

entire issue of said newspaper for one

successive and consecutive weeks in the following

issues:

December 4, 1980

Janet L. Stinchfield

Subscribed and sworn to before me this 31st

day of December, 1980

McLaren E. Stinchfield
Notary Public for Oregon

(My commission expires February 20, 1982)

Legal Notice

NOTICE OF PLANNING COMMISSION HEARING December 15, 1980

NOTICE IS HEREBY GIVEN that the Gilliam County Planning Commission will hear proponents and opponents of the Application for zone change submitted by Chem-Security Systems, Inc. This application provision is found in Section 9.010 of the Gilliam County Zoning Ordinance and requests the following: Change an exclusive Agricultural Zone (AE) to an Industrial Zone (MG).

Legal description of property: N $\frac{1}{2}$ of NW $\frac{1}{4}$ of Section 36, plus SW $\frac{1}{4}$ of Section 25 plus S $\frac{1}{2}$ of NW $\frac{1}{4}$ of Section 25 all in Township 2N, Range 20E, WM, Gilliam County, Oregon.

The hearing will be held in the Arlington City Hall on December 15, 1980, at 8:00 p.m.

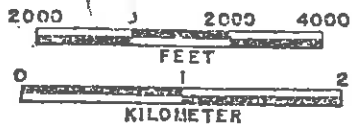
Dated this 1st day of December, 1980.
Gilliam County Planning Commission
Published December 4, 1980 TJ/195

Am-008

LEGAL DESCRIPTION

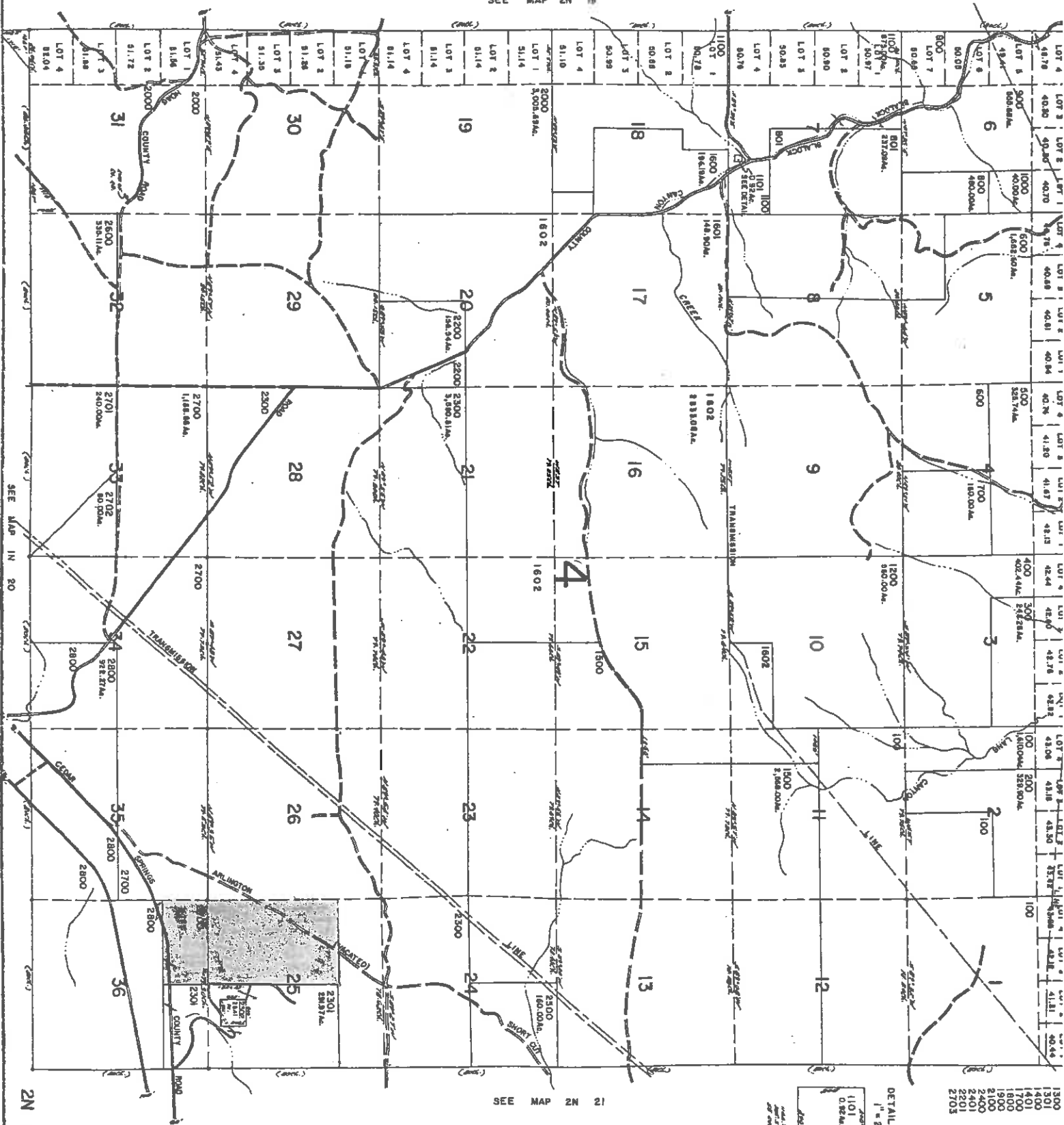
320 acres consisting of the North 1/2 of the Northwest 1/4 of Section 36 (80 acres) plus the Southwest 1/4 of Section 25 (160 acres) plus the South 1/2 of the Northwest 1/4 of Section 25 (80 acres), all in Township 2 North, Range 20 East, W.M., Gilliam County, Oregon.

SCALE 1:48000



This map was prepared for assessment purpose only.

SEE MAP 2N 11



SEE MAP 2N 21

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1400
1401
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1701
1800
1900
2100
2400
2401
2703



2N 20

2N 21

RECOMMENDATION OF THE PLANNING COMMISSION

IN THE MATTER OF an application for an amendment to the text _____ map ✓
of Gilliam County Zoning Ordinance, Application No. AM-008 :

Having first received an application for an amendment to the Gilliam County Zoning Ordinance of 1977, and having given notice and held hearing as provided for by the zoning ordinance, the Gilliam County Planning Commission recommends to the Gilliam County Court that the following proposed amendment be approved ✓, ~~disapproved~~, ~~modified~~

Modification, if recommended, of the proposed amendment should be as follows:

The Planning Commission recommends the above action, listing the following findings in support of their decision:

- Possibility of increased employment in the County
- Most suitable site for this type of waste disposal, according to studies
- Would just be an extension of existing site
- Area would be under State control standards

Dated on this, the 16 day of December, 19 80.

Gilliam County Planning Commission

By Lynda Ferris
Secretary

COUNTY COURT COPY

File

NOTICE OF PLANNING COMMISSION HEARING

DECEMBER 15, 19 80

NOTICE IS HEREBY GIVEN that the Gilliam County Planning Commission will hear proponents and opponents of the Application for _____

ZONE CHANGE

submitted by CHEM-SECURITY SYSTEMS, INC.

This application provision is found in Section 9.010 of the Gilliam County Zoning Ordinance and requests the following: _____

CHANGE AN EXCLUSIVE AGRICULTURAL ZONE (AE) TO AN INDUSTRIAL ZONE (MG)

The hearing will be held in the ARLINGTON CITY MALL on DECEMBER 15, 19 80, at _____ 8:00 P.M.

Dated this 1 day of December, 19 80.

Gilliam County Planning Commission

Lynnda Ferris, Secretary

LEGAL DESCRIPTION OF PROPERTY:
N½ of NW¼ of Section 36, plus SW¼ of Section 25 plus S½ of NW¼ of Section 25 all in Township 2N, Range 20E, WM, Gilliam County, Oregon

Printed in Times-Journal
December 4, 19 80
18, 19 _____
_____, 19 _____

THE FOLLOWING WERE IN ATTENDANCE AT THE HEARING

FOR: Chem-Security Systems, Inc.

NO. AM-008

DATE: 1-7-81

Name	Address
Bill Hardie	Box 232 Condon Oregon
TAMM D. BUKRS	Box 685 Condon, Oregon
Lester Brooks	Arlington Oregon
Frank G. Dement	Arlington Oregon
Mary J. Lutz	Box 516 Condon Oregon
Jean M. Sullivan	Box 15 Condon, Oregon
Sue Miller	Box 374 Condon, Oregon

CERTIFICATION OF MAINTENANCE OF MAP AMENDMENT

I, Sue Miller Deputy, County Clerk of Gilliam County, Oregon,
do hereby certify that the map amendment adopted by the Gilliam County Court on
January 7, 19 81, identified by #1
and bearing the signatures of the members of the Gilliam County Court, has been
filed in my office and will there remain unchanged as long as the Gilliam County
Zoning Ordinance of 1977 remains in effect.

Dated January 7, 1981

Signed Sue Miller, Deputy
County Clerk

The above certification is inappropriate because:

No Map amendment was involved in the proceedings _____
The proposed map amendment was not adopted _____

Dated _____

Signed _____
County Clerk

I, Lynda Ferris, Secretary of the Gilliam County Planning
Commission, do hereby certify that the documents contained and referred to
herein constitute a complete and accurate record of the proceedings in the matter
of the application for amendment to the Gilliam County Zoning Ordinance of 1977,
Application No. A M-008.

Dated January 7, 1981

Signed Lynda Ferris
Secretary

NOTIFICATION OF CHANGE
TO THE ASSESSOR'S OFFICE
(ORS 308.342)

I hereby certify that on the 7 day of January, 1981,
the Gilliam County Court, approved the recommendation from the Gilliam County
Planning Commission to:

- _____ A change in the Comprehensive Land Use Plan
_____ A change in the zoning ordinance
xx A change in a zoning designation from a zone of OE to ME
_____ An adoption of a new zone
_____ A street, alley or road change from _____ to _____
_____ Other:

By permit number AM - 008

Property affected by this change or adoption:

N $\frac{1}{2}$ of NW $\frac{1}{4}$ of Section 36, plus SW $\frac{1}{4}$ of Section 25, plus S $\frac{1}{2}$ of NW $\frac{1}{4}$ of Section 25,
all in Township 2N, Range 20E WM, Gilliam County, Oregon

Petitioner for this change is: Chem-Security Systems, Inc.
Address: _____

Adlington, Oregon

Landowner of the described
property is: Big Sky Ranch, Inc.
Address: _____

113 Foothills Road,
Lake Oswego, Oregon 97034

(Include all landowners)

The change or the purpose of the change is: Exclusive Agricultural
zone to General Industrial for waste disposal use

Dated: January 7, 1981

Lynnda Ferris
Secretary or Clerk

APPENDIX F

Waste Management Land Need Letter



March 31, 2022

Tommy A. Brooks
Cable Huston LLP
1455 SW Broadway
Suite 1500
Portland, Oregon 97201

Dear Mr. Brooks,

As part of the Chemical Waste Management of the Northwest, Inc. (CWMNW) Application for Goal Exception to allow expansion of the Existing Subtitle C Landfill at 17629 Cedar Springs Lane in Gilliam County, Cable Huston requested CWMNW provide a letter explaining the amount of land requested for Goal Exception. There are many factors CWMNW has weighed to arrive at the requested land for Goal Exception, follows:

REGULATORY PROCESS

Under Oregon Law and Administrative Rules, the need for new Subtitle C landfill construction and capacity delivery is evaluated by ODEQ as a preliminary step in the environmental permitting process. To get to this regulatory step with ODEQ, the land use jurisdiction must issue a Land Use Compatibility Statement (LUCS) wherein the applicable local government verifies the hazardous waste disposal facility will be located where local land use regulations allow the facility.

Because of this regulatory structure, the amount of land needed to assure future Subtitle C landfill capacity will be available is evaluated in the two regulatory steps. The first step is the much broader *land use need* that is based upon long-term projections of potential hazardous waste generation and the amount of land area that could be appropriate for future ODEQ permitting. The *land use need* functions to protect the environment by providing a sufficient area in an appropriate location with land use approvals in place to undertake future ODEQ permitting to respond to future hazardous waste stream flows. The *land use need* is important to assure that siting decisions are made in a deliberate manner through the application of Oregon's land use planning process well in advance of any *environmental need* arising. The second step is a more particular determination of *environmental need* made by ODEQ through the permitting process for individual landfills/landfill cell permitting; the ODEQ need determination is made on a much shorter time horizon and permits landfilling based upon the expected *environmental need* for additional Subtitle C landfill capacity.

The environmental permitting process often takes years just to prepare the application and may take ODEQ many months to complete its review. Accordingly, the land area proposed for Goal Exception reflects a *land use need* that accounts for the expected evolution of *environmental need* over time. The *land use need* reflects likely or potential regulatory changes and episodic events that change waste stream flows both in the near term and the long term. In the regulatory context, new science and information about materials that pose health risks are likely to be

identified in the future and then these materials become targeted for clean-up and must be disposed in an appropriate facility.

The practical effect on land use of the Subject Properties of this two-step regulatory process concerning *land need* is that the change in the land use maps for the Goal Exception will not change any land uses on the ground, until such future time as *environmental need* is identified by CWMNW to require additional landfilling capacity and ODEQ confirms this *environmental need* through the environmental permitting process. If the *land use need* is not determined and satisfied prior to realization of the *environmental need*, the *environmental need* may not be satisfied which represents a significant environmental risk.

EXPECTED REGULATORY CHANGES

CWMNW expects regulatory changes are likely over the next several years that will require heightened levels of care, handling and disposal for PFAS. PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals. EPA has identified 2,800 sites nationwide that have been impacted by PFAS. If these chemicals are classified by EPA or ODEQ to require disposal in a Subtitle C Landfill, then clean-up of these sites will require significant additional demand for Subtitle C landfill disposal.

In the near term, it is expected that the Portland Harbor is going to undergo significant clean-up efforts. It is expected that ODEQ is going to require significant volumes of waste from this clean-up effort to be disposed within a Subtitle C Landfill. The CWMNW facility has an excellent environmental setting for these wastes and is the closest and most economic location for these disposal activities.

EPISODIC EVENTS

Episodic events, like fires or tsunamis, can increase demands for hazardous waste disposal facilities as part of the disaster clean-up process. Society takes measures to prevent human caused disasters. Society takes measures to mitigate and reduce risks from natural hazards. However, these types of episodic events can and do happen. When a major episodic event happens, the time it takes for clean-up to get underway and ramp up can make a big difference in the on the long-term effects of the event. Having sufficient land available land properly zoned to allow for the environmental permitting to proceed and respond to a major episodic event is sound risk management.

FACILITY PLANNING AND DEVELOPMENT

The facility itself is planned and designed to operate for an extended period. The monitoring period alone for a closed landfill is 30 years. The facility has already been in existence for 46 years. The facility is expensive to properly operate and maintain and requires significant long-term capital investments. These investments must be amortized over many years.

Given the capital intensive and long-term nature of the facilities, CWMNW is planning and designing for the future with facilities that will have useful operational lives of 50 to 100 years. Having adequate land planned and zoned to allow the use for years to come, supports the rationale for these long-term investments and it assures the facility can be operated at an economy of scale that is reasonably efficient.

To this end, the long-term site plan for the facility has been developed as part of the land use application that will have land area planned that will provide space for the following:

- Continued disposal of existing known recurring waste streams.
- New disposal space resulting from regulatory reclassification of wastes that elevate waste categories to require Subtitle C disposal, specifically, the expected PFAS waste reclassification and future cleaned up with disposal into a Subtitle C Landfill facility.
- Additional disposal space for the Portland Harbor Clean-up.
- Need for additional evaporation ponds to concentrate wastes suspended in solution, primarily aqueous solution, through evaporation prior to landfilling.
- Utilization of on-site aggregate resources to meet the aggregate demands of Subtitle C Landfill construction and maintenance; landfill construction and maintenance is an aggregate consumptive use and the best resource on the property is being reserved on the site plan to assure high-quality rock will be available for construction.
- Reservation of space for future waste recovery facilities; over time it is expected that new technologies for waste recovery will emerge, but many of those systems will still be mixed with (or have unresolved byproducts) that will still require Subtitle C landfilling.

After all the above components were factored into the site planning analysis, the CWMNW site plan identifies a need for an additional ~576 acres of land area outside the 1000-foot buffer that would be regulatorily available for landfilling which results in an exception area of ~935 acres.

Respectfully,

A handwritten signature in black ink, appearing to read 'James L. Denson Jr.', with a large, sweeping flourish underneath.

James L. Denson Jr
Waste Management.
PNW/BC Environmental Protection Manager

APPENDIX G

Host Fee & Economic Enhancement Fund Agreement

1 IN THE COUNTY COURT OF THE STATE OF OREGON

2 FOR GILLIAM COUNTY

3 AN ORDINANCE ESTABLISHING A HOST)
4 FEE FOR CHEM-SECURITY SYSTEMS,)
5 INC. (CSSI) AND ESTABLISHING AN) COUNTY ORDINANCE NO. _____
6 ECONOMIC ENHANCEMENT FUND.)

7 WHEREAS, Chem-Security Systems, Inc. (CSSI) operates a hazard-
8 ous waste disposal facility in the County.

9 WHEREAS, CSSI has agreed to pay a host fee to further enhance
10 the services and economic opportunities in the County.

11 WHEREAS, CSSI is the major user of the Cedar Springs County
12 Road to the facility and desires to contribute further to the main-
13 tenance costs of the road.

14 WHEREAS, it has been determined that such host fees, whether
15 established by this Ordinance or other agreements, should be used
16 for the purpose of maintaining Cedar Springs Road and the general
17 purpose of enhancing Gilliam County's economic development oppor-
18 tunities;

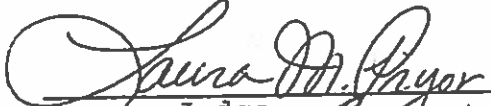
19 NOW, THEREFORE, BE IT ORDAINED BY THE COUNTY OF GILLIAM:

20 1. That Chem-Security Systems, Inc. (CSSI), as the operator
21 of a hazardous waste disposal site in the County, shall pay an annual
22 host fee of Fifty Thousand Dollars (\$50,000) to the Economic Enhance-
23 ment Fund. Said payment will be due on January 15, 1988, and on
24 January 15 of every year thereafter as long as CSSI, or its successor
25 in interest, operates the hazardous waste facility. This fee shall
26 not be increased until the January 15, 1993, payment, if at all.
All the terms and conditions of this Ordinance shall be reviewed,
and revised if necessary, by the Gilliam County Court at five year
intervals, and at such time as the said facility no longer disposes
of hazardous waste.

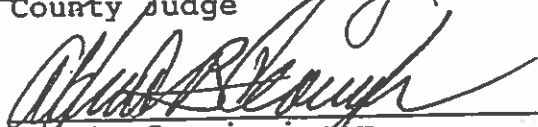
27 2. There will be established a Gilliam County Economic
28 Enhancement Fund. The host fees collected pursuant to this Ordinance,
29 and those fees collected pursuant to the conditional use permit
30 granted to Waste Management of Oregon, Inc., for the operation of
31 a sanitary landfill, shall be deposited in the Economic Enhancement
32 Fund. The funds received from CSSI shall be spent first for the
33 purpose of maintenance of Cedar Springs County Road in accordance
34 with the Road Improvement and Maintenance Agreement between the County,
35 CSSI and Waste Management of Oregon and then for any purposes that
36 will enhance Gilliam County's economic development opportunities,
as determined by the Gilliam County Court.

1 3. The Gilliam County Court deems it necessary that this
2 Ordinance be in effect prior to the date of the first payment called
3 for herein. Therefore, an emergency is declared, and this Ordinance
4 shall be effective as of the date it is enacted, which is February
5 3, 1988.

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County Judge



County Commissioner



County Commissioner

APPENDIX H

Alkali Canyon Geologic Unit Information

van Couvering's (1974) epoch boundaries. K/Ar dates are 5.1±0.5 (109-WB), 5.7±0.6 (110-WB), 7.5±0.7 (105-WB), 41.1±2.8 (107-WB), and 47.5±5.7 (108-WB) m.y. (Appendix 2). Newcomb (1966) reported K/Ar dates of 10.6 and 15.2 m.y. for the flow at Fulton Ridge.

Alkali Canyon Formation (Tda)

Indurated basalt gravel and tuffaceous silt and sand overlying the Columbia River Basalt Group in the Arlington-Boardman area are here informally named the Alkali Canyon formation after exposures in Alkali Canyon, 16 km southwest of Arlington, Gilliam County, Oregon.

The formation was previously named the Alkali lake beds (Hodge, 1932), the Shutler Formation (Hodge, 1941, 1942), fanglomerate (Hogenson, 1964), Dalles Formation (Newcomb, 1969, 1971b; Shannon and Wilson, 1971, 1972, 1973, 1975a,b; Farooqui, 1980), and Tertiary sedimentary rocks (Walker, 1973).

The formation occurs within the Dalles-Umatilla syncline, along the northern slope of the Blue Mountains. West of Arlington, it extends northward to the edge of the Columbia River canyon. East of Arlington, it crops out along the relatively flat floor of the Deschutes-Umatilla Plateau (Dicken, 1965). However, east of Sixmile Creek, it extends northward only to approximately 45° N. latitude. North of this latitude, it is either absent or buried by catastrophic flood deposits.

The most representative section is in Alkali Canyon (Figure 5), where the basal Alkali Canyon formation is a 5-m-thick light-gray vitric tuff overlying the Selah member (Ellensburg Formation). This vitric tuff is here assigned to the Alkali Canyon formation. Newcomb (1971b) tentatively assigned it to his Dalles Formation, noting its presence above the Pomona Member (Saddle Mountain Basalt). This relation is confirmed by subsurface data (Shannon and Wilson, 1981). North of this section, the vitric tuff underlies much of the Chem-Security Systems waste disposal site but extends westward only as far as the W½ sec. 25, T. 3 N., R. 20 E. (Shannon and Wilson, 1971, 1981).

The vitric tuff is overlain at this section by 2 to 3 m of tan, iron-stained, carbonate-veined tuffaceous silty clay. The upper surface of the clay is scoured with channels as much as 2 m in width and depth and filled with basalt gravel. The basalt gravel in total comprises the 3-m-thick middle part of the section. East of this section along the northern wall of Alkali Canyon, the middle part is 6 to 15 m thick (Newcomb, 1971b). The gravel is partially carbonate cemented, ranging from granules to small boulders; cobbles are most common. A sand matrix partially fills interstices among the clasts, while other gravel is openwork. Tuffaceous, micaceous, cryptocrystalline-quartz sand comprises the matrix. The gravel is commonly massive, but 1-m-thick horizontal and lenticular beds also occur. The cobbles commonly dip southwards, indicating a generally northward transport direction.

The upper 10 m of this section is comprised of red-tan, carbonate-cemented, tuffaceous sandy silt. The sandy silt is interbedded with 1-

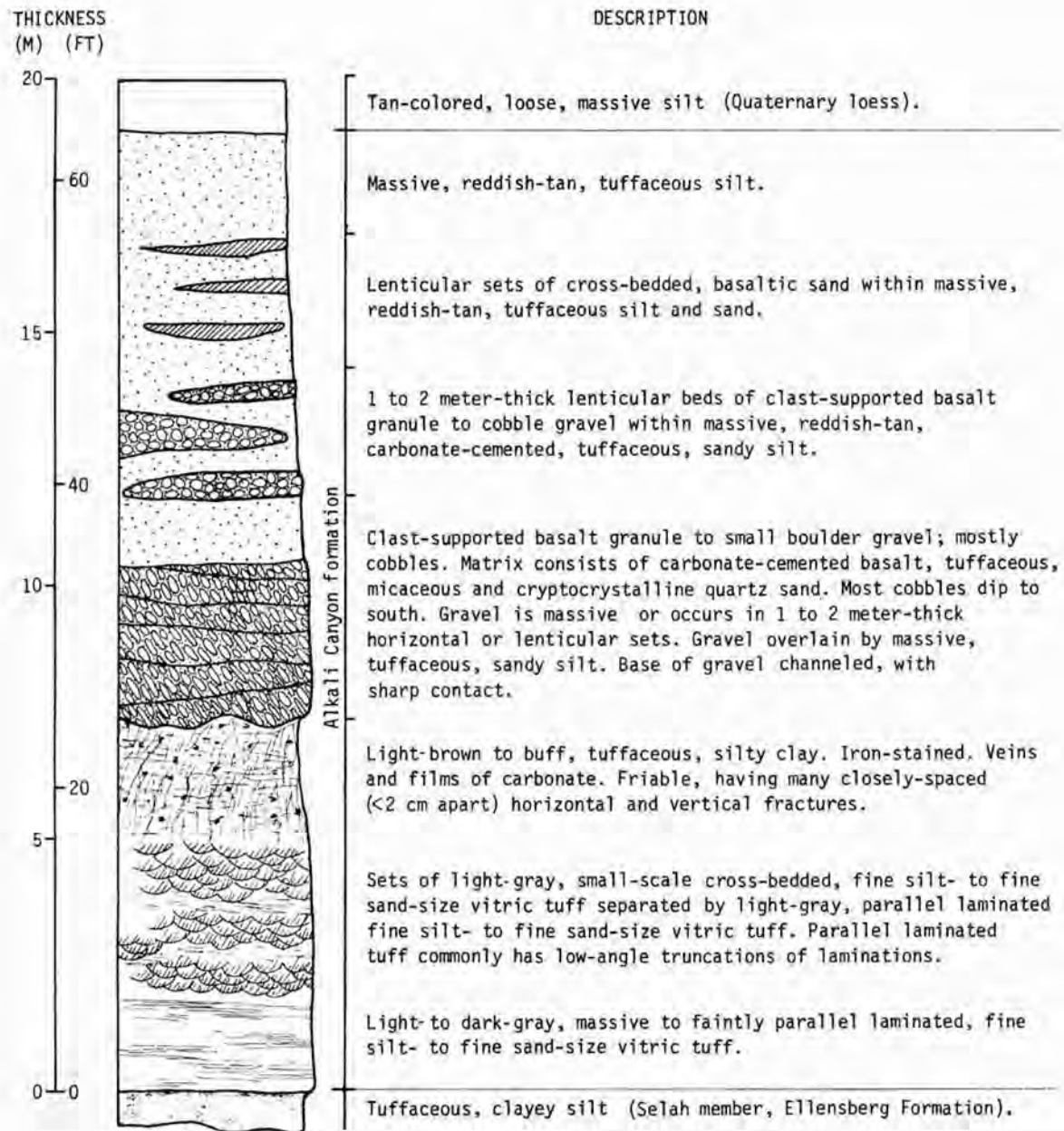


Figure 5. Representative columnar section of the Alkali Canyon formation. Location: Chem-Security Systems site access road, SE $\frac{1}{4}$ sec. 25, T. 2 N., R. 20 E.

to 2-m-thick lenticular, cross-stratified gravel beds in the lower 3 m. Lenticular sets of cross-bedded basaltic sand, isolated in sandy silt, generally comprise the middle part of this 10-m-thick upper section. The uppermost 2 to 5 m of section consists of loose to compact, massive tuffaceous silt.

This four-fold division of the Alkali Canyon formation only occurs locally. Another section near Olex (Figure 6) consists entirely of basalt cobble gravel in a quartzose and basaltic sand matrix. There the Alkali Canyon formation rests directly on the Frenchman Springs Member (Wanapum Basalt).

Other exposures reveal more diversity within the Alkali Canyon formation (Shannon and Wilson, 1974b, 1975a,b). Gravel pit exposures commonly display horizontal, 1- to 2-m-thick beds of massive and cross-stratified cobble gravel. The cobbles show southward-dipping imbrication, indicating general northward transport. Tuffaceous sand and silt lenses are interbedded with and truncated by the gravel beds. Temporary exposures in trench walls at the Chem-Security Systems site (sec. 25, T. 3 N., R. 20 E.) reveal a lenticular, 1-m-thick clay bed lying atop gravel near the top of the formation. The clay is thinly laminated and is interbedded with a thin, vitric tuff bed. Gravel overlies the clay and tuff.

The depositional environment of the Alkali Canyon formation is poorly understood. Hogenson (1964) interpreted it as fanglomerate. The earlier described sedimentary structures suggest the Alkali Canyon represents a type of "proximal braided stream" deposit such as that described by Rust (1978). However, local alluvial fans also constitute part of the depositional system of the Alkali Canyon formation (Figure 7).

Thickness of the Alkali Canyon formation varies. It is 20 to 40 m thick at the Alkali Canyon and Olex sections. Newcomb (1971b) reported 18- to 30-m thicknesses near the Alkali Canyon section. Borings show the Alkali Canyon is 3 to 5 m thick at the Chem-Security Systems waste disposal site (Shannon and Wilson, 1971, 1981). These latter thicknesses are minimums, however, because catastrophic flood erosion locally removed part of the Alkali Canyon formation in the waste disposal site area.

Regionally, the Alkali Canyon formation lies disconformably and with angular unconformity on the Columbia River Basalt Group. The basalt units that it overlies include the Elephant Mountain and Pomona Members (Saddle Mountains Basalt) and the Priest Rapids and Frenchman Springs Members (Wanapum Basalt of the Columbia River Basalt Group) and tuffaceous interbeds of the Ellensburg Formation. A slight angular unconformity is present where the formation overlies the edges of the basalt members (Shannon and Wilson, 1971, 1973, 1974a, 1981; Newcomb, 1971b; Swanson and others, 1981).

Our mapping concurs with previous mapping by Newcomb (1971b) and Shannon and Wilson (1972; 1975a,b) and shows that the Alkali Canyon formation is a post-Columbia River basalt unit and that it does not interfinger with it, as do interbeds of the Ellensburg Formation (Figure 15).

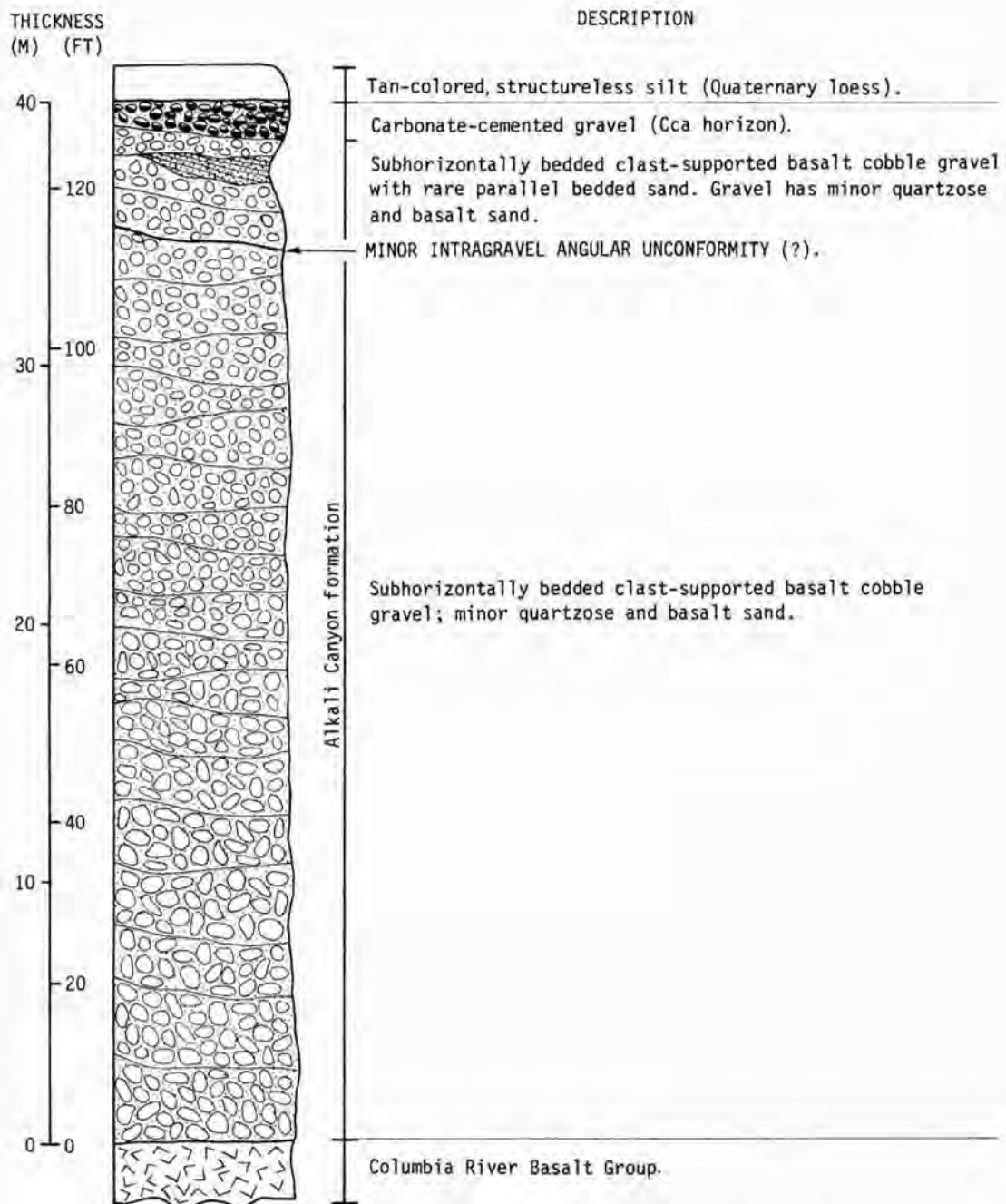


Figure 6. Representative columnar section of the Alkali formation. Location: NW $\frac{1}{4}$ sec. 21, T. 1 S., R. 21 E. Below the unconformity(?), beds trend N. 10° W. to N. 50° E.; apparent dips are 40° to 60° W. Above the unconformity(?), beds trend N. 10° E.; apparent dip is 10° W.

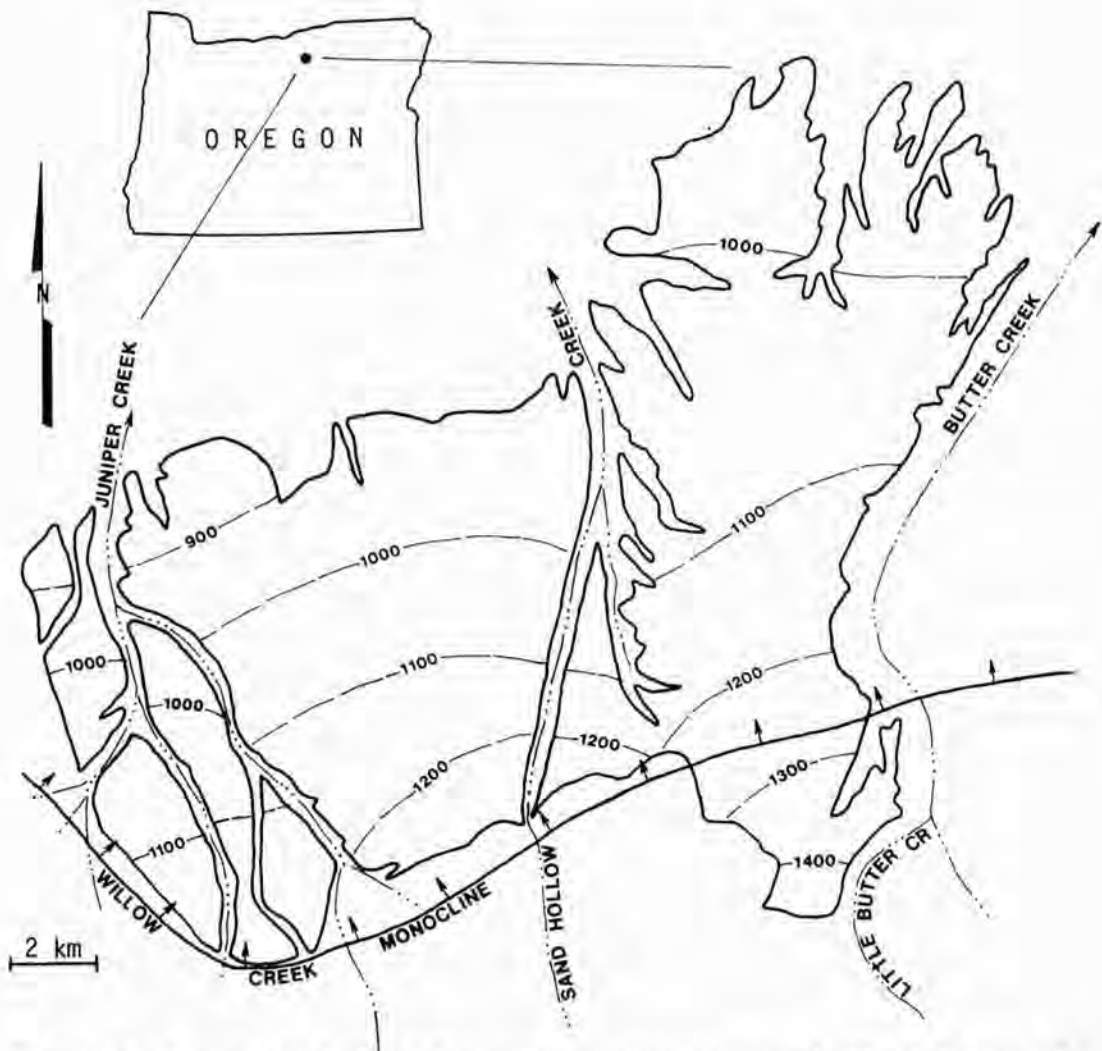


Figure 7. Generalized elevation contours atop preserved alluvial fans of the Alkali Canyon formation. Location: Tps. 1, 2, 3 N., Rs. 25, 26, 27, 28 E. Contours drawn from U. S. Geological Survey Butter Creek Junction; Service Buttes NW; Strawberry Canyon NE, SE, and SW; and Well Spring 7.5-minute quadrangle maps.

The Alkali Canyon formation is locally folded and faulted most commonly along the Turner Butte and Arlington-Shutler lineaments and west-trending anticlines between the lineaments (Shannon and Wilson, 1971, 1974b). It is also folded with the Willow Creek monocline and the Dalreed Butte and Poverty Ridge anticlines (Shannon and Wilson, 1973, 1974b, 1975b). The formation is tilted northward at the western end of the Willow Creek monocline near Olex, where gravel beds trend N. 10° W. to N. 50° E., having apparent dips of 49° to 60° NW.

The Alkali Canyon formation is of late Miocene to early Pliocene(?) age, based on vertebrate fossils assigned to the Hemphillian (Shotwell, 1956). According to Berggren and van Couvering (1974), the Hemphillian is late Miocene to early Pliocene. The Alkali Canyon formation is not older than late Miocene, however, because it overlies the 10.5-m.y. (McKee and others, 1977) Elephant Mountain Member (Saddle Mountains Basalt) (Shannon and Wilson, 1975b).

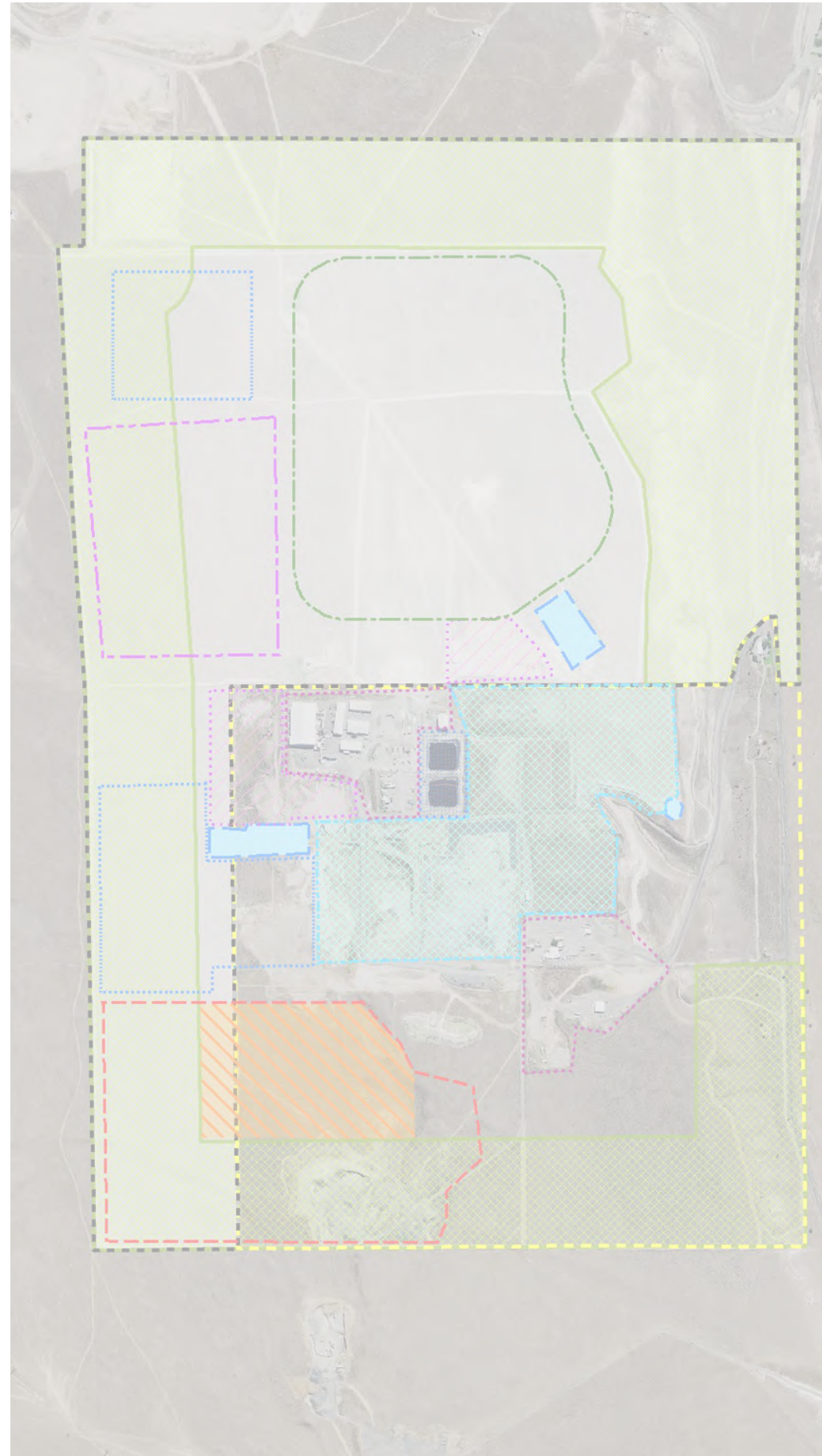
Deschutes Formation (Tdd)

Distinctively fluvial and volcanoclastic beds within the broad Madras basin comprise the Deschutes Formation. It also includes welded and non-welded ash-flow tuff, intracanyon and plateau-forming basalt flows, basaltic intrusions and cinder cones, mudflow deposits, and diatomite.

Russell (1905) termed the heterogeneous assemblage of interbedded volcanic, volcanoclastic, pyroclastic, and epiclastic rocks exposed in the Deschutes and Crooked River canyons in the Prineville-Redmond-Madras-Warm Springs area the "Deschutes sands." Stearns (1930) introduced the name Deschutes Formation for these rocks. Hodge (1928, 1940) termed similar rocks near Madras the Madras Formation and later (1942) called them Dalles formation. Williams (1957) and Robinson and Price (1963) used the name Madras Formation. Waters (1968a), Robinson (1975), and Robison and Laenen (1976) used the name Dalles Formation. Stensland (1970), Peterson and others (1976), and Taylor (1980) used the name Deschutes Formation. Robinson and Stensland (1979) used the name Madras Formation. We herein restore the name Deschutes Formation because that name has historic priority, the unit is well exposed along the Deschutes River, and it is desirable to simplify the nomenclature (Roger Swanson, 1981, written communication).

The Deschutes Formation occurs in the Madras basin. The Madras basin is centered near Madras and is bordered on the north by the Mutton Mountains, on the east by the foothills of the Ochoco Mountains, and on the west by the Cascade Range. The southern boundary of the basin is obscure, extending almost to Bend, where the Deschutes Formation is buried beneath younger volcanic rocks.

Stensland (1970) provided detailed information on the Deschutes Formation. It consists of epiclastic and pyroclastic sedimentary rocks; welded and nonwelded ash-flow tuff; interbedded, intracanyon and plateau-forming basalt flows; basaltic intrusions and cinder cones; diatomite; and



Goal Exception, Zone Change, and Conditional Use Permit Application

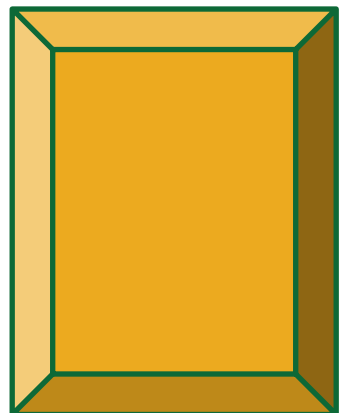
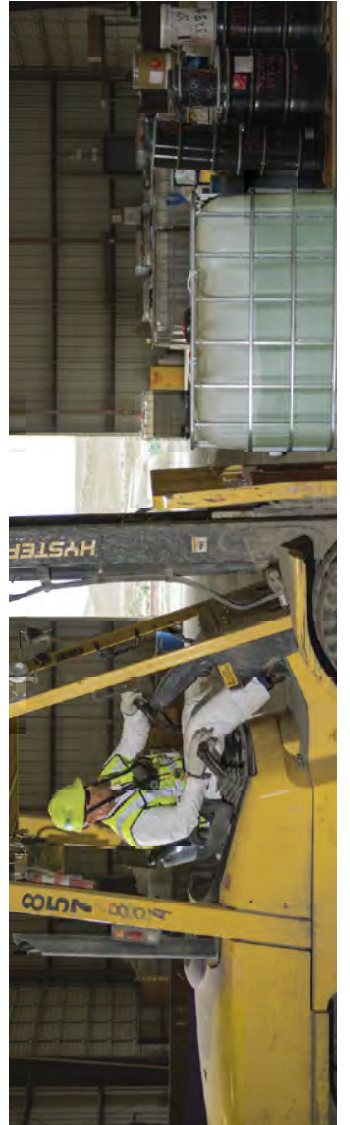
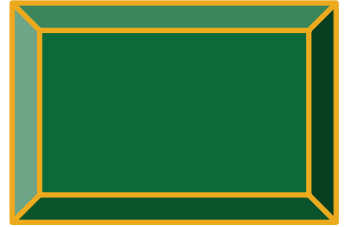
Volume 2 *Atlas of Maps*

Prepared for:
Chemical Waste Management
of the Northwest



CSA Planning, Ltd
4497 Brownridge, Ste 101
Medford, OR 97504-9173
Telephone 541.779.0569
www.csaplanning.net

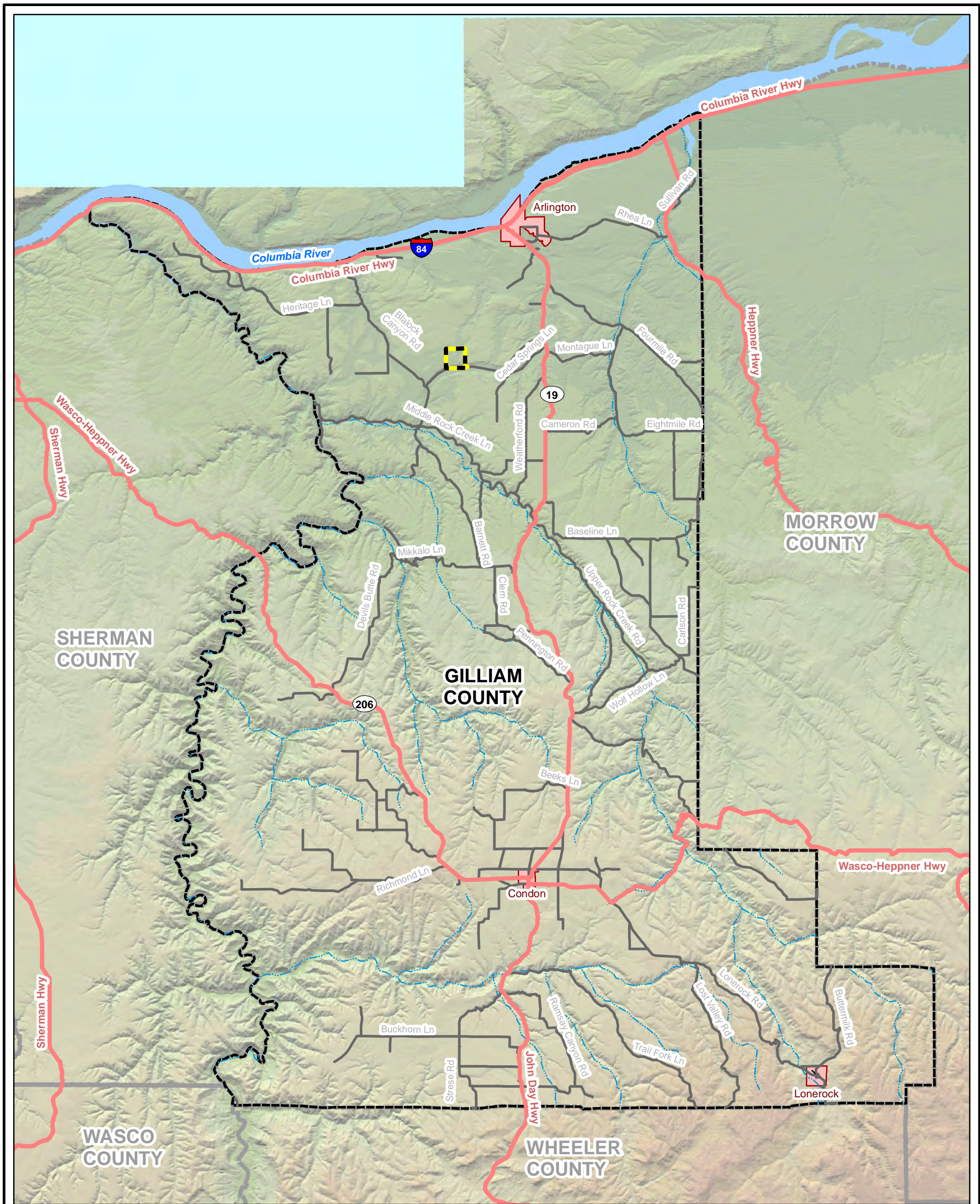
March 30, 2022



Volume 2 Atlas of Maps

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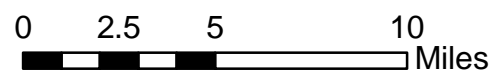
<u>Vicinity Map</u>	<u>1</u>	<u>Alternative D Siting Sufficiency</u>	<u>22</u>
<u>Existing Treatment, Storage, and Disposal Facility</u>	<u>2</u>	<u>Alternative D Siting Considerations</u>	<u>23</u>
<u>Gilliam County Current Zoning</u>	<u>3</u>	<u>Alternative E Siting Sufficiency</u>	<u>24</u>
<u>Ownership Map</u>	<u>4</u>	<u>Alternative E Siting Considerations</u>	<u>25</u>
<u>Proposed Goal Exception</u>	<u>5</u>	<u>Alternative F Siting Sufficiency</u>	<u>26</u>
<u>Proposed Zoning</u>	<u>6</u>	<u>Alternative F Siting Considerations</u>	<u>27</u>
<u>100 Year Flood Areas & Topography</u>	<u>7</u>	<u>Alternative G Siting Sufficiency</u>	<u>28</u>
<u>Gilliam County Geology</u>	<u>8</u>	<u>Alternative G Siting Considerations</u>	<u>29</u>
<u>Gilliam County Soils</u>	<u>9</u>	<u>Alternative H Siting Sufficiency</u>	<u>30</u>
<u>Winter Range Habitat & Natural Resource Areas</u>	<u>10</u>	<u>Alternative H Siting Considerations</u>	<u>31</u>
<u>Wind Power Facilities</u>	<u>11</u>	<u>Theoretical Alternatives Requiring an Exception</u>	<u>32</u>
<u>Transportation</u>	<u>12</u>	<u>Theoretical Site 1 ESEE Site Sufficiency</u>	<u>33</u>
<u>Subtitle C Landfill Facilities</u>	<u>13</u>	<u>Theoretical Site 1 ESEE Site Considerations</u>	<u>34</u>
<u>County Aggregate Resources Map and State of Oregon Precipitation Map</u>	<u>14</u>	<u>Theoretical Site 2 ESEE Site Sufficiency</u>	<u>35</u>
<u>Alternatives Not Requiring an Exception</u>	<u>15</u>	<u>Theoretical Site 2 ESEE Site Considerations</u>	<u>36</u>
<u>Alternative A Siting Sufficiency</u>	<u>16</u>		
<u>Alternative A Siting Considerations</u>	<u>17</u>		
<u>Alternative B Siting Sufficiency</u>	<u>18</u>		
<u>Alternative B Siting Considerations</u>	<u>19</u>		
<u>Alternative C Siting Sufficiency</u>	<u>20</u>		
<u>Alternative C Siting Considerations</u>	<u>21</u>		

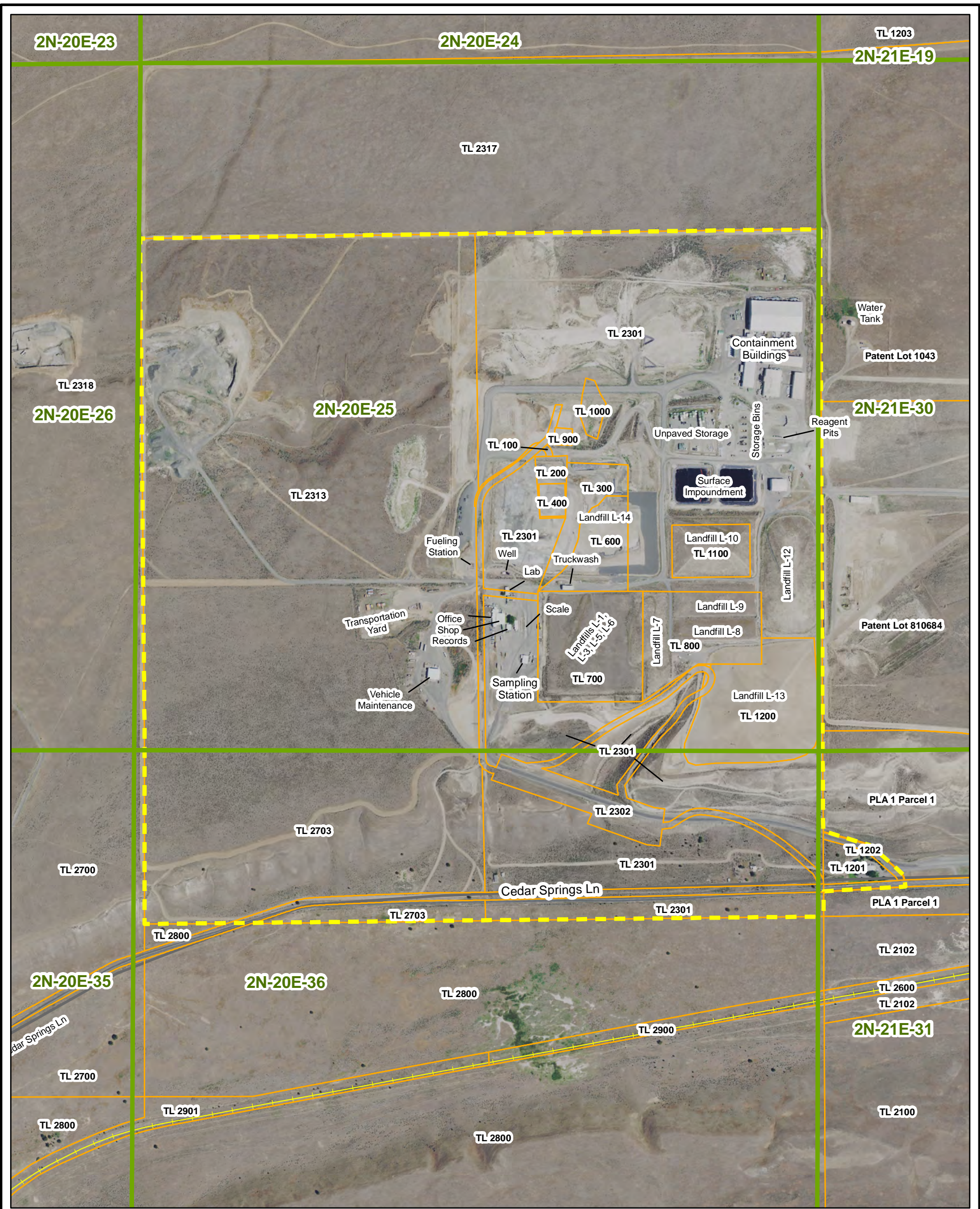


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Vicinity Map

-  Existing Facility
-  Highways
-  Gilliam County
-  County Roads
-  City Limits
-  Rivers & Streams



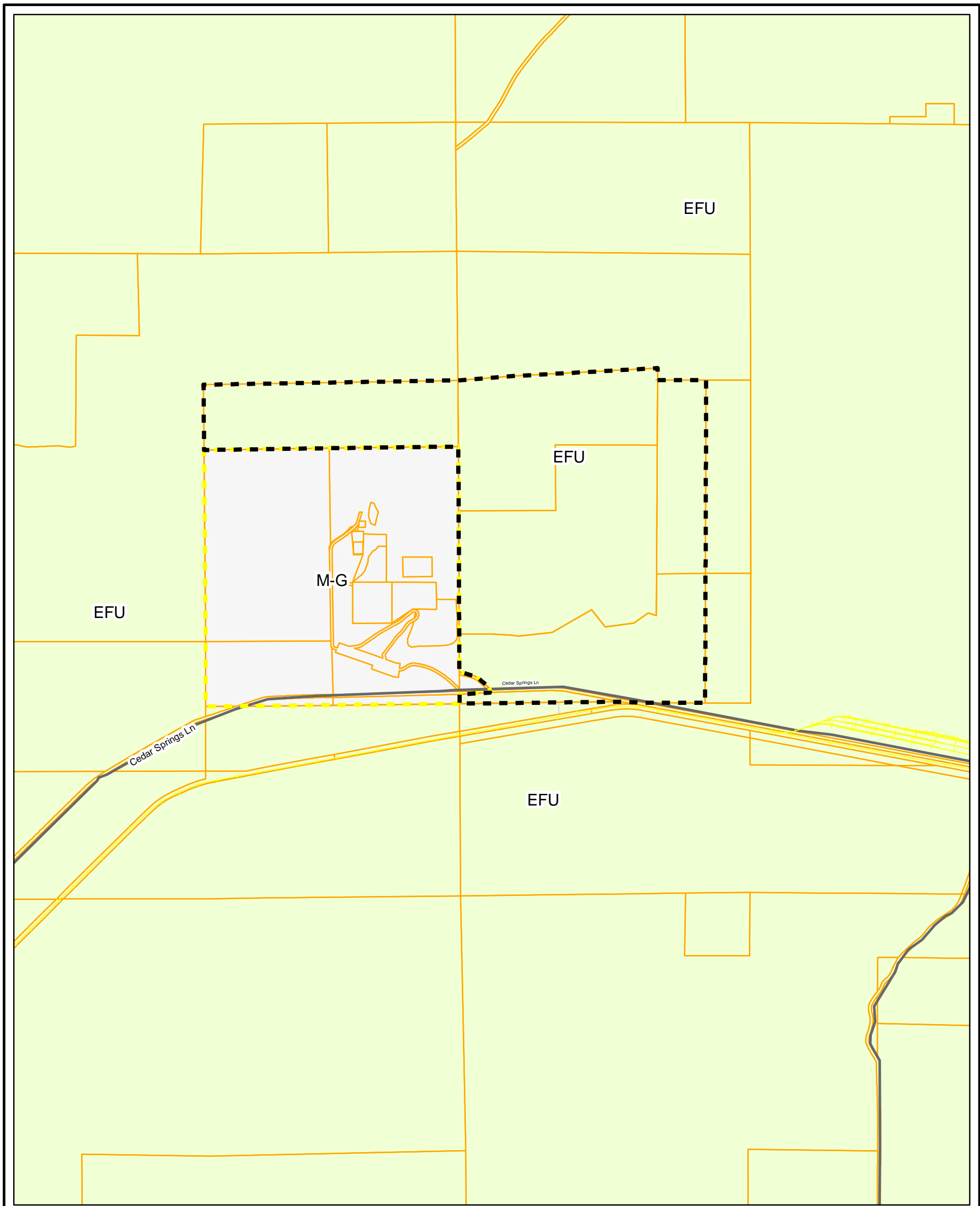


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Existing Treatment, Storage, and Disposal Facility








- Township, Range, Section
- Area of M-G Zoning
- Taxlots
- County Roads
- Railroad

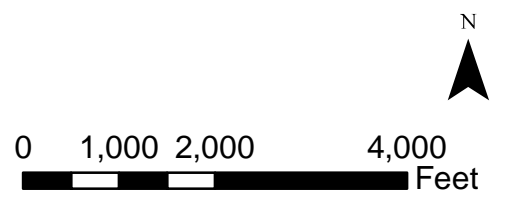


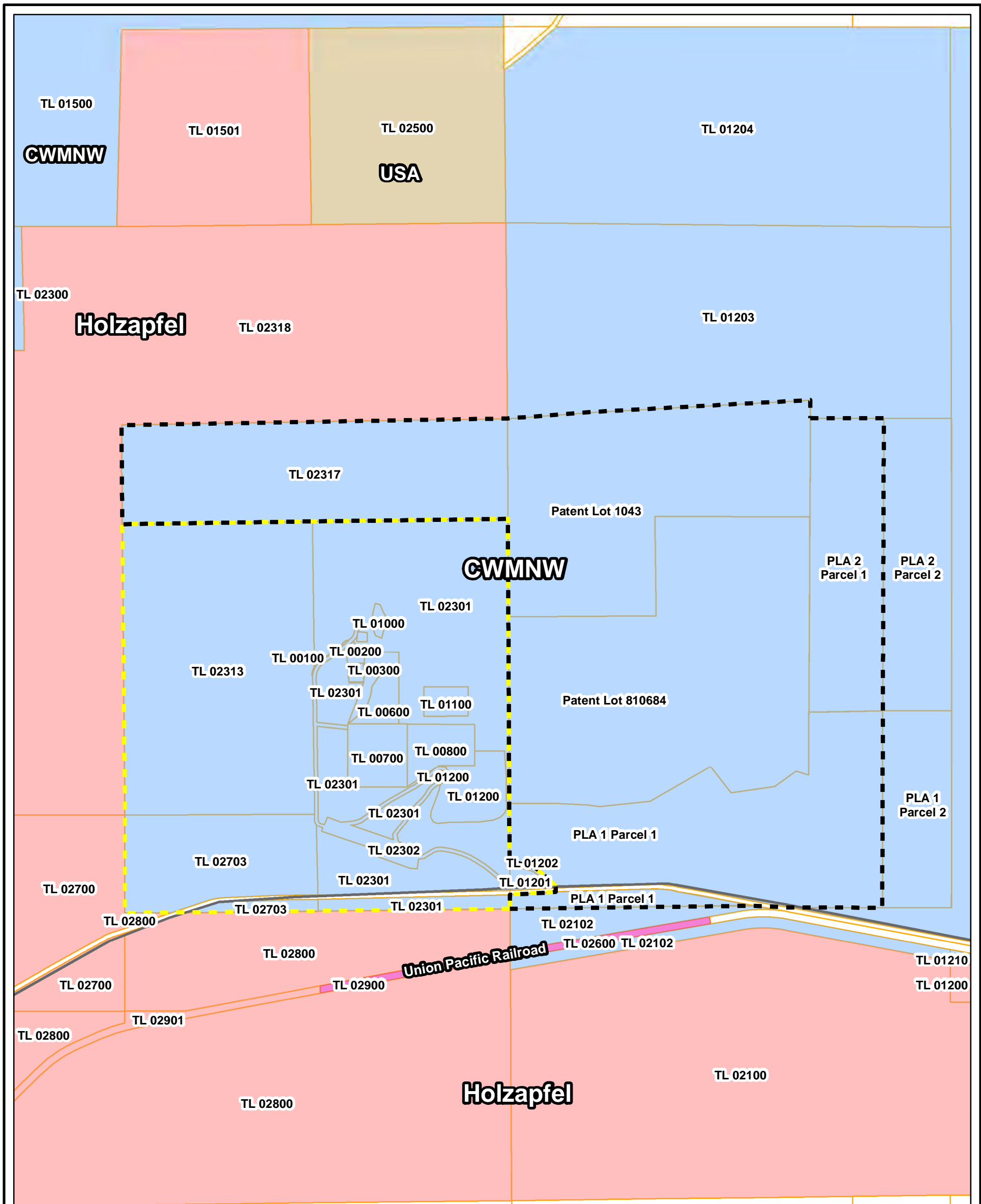


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Gilliam County Current Zoning




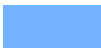



-  Existing Facility
-  Goal Exception Area
-  Railroad
-  County Roads
-  Taxlots
- Zoning**
-  FARM USE (EFU)
-  INDUSTRIAL GENERAL (M-G)



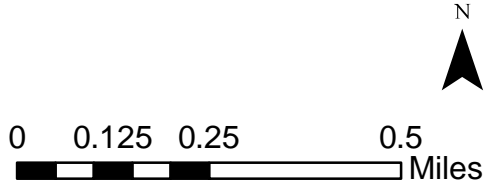


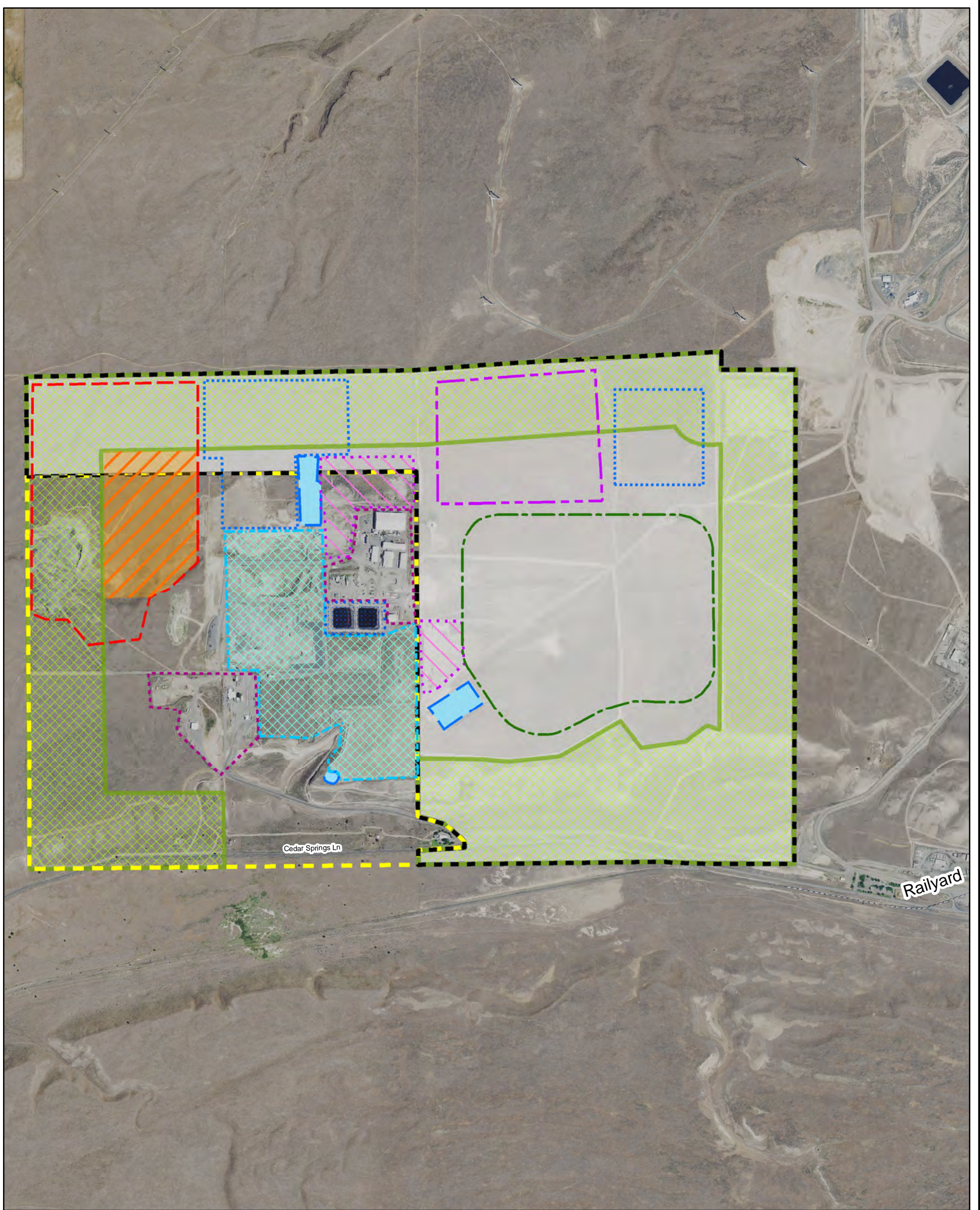
GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Ownership Map

-  Goal Exception Area
-  Existing Facility
-  Taxlots
- Ownership**
-  CWMNW (and affiliates)
-  Holzapfel (and affiliates)
-  Union Pacific Railroad
-  USA

Note: Property lines depicted reflect those requested in two Property Line Adjustment Applications currently in process, Files Nos. 2022-PLA-01 & 2022-PLA-02





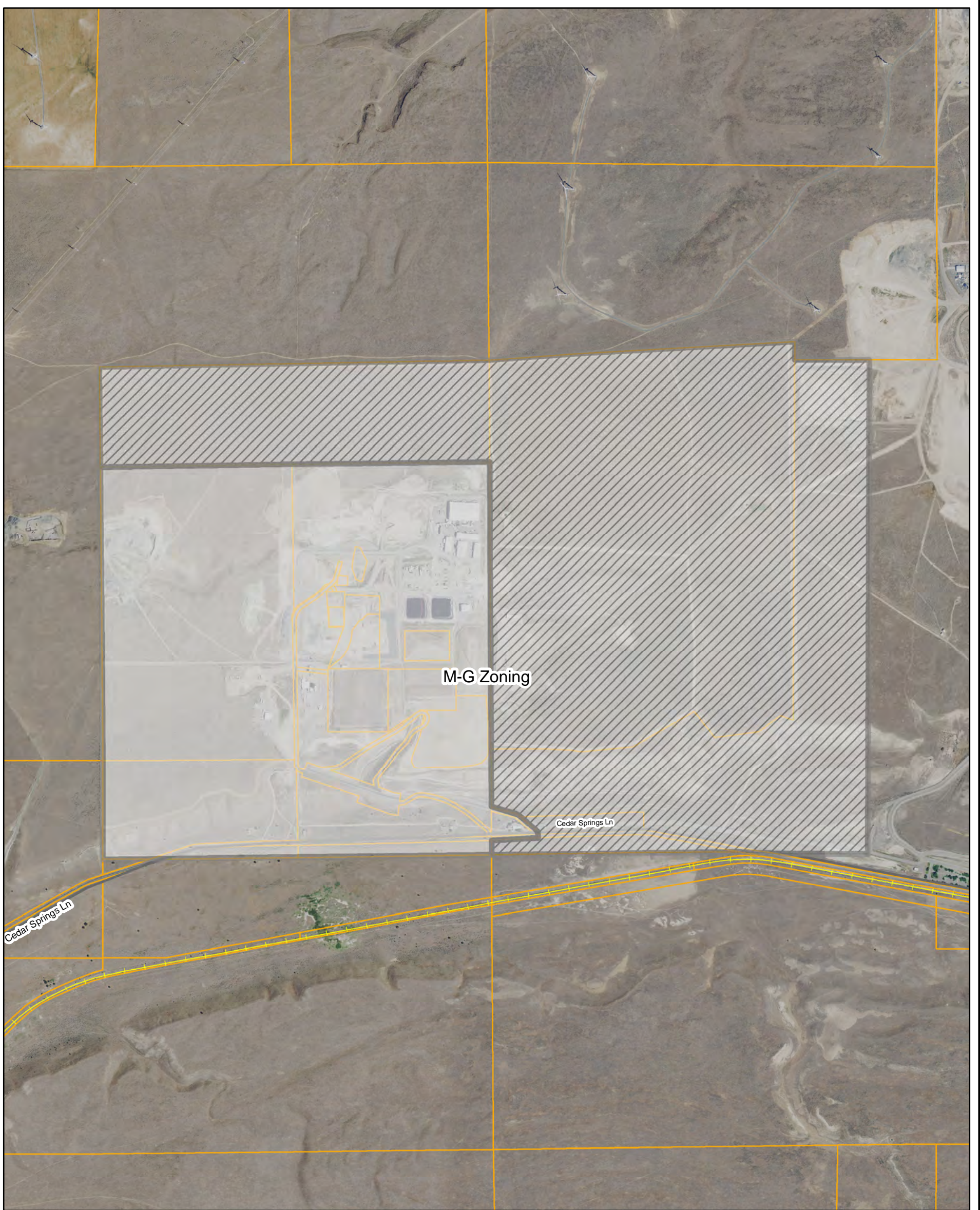
GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Proposed Goal Exception

- | | | |
|-------------------------------|----------------------------|--------------------------------------|
| Existing Facility Area | Existing Landfills | New Landfill L15 |
| Area of Proposed M-G Zoning | Existing Facilities | Future Landfill after rock depleted* |
| Goal Exception Area | Stormwater Ponds | Future Treatment Facilities* |
| 1000' Buffer (No Landfilling) | Existing Quarry Area | New Evaporation Ponds |
| | Existing Evaporation Ponds | New Treatment Facilities |

*Not part of current DEQ Permit

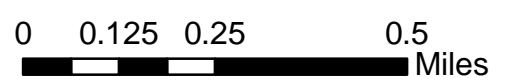


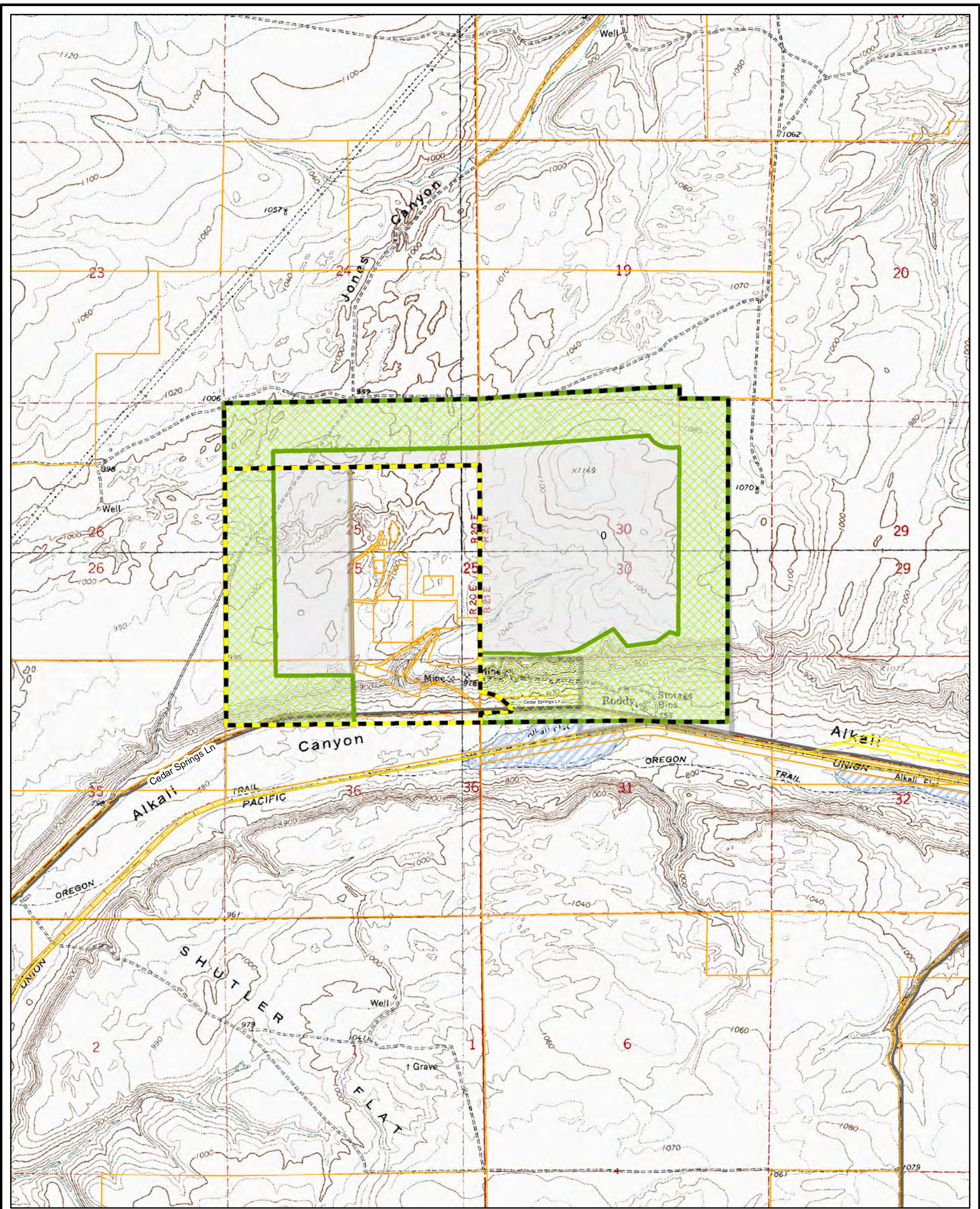


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Proposed Zoning



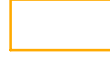





- Existing M-G Zoning
- Area of Proposed M-G Zoning
- Taxlots
- Railroad
- County Roads

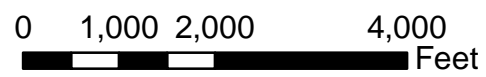


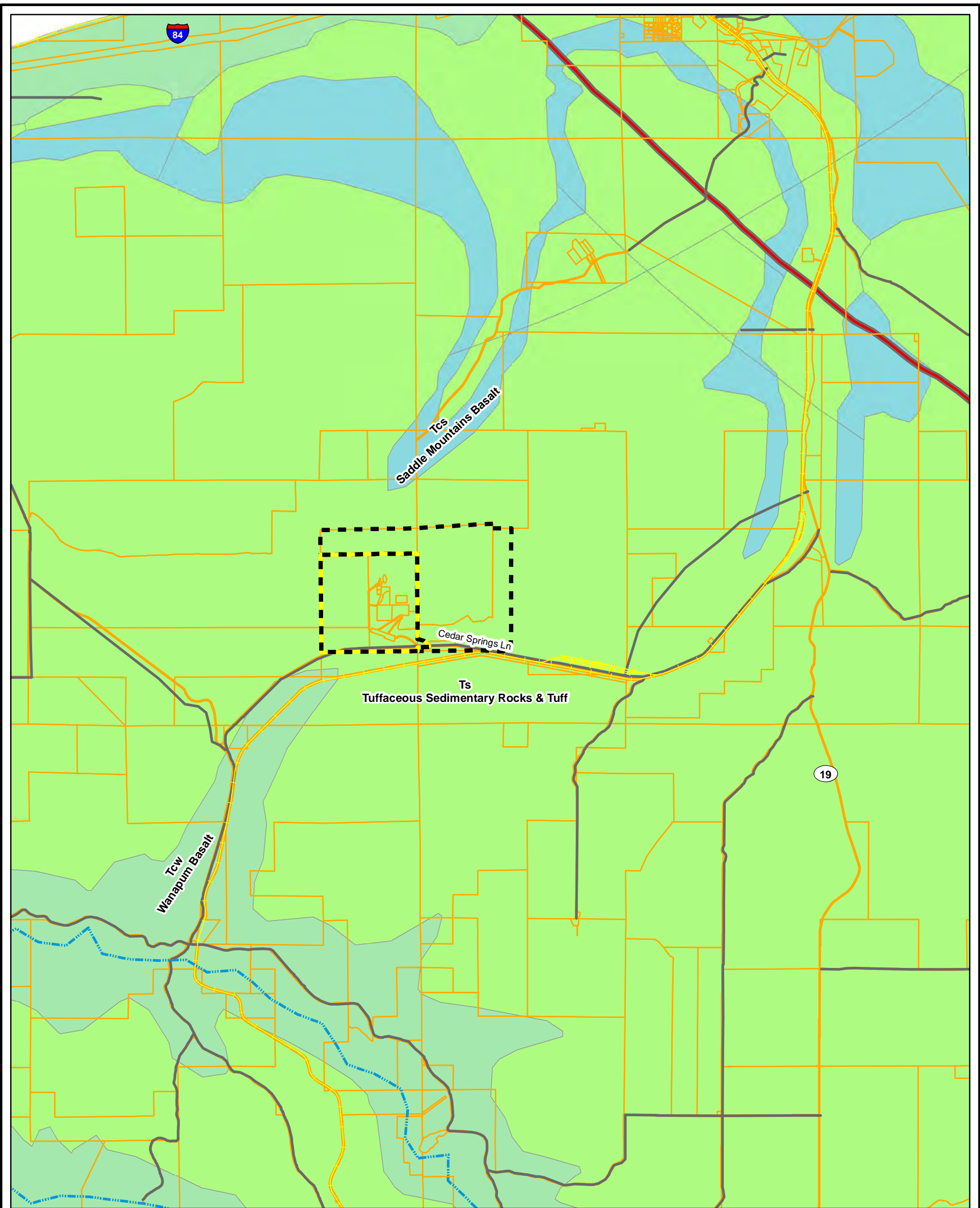


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

100 Year Flood Areas & Topography




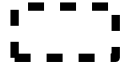





-  Existing Facility
-  FEMA 100 Year Flood
-  Taxlots
-  Goal Exception Area
-  Railroad
-  1000' Buffer (No Landfilling Overlay)
-  Proposed Goal Exception/ (M-G) Zoning Area
-  County Roads



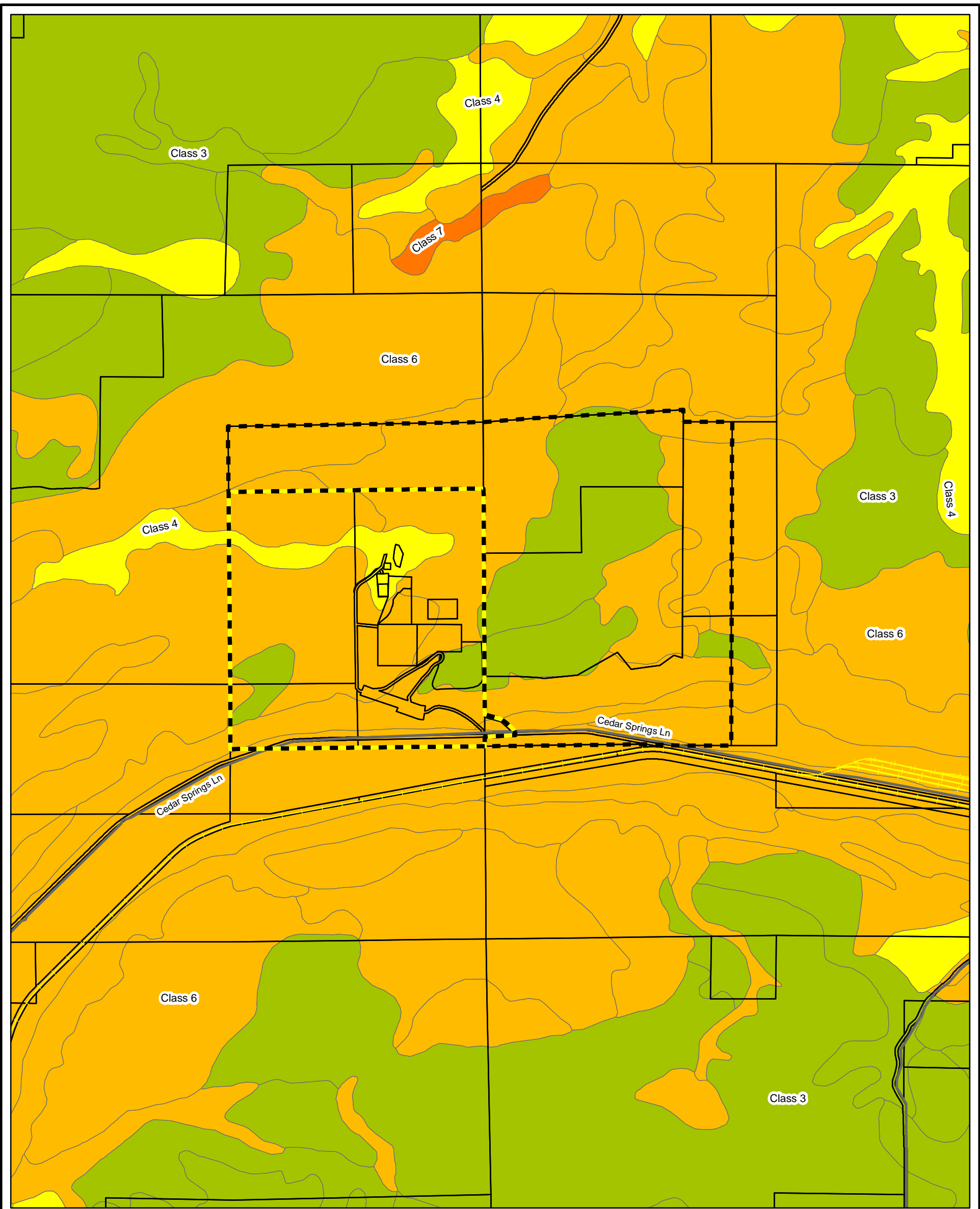


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Gilliam County Geology










- | | | | |
|---|--|--|---|
|  Existing Facility |  Railroad | Geologic Unit |  Faults (Not active in Holocene) |
|  Goal Exception Area |  County Roads |  Tcs | |
|  Taxlots | |  Tcw | |
| | |  Ts | |

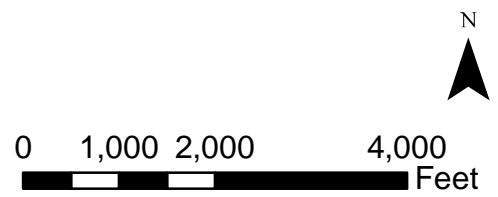


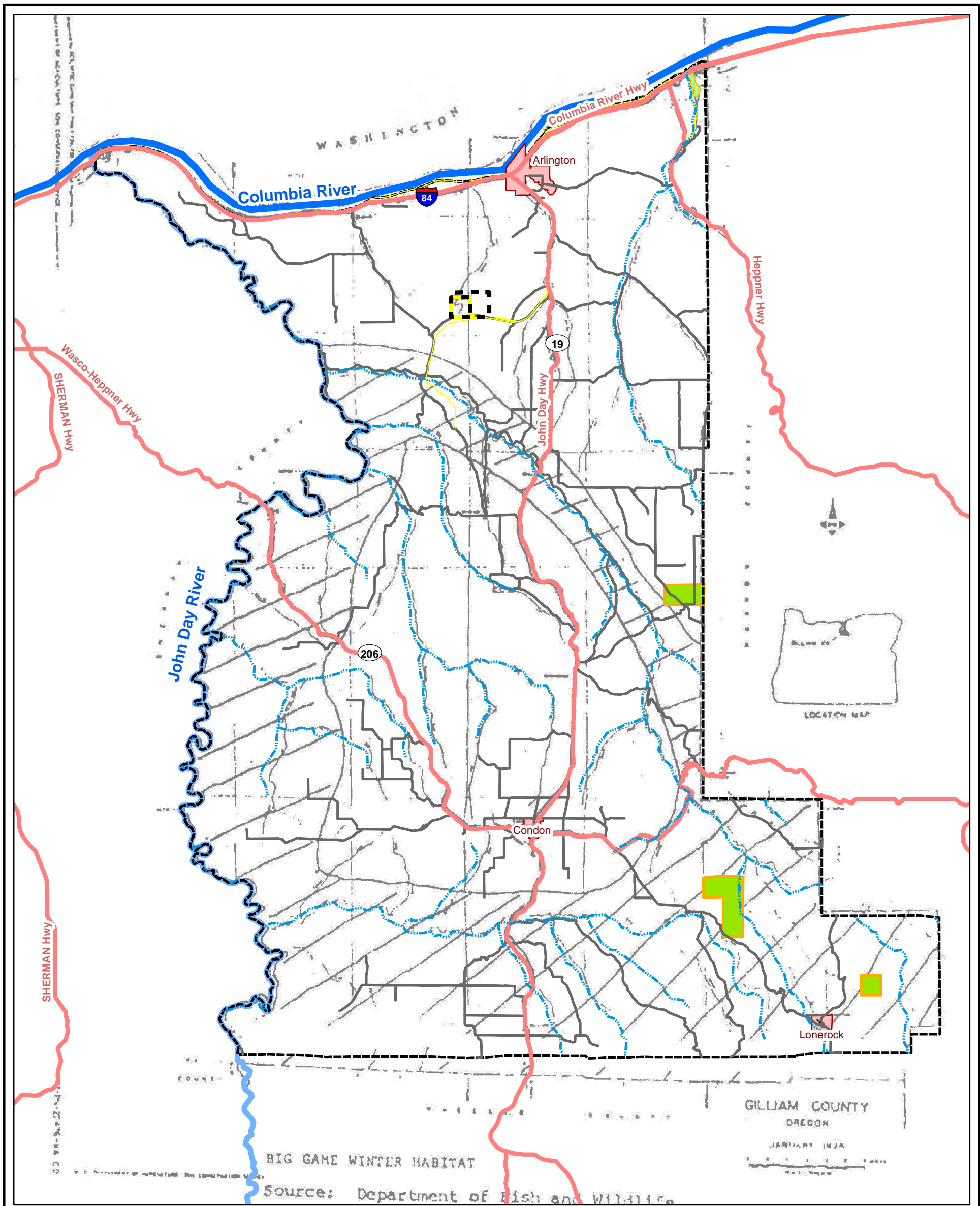


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Gilliam County Soils






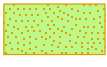




 Existing Facility	 Railroad	Non-Irrigated Capability Class	
 Goal Exception Area	 County Roads		 3
 Taxlots			 4
			 6
			 7



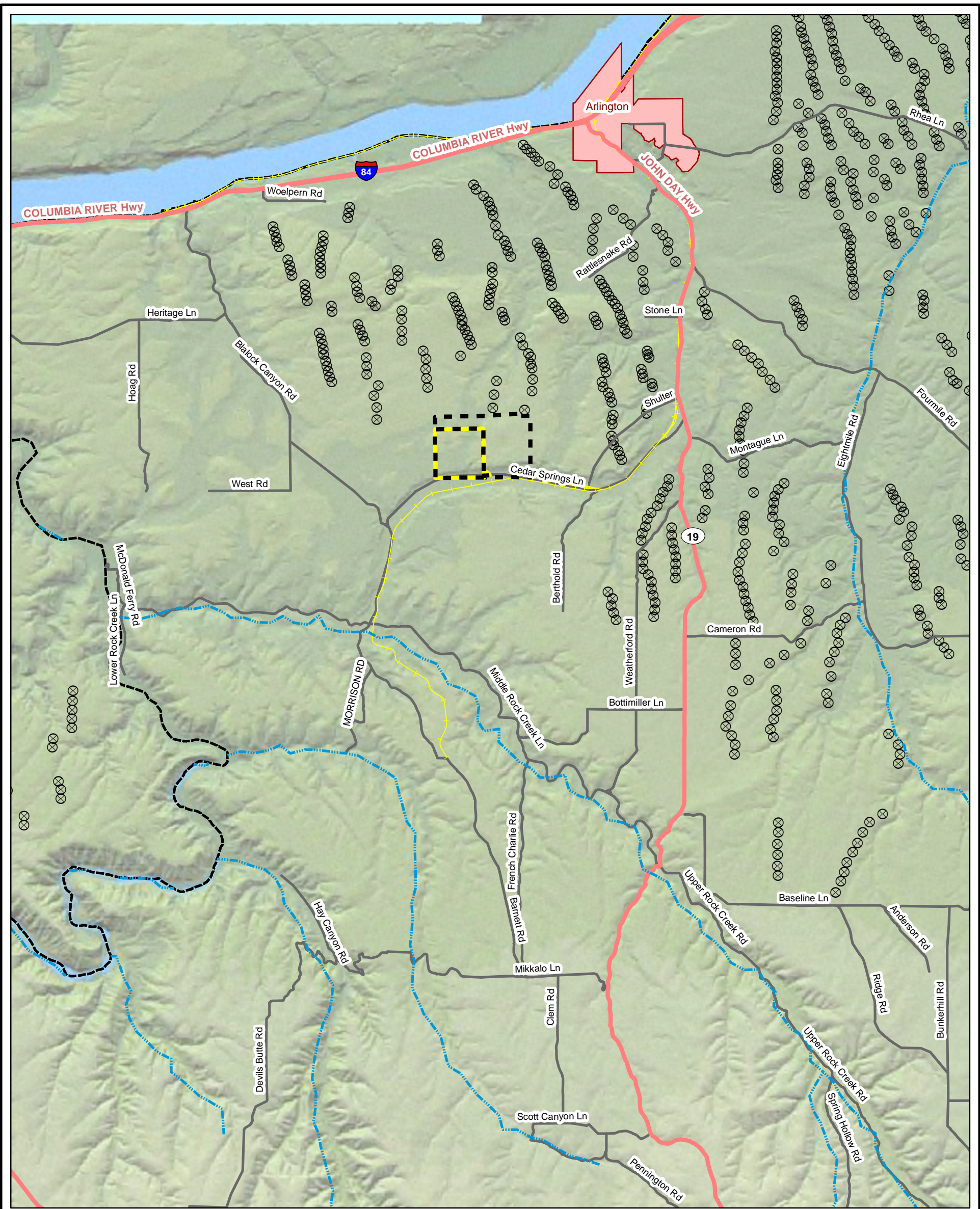


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Winter Range Habitat & Natural Resource Areas

-  Gilliam County
-  Rivers
-  Natural Resource Areas (Comp Plan)
-  Existing Facility
-  Highways
-  Willow Creek Natural Area (State)
-  City Limits
-  Railroads
-  Winter Range Habitat
-  County Roads

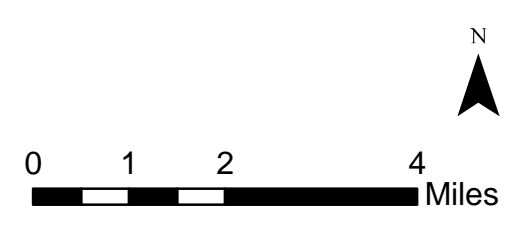


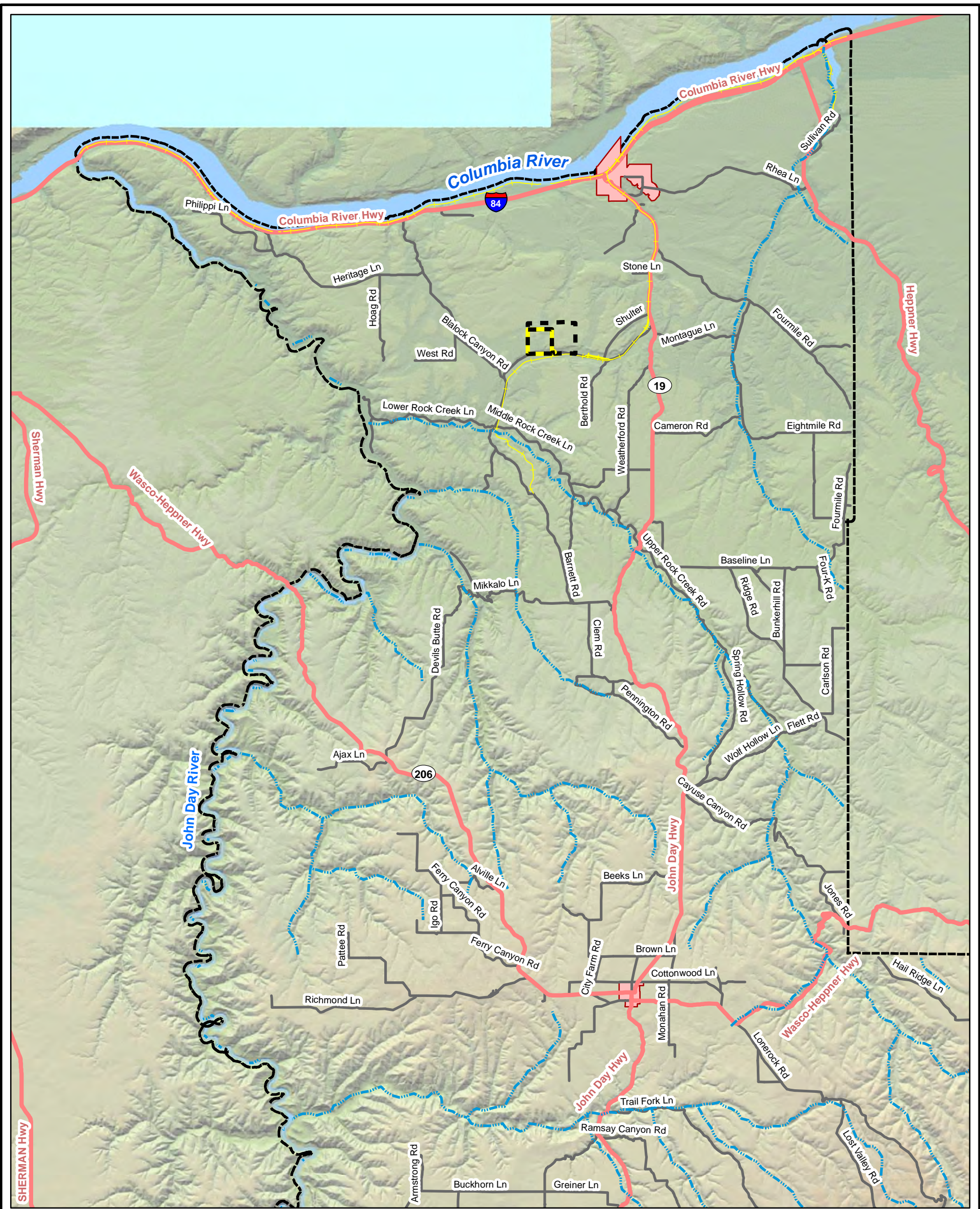


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Wind Power Facilities Map

- Existing Facility
- Gilliam County
- City Limits
- Highways
- County Roads
- Railroads
- Rivers & Streams
- X Wind Turbine

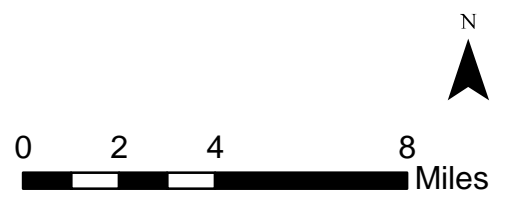


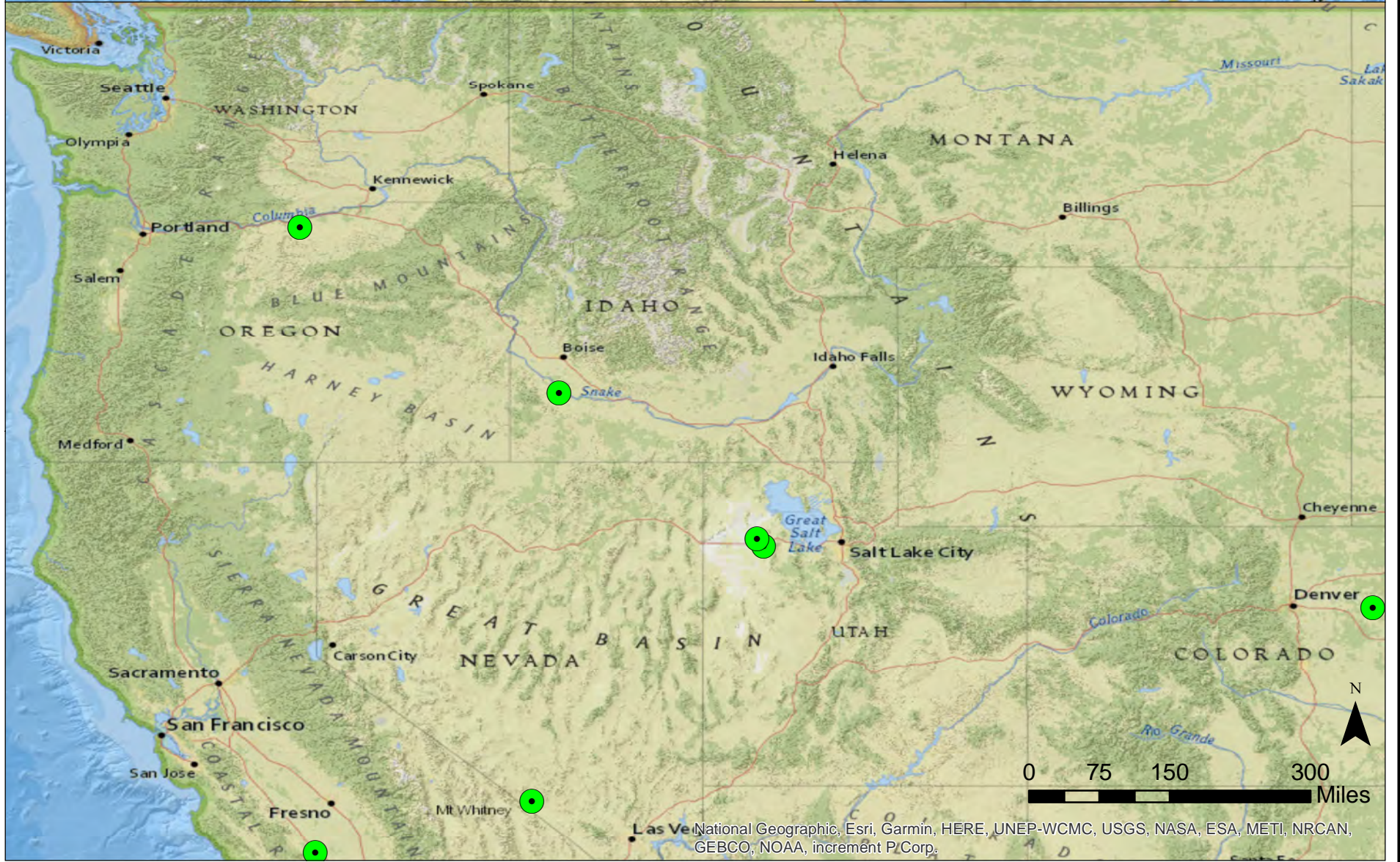
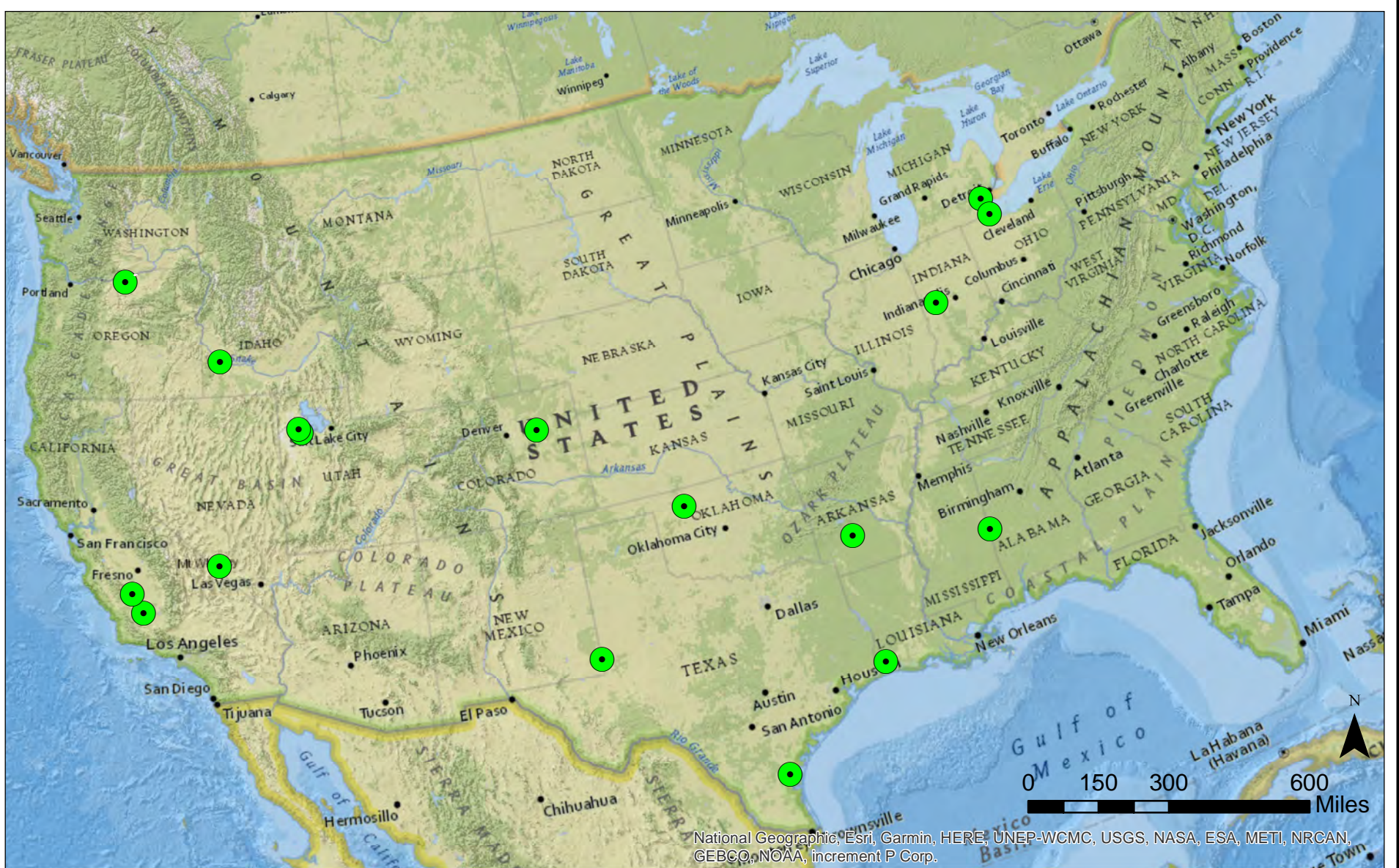


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Transportation

- Existing Facility
- Highways
- Gilliam County
- Railroads
- City Limits
- County Roads
- Rivers & Streams

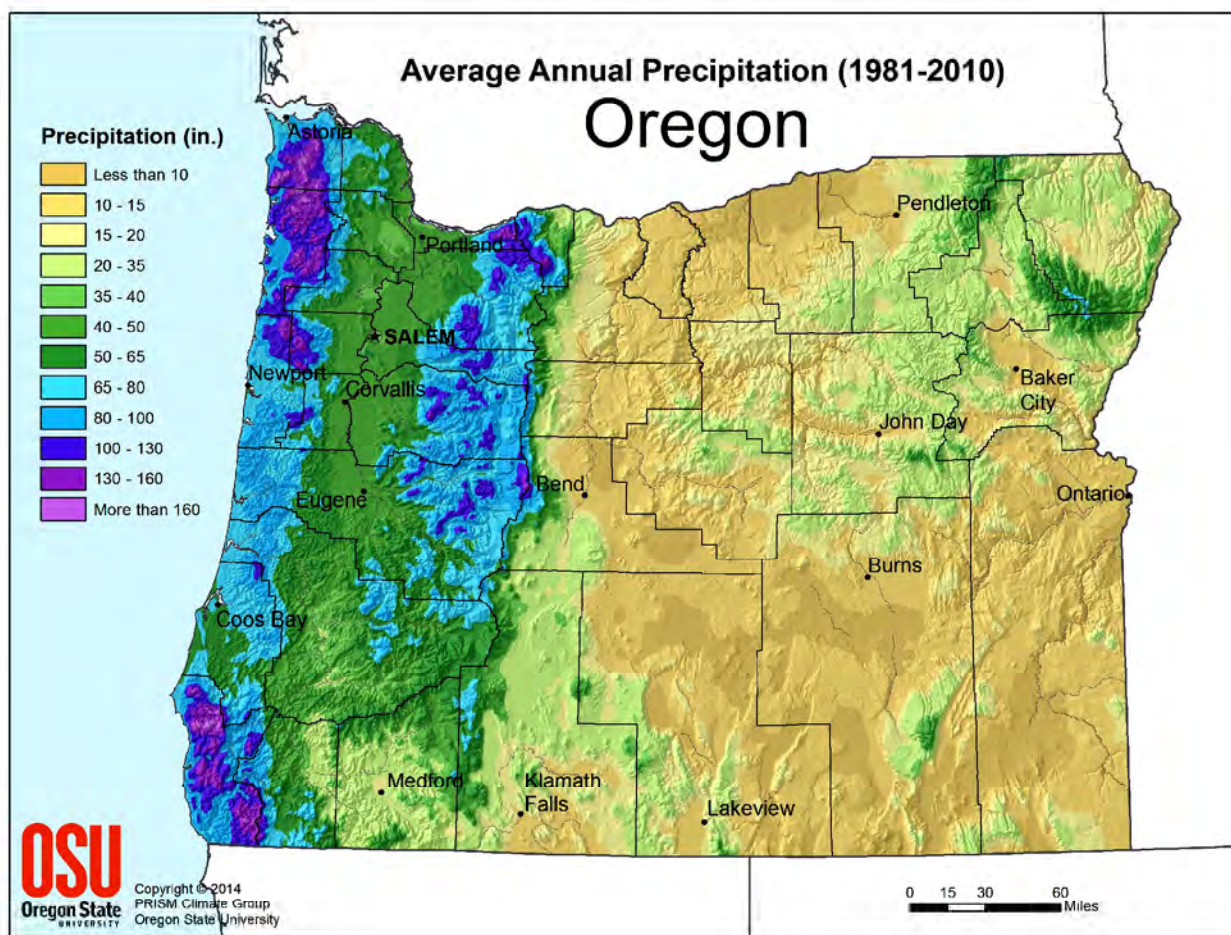
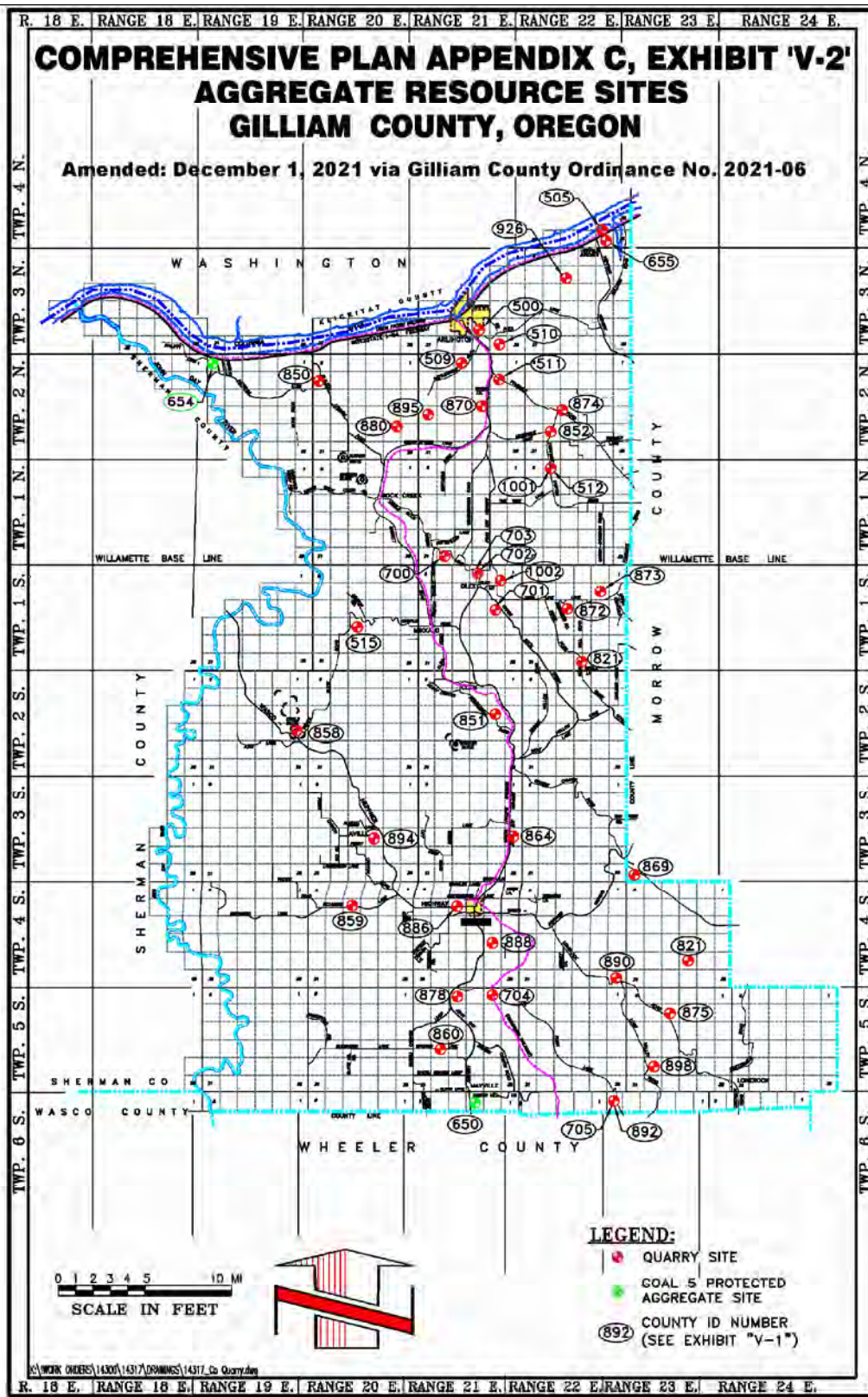




GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

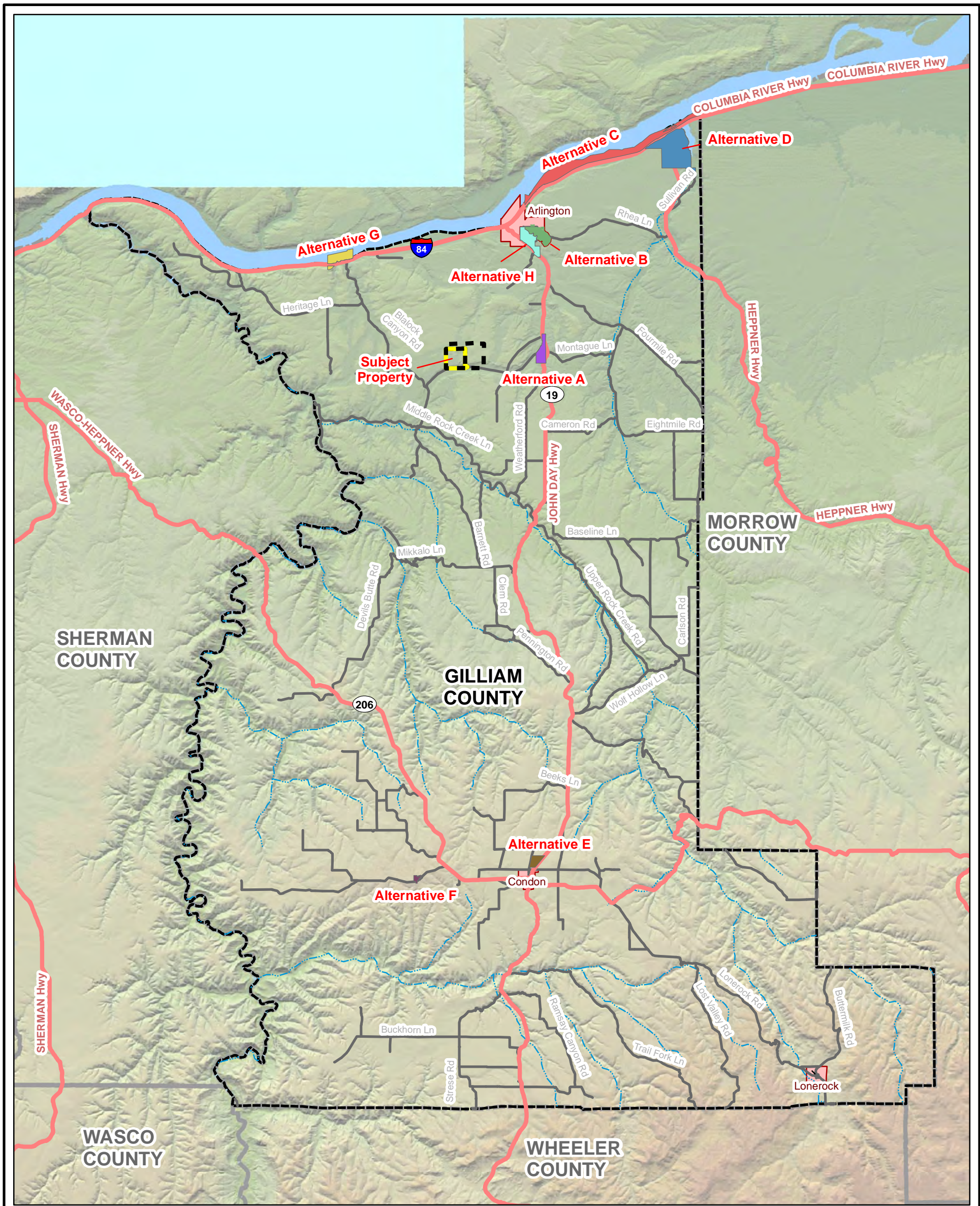
Subtitle C Landfill Facilities

- Subtitle C Landfill Locations










GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

**County Aggregate Resources Map
State of Oregon Precipitation Map**

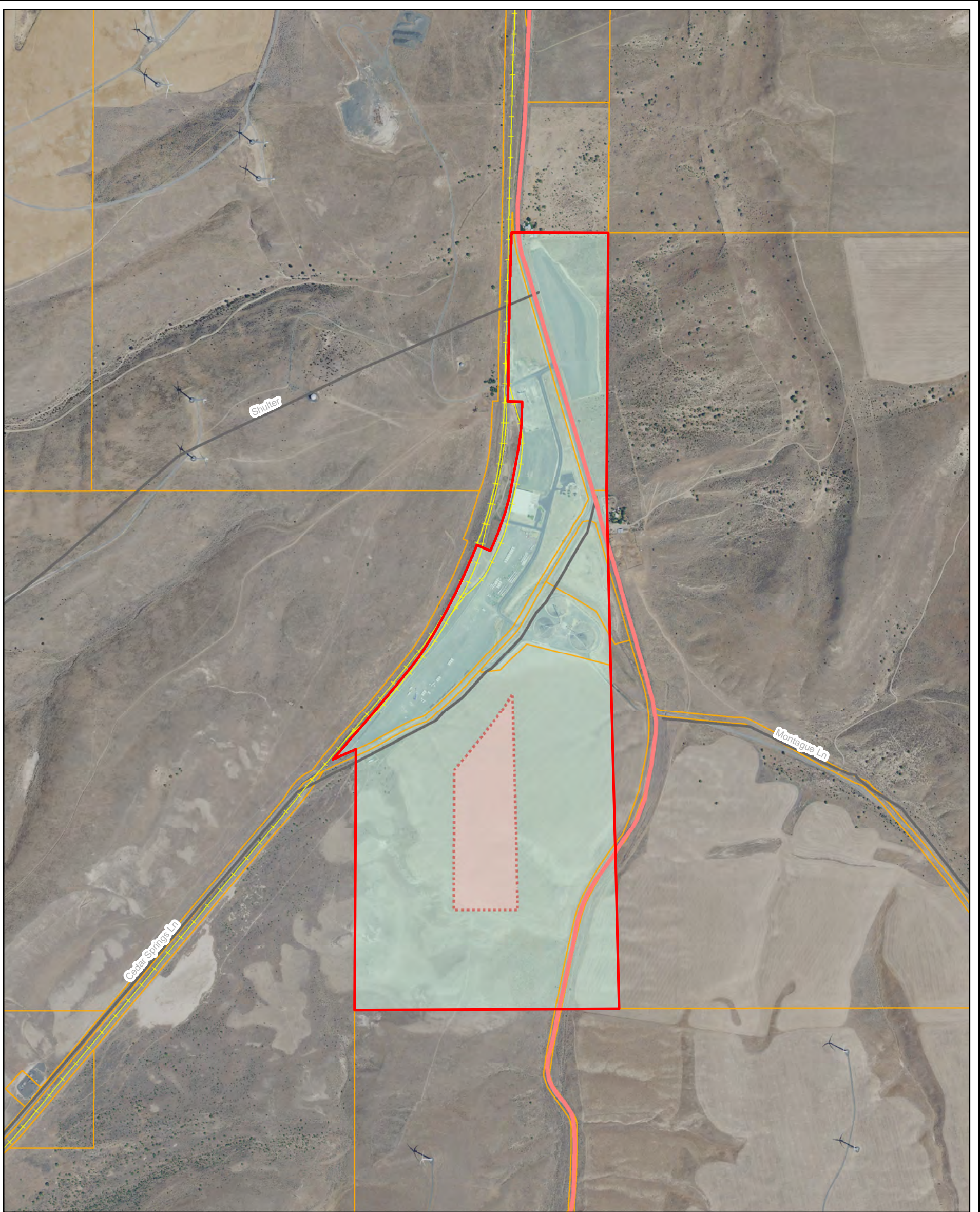


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternatives Not Requiring an Exception





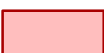




-  Existing Facility
-  Highways
-  Goal Exception Area
-  County Roads
-  City Limits
-  Rivers & Streams
-  Gilliam County

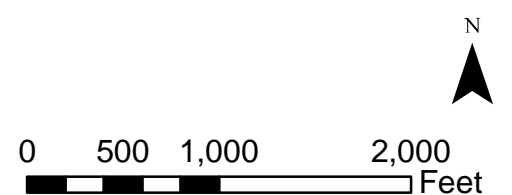


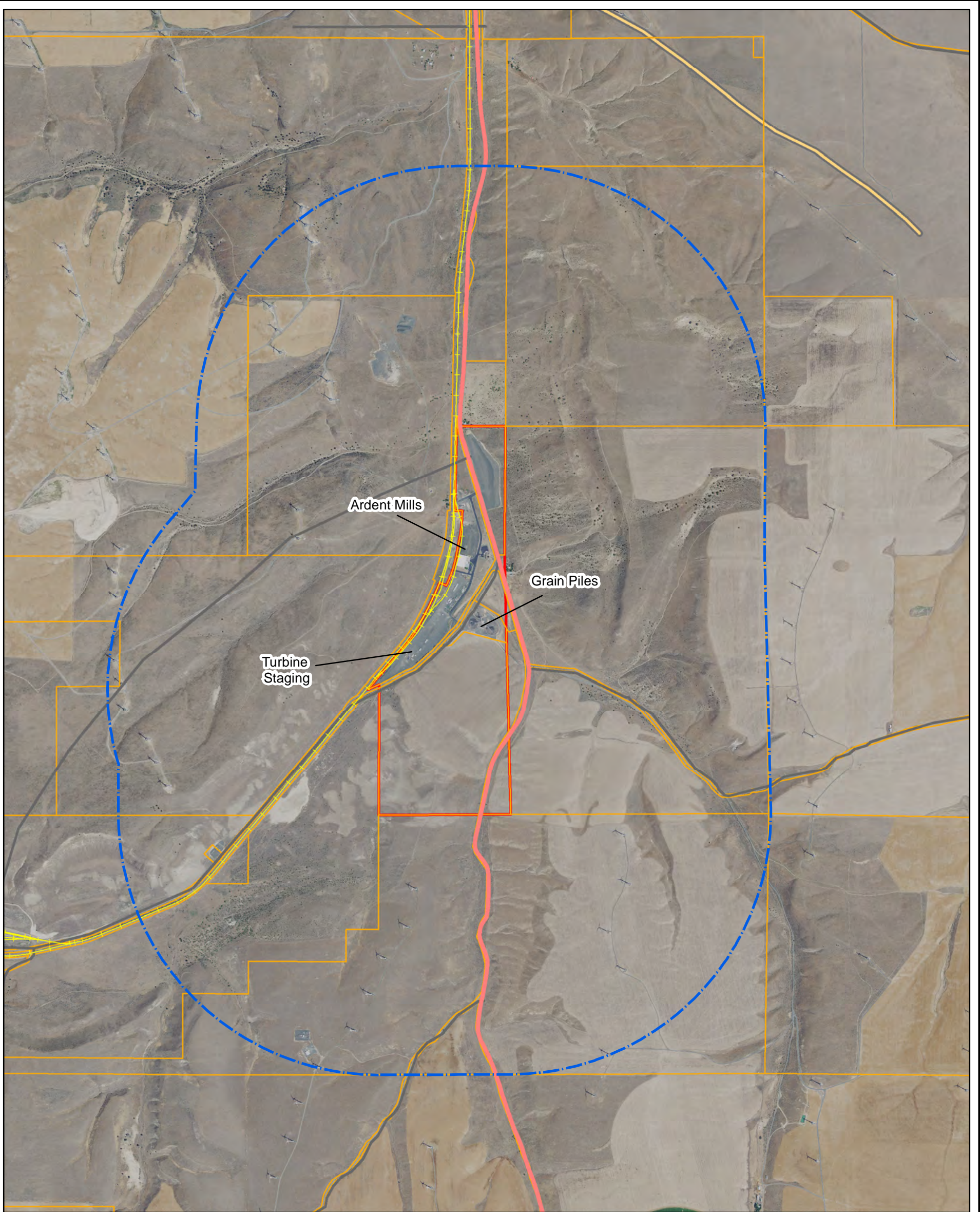


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative A Siting Sufficiency











- | | | |
|---|--|-------------|
|  Alternative |  Highways | Zone |
|  Taxlots |  Railroads | |
|  City Limits |  County Roads | |
|  Gilliam County |  Rivers & Streams | |
|  Area Outside 1,000 ft Setback | | |

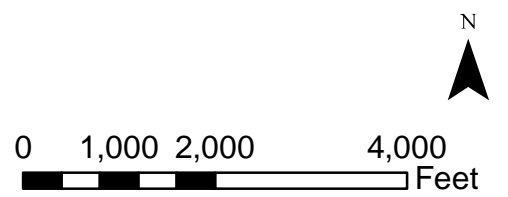


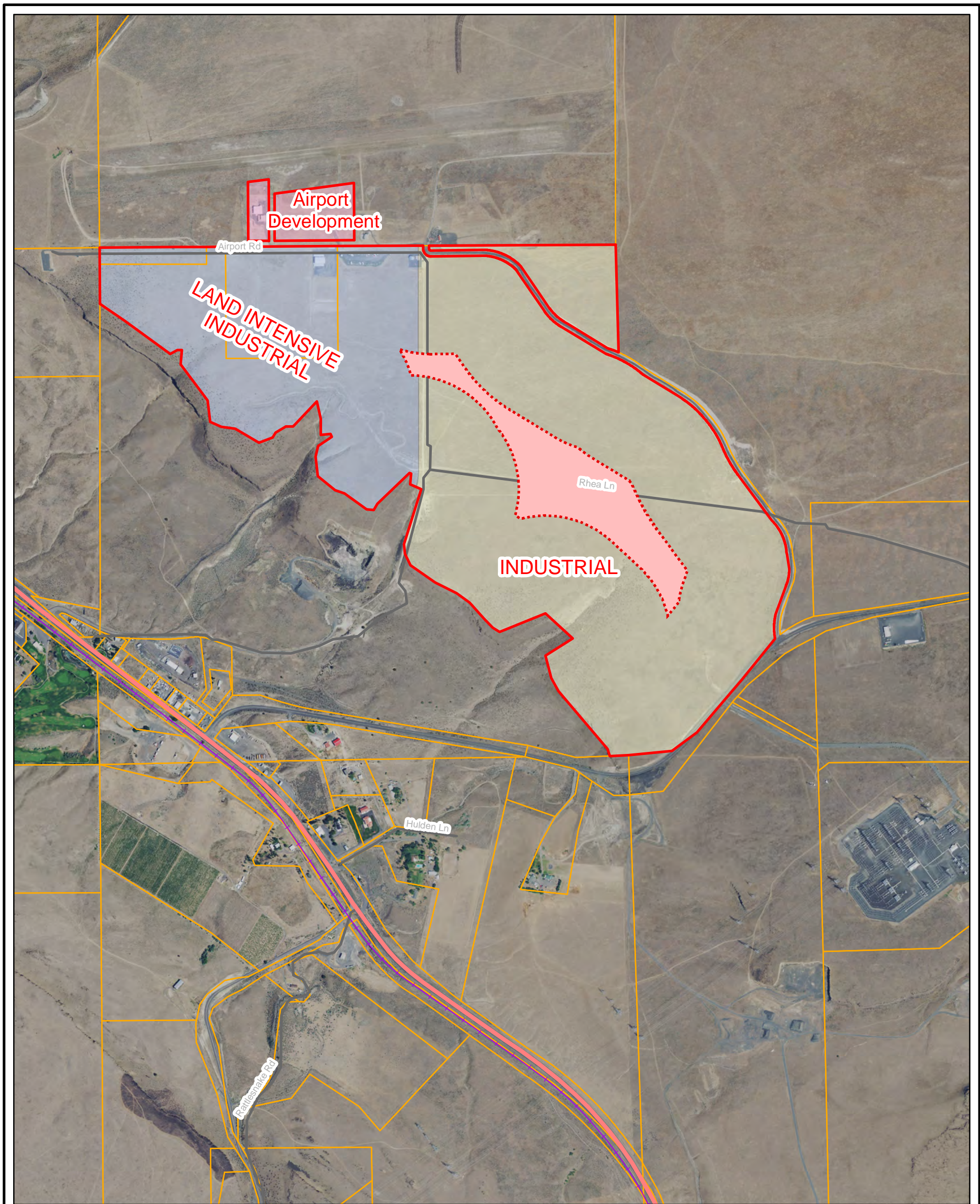


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative A Siting Considerations

- | | | | |
|---|------------------------------|---|------------------|
|  | 1 Mile Locational Separation |  | Highways |
|  | Alternative |  | Railroads |
|  | UGB |  | County Roads |
|  | Gilliam Taxlots |  | Rivers & Streams |
|  | City Limits |  | Faults |

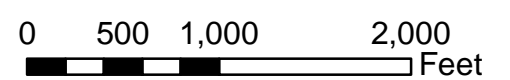


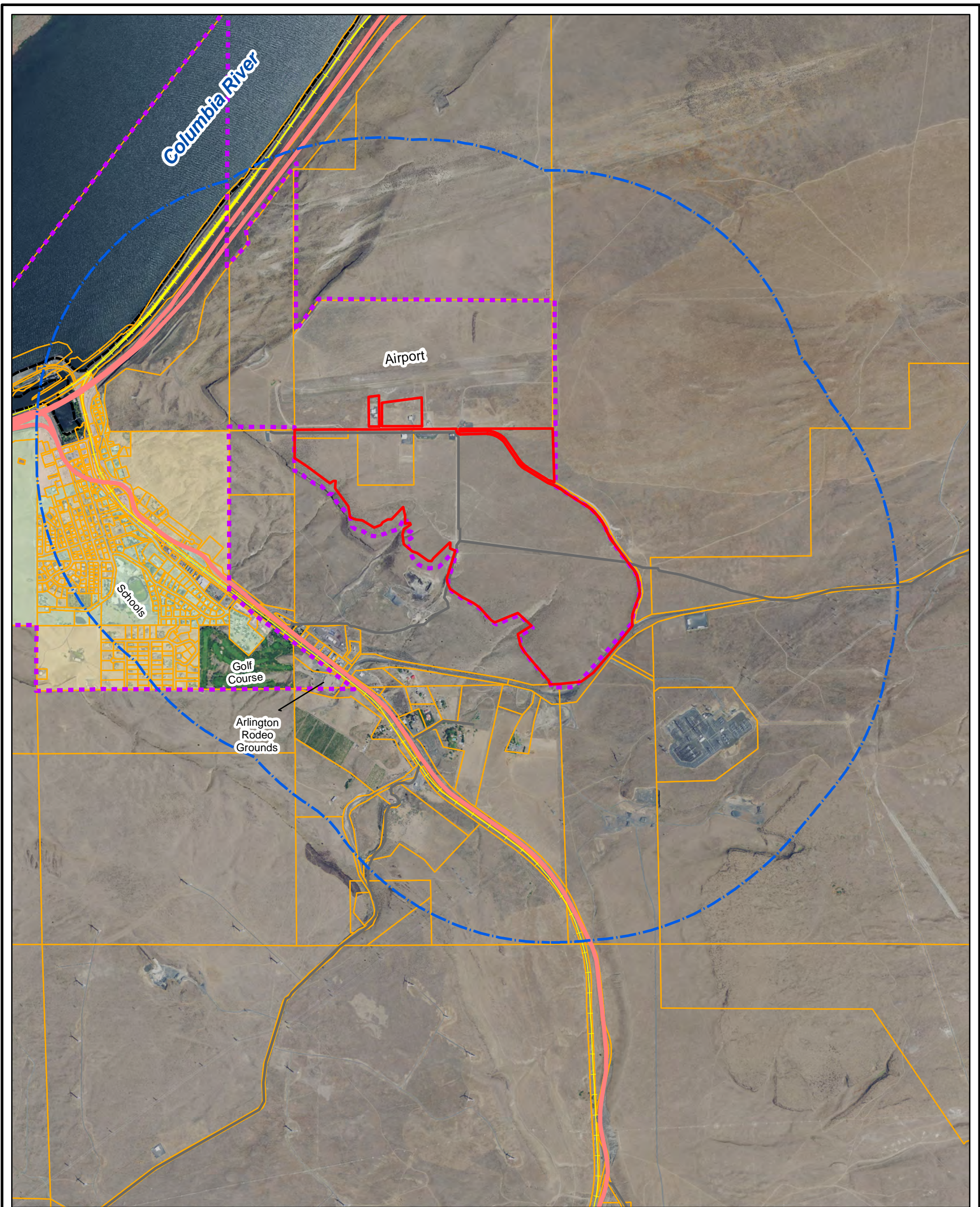


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative B Site Sufficiency

- | | | | | | | |
|---|------------------------------|---|------------------|---|---|---------------------|
|  | Alternative B |  | Highways | Zone |  | AIRPORT DEVELOPMENT |
|  | Gilliam_Taxlots |  | Railroads |  | INDUSTRIAL | |
|  | Gilliam County |  | County Roads |  | LAND INTENSIVE INDUSTRIAL | |
|  | Area outside 1000 ft Setback |  | Rivers & Streams | | | |

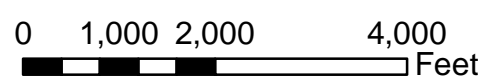


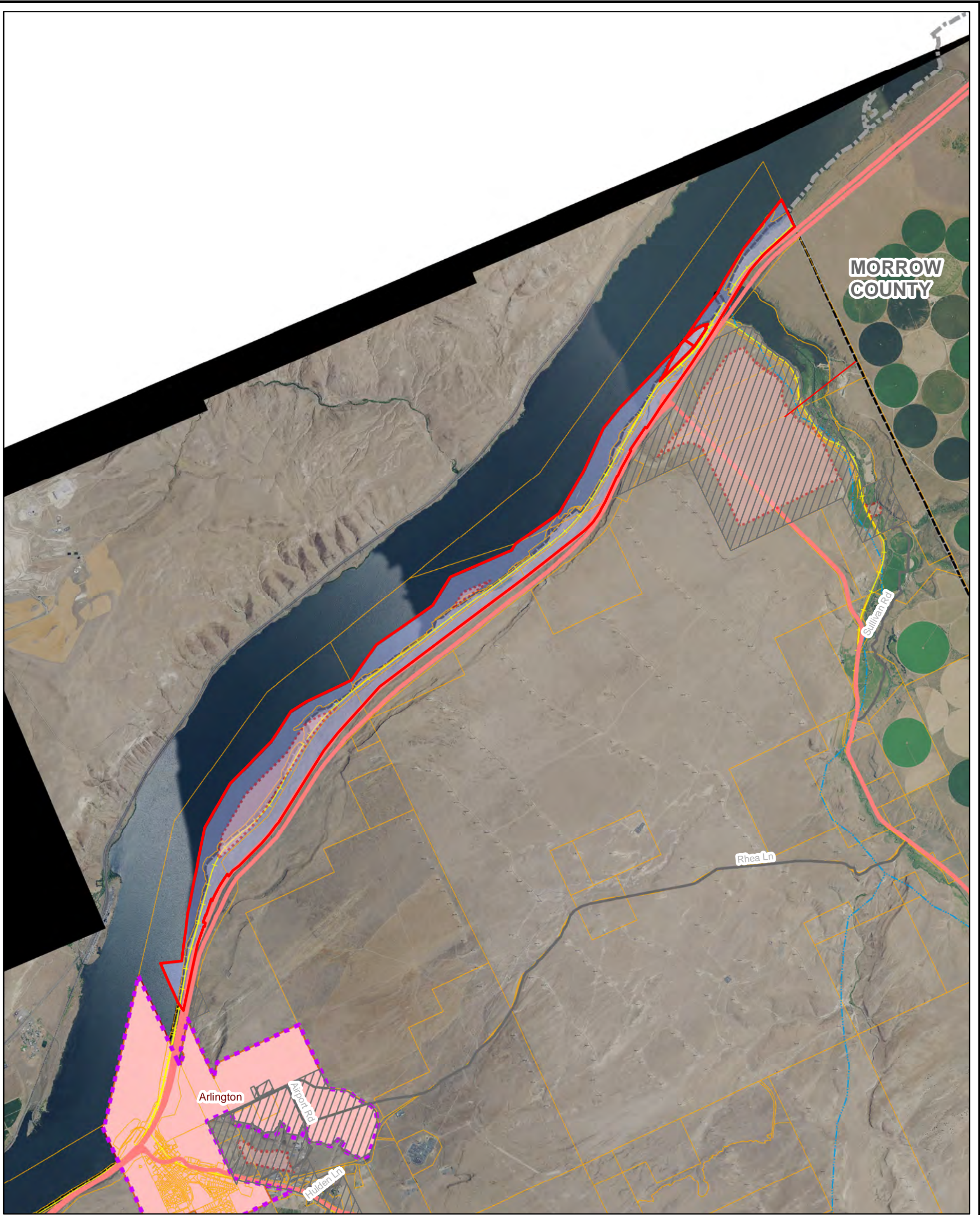


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative B Siting Considerations

- | | | |
|------------------------------|------------------|---------------------------|
| 1 Mile Locational Separation | Highways | Conflicting Zones |
| Alternative | Railroads | COMMERCIAL |
| UGB | County Roads | MULTI FAMILY RESIDENTIAL |
| Taxlots | Rivers & Streams | SINGLE FAMILY RESIDENTIAL |





MORROW COUNTY

Arlington

Airport Rd












Hulden Ln

Rhea Ln


Sullivan Rd


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

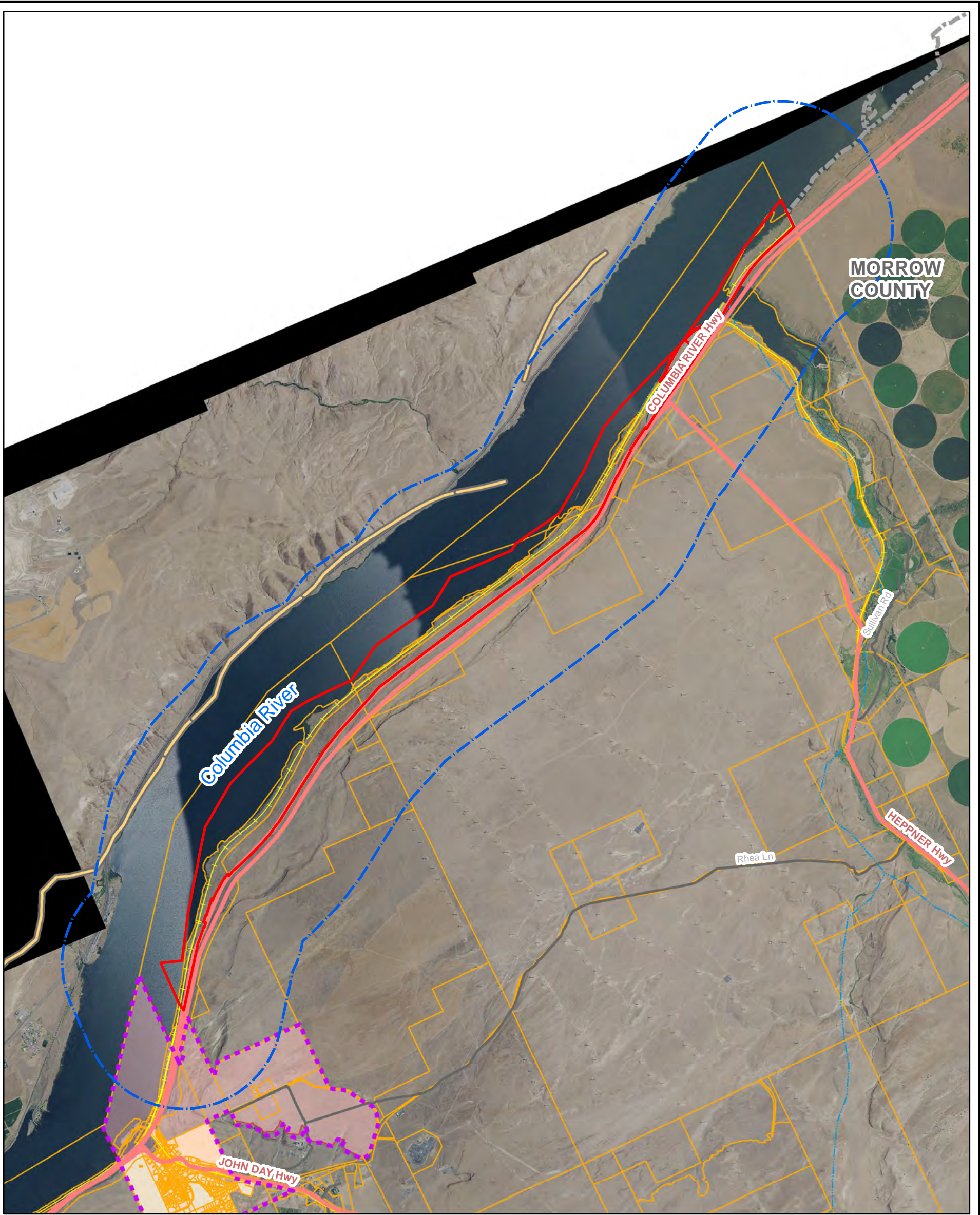
Alternative C Siting Sufficiency

 Alternative	 Gilliam County	Zone
 Other Alternatives	 Highways	 LIMITED INDUSTRIAL
 Area Outside 1,000 ft Setback	 Railroads	
 UGB	 County Roads	
 Taxlots	 Rivers & Streams	

Atlas Page 20








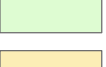


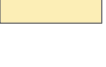




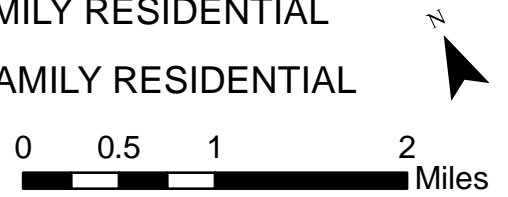


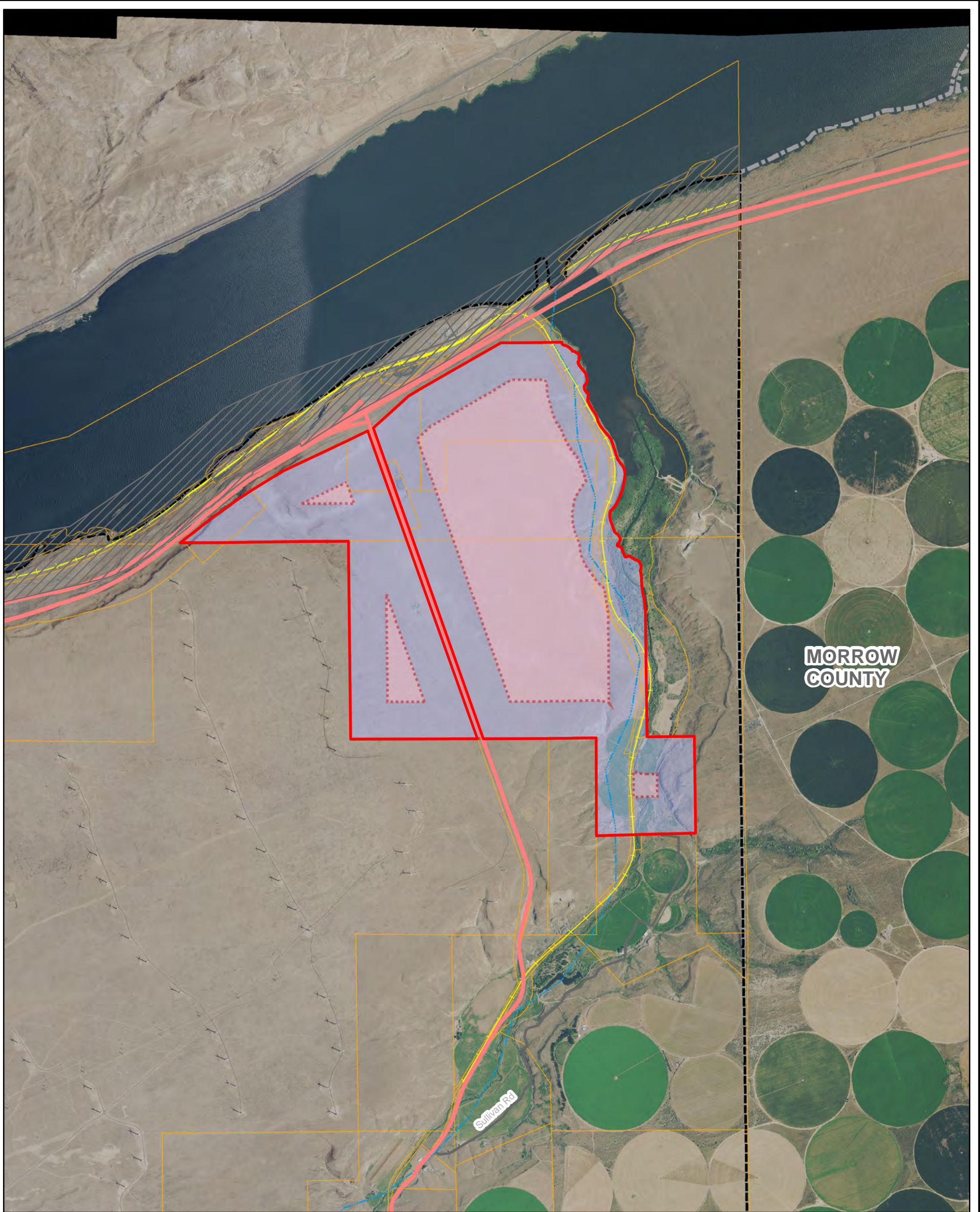


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative C Siting Considerations

 1 Mile Locational Separation	 Highways	Conflicting Zones	
 Alternative	 Railroads		 COMMERCIAL
 UGB	 County Roads		 MULTI FAMILY RESIDENTIAL
 City Limits	 Rivers & Streams		 SINGLE FAMILY RESIDENTIAL
 Gilliam Taxlots	 Faults		




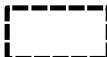




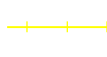






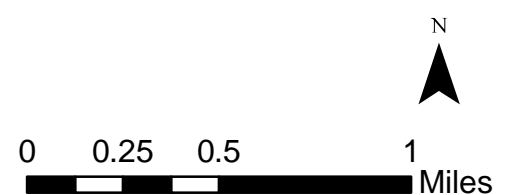
MORROW COUNTY

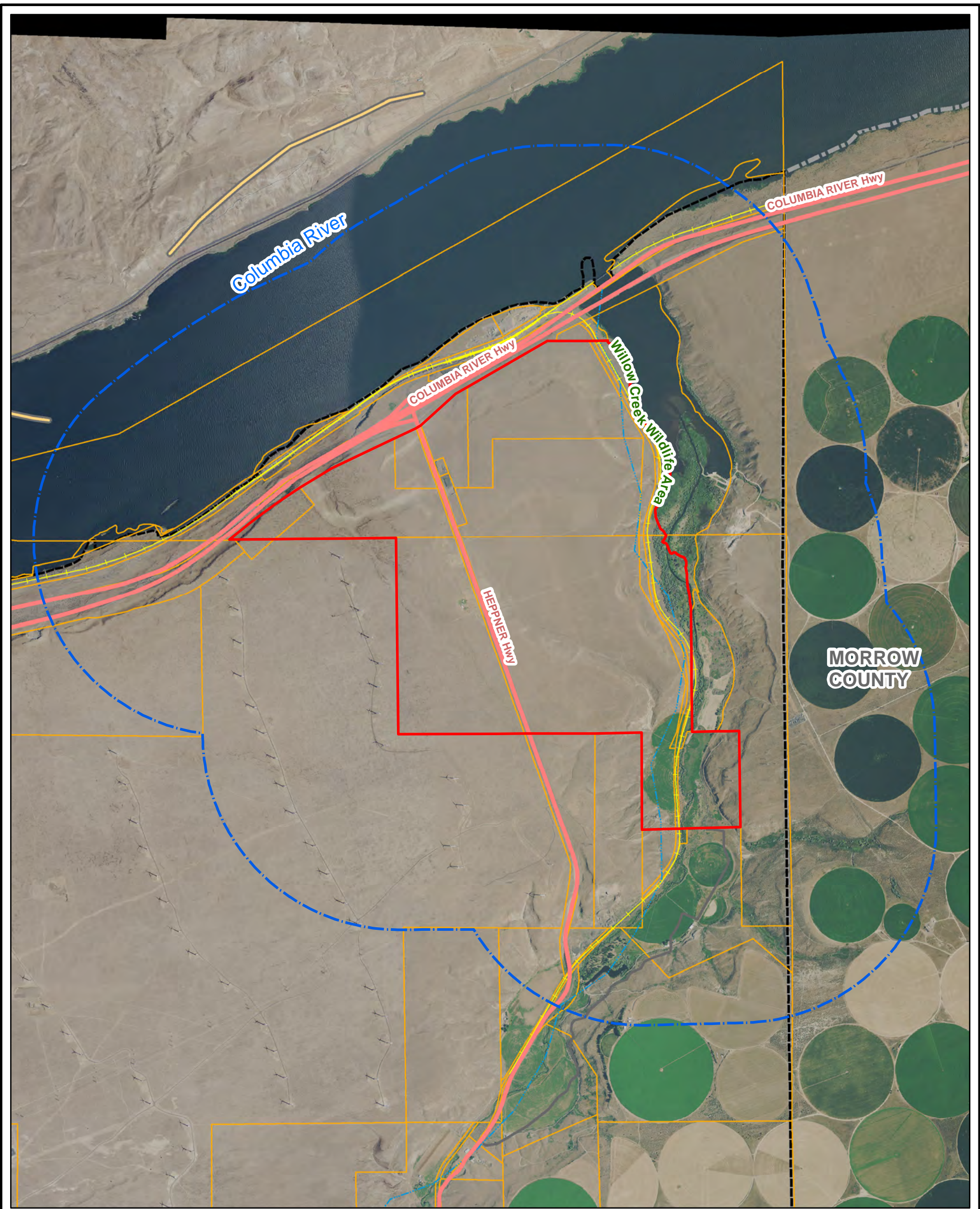
Sullivan Rd

GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative D Siting Sufficiency

- | | | |
|---|--|--|
|  Alternative |  Gilliam County | Zone |
|  Other Alternatives |  Highways |  LIMITED INDUSTRIAL |
|  Area Outside 1,000 ft Setback |  Railroads | |
|  UGB |  County Roads | |
|  Taxlots |  Rivers & Streams | |

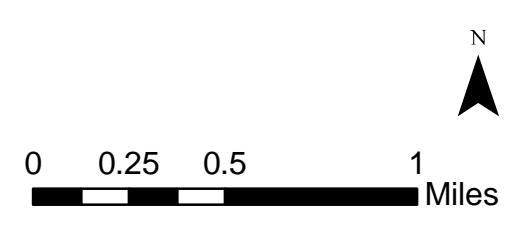


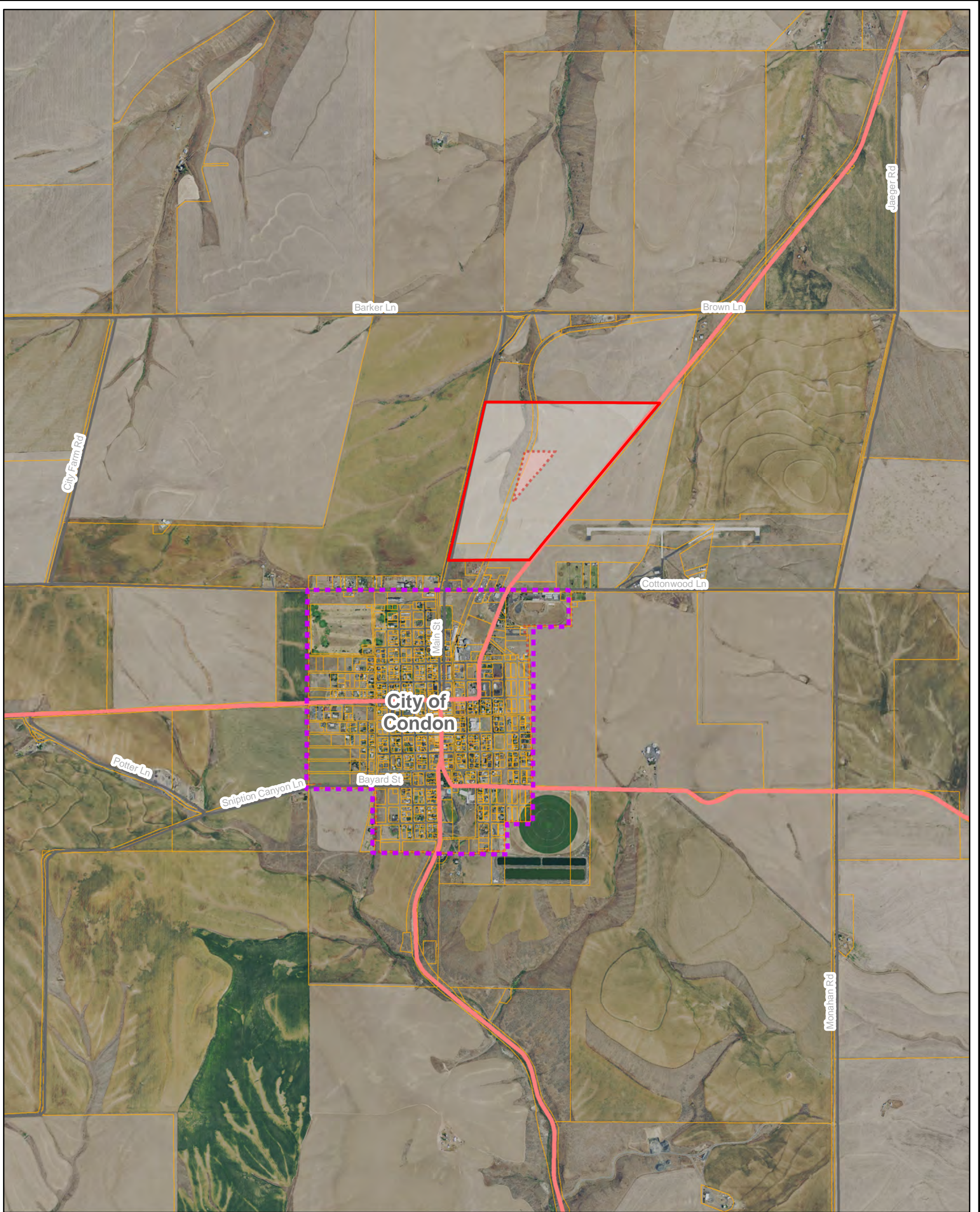


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative D Siting Considerations

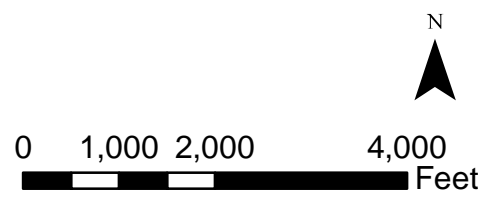
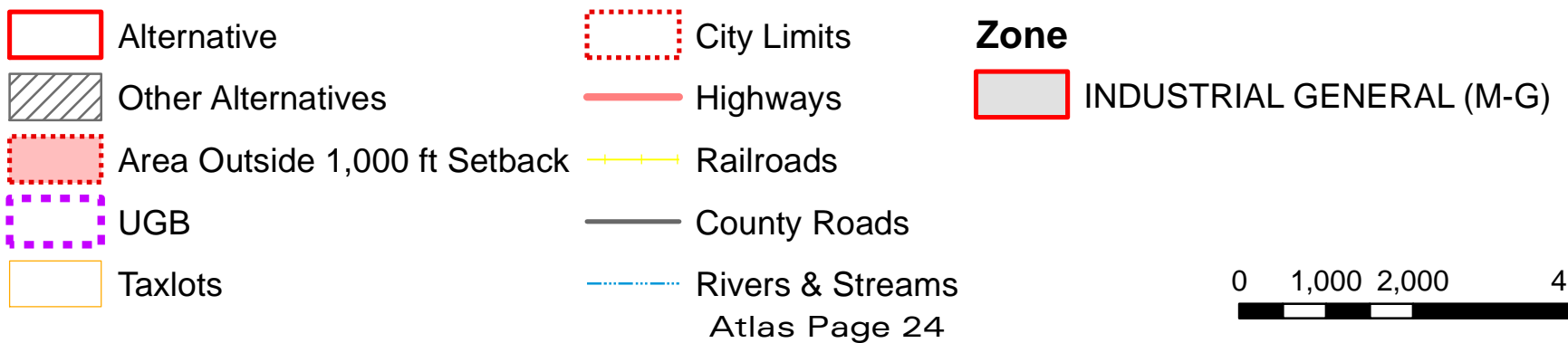
- 1 Mile Locational Separation
- Alternative
- UGB
- City Limits
- Gilliam Taxlots
- Highways
- Railroads
- County Roads
- Rivers & Streams
- Faults

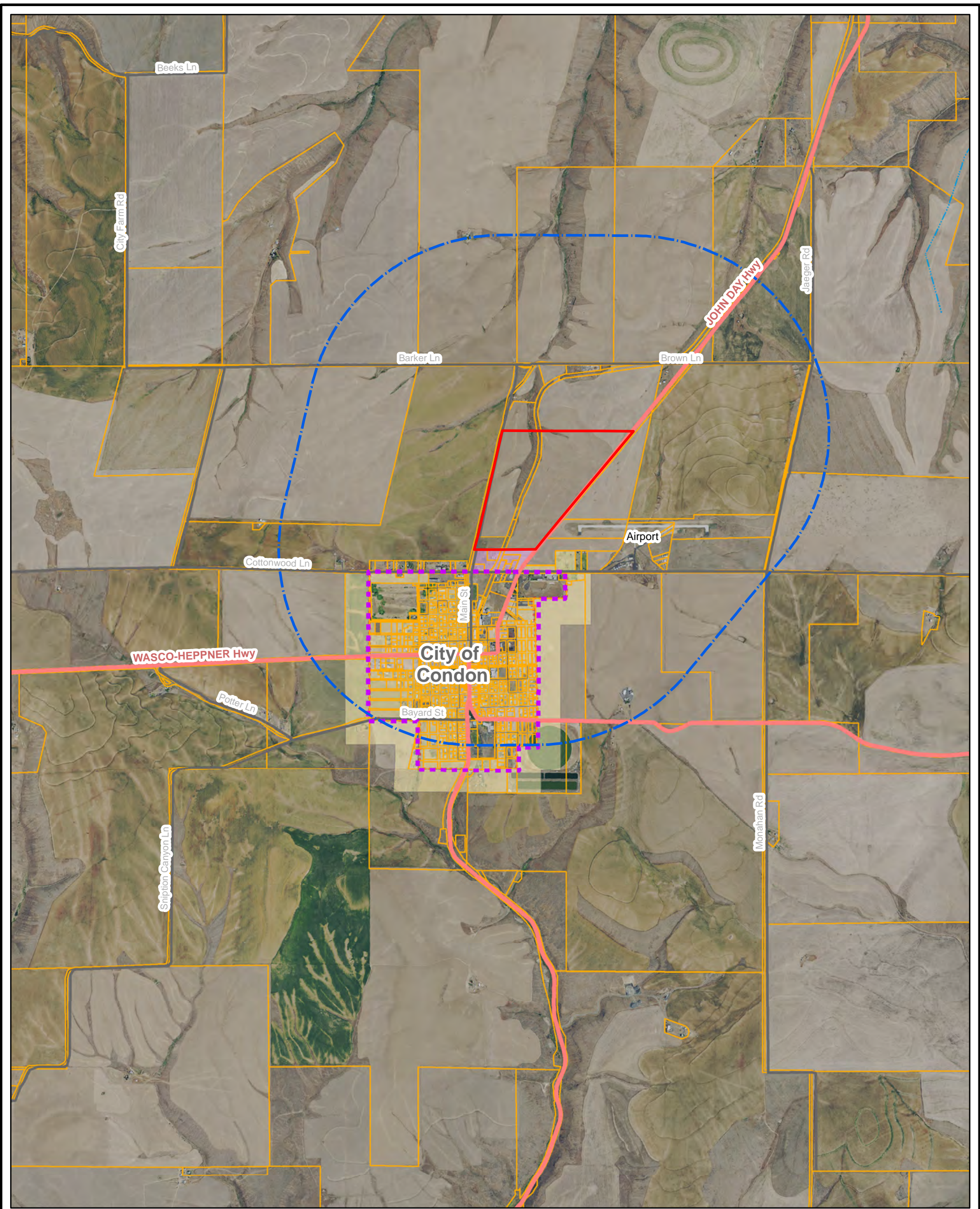




GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION





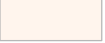





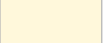


Alternative E Siting Sufficiency

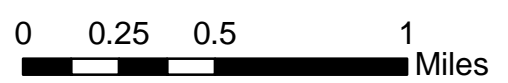


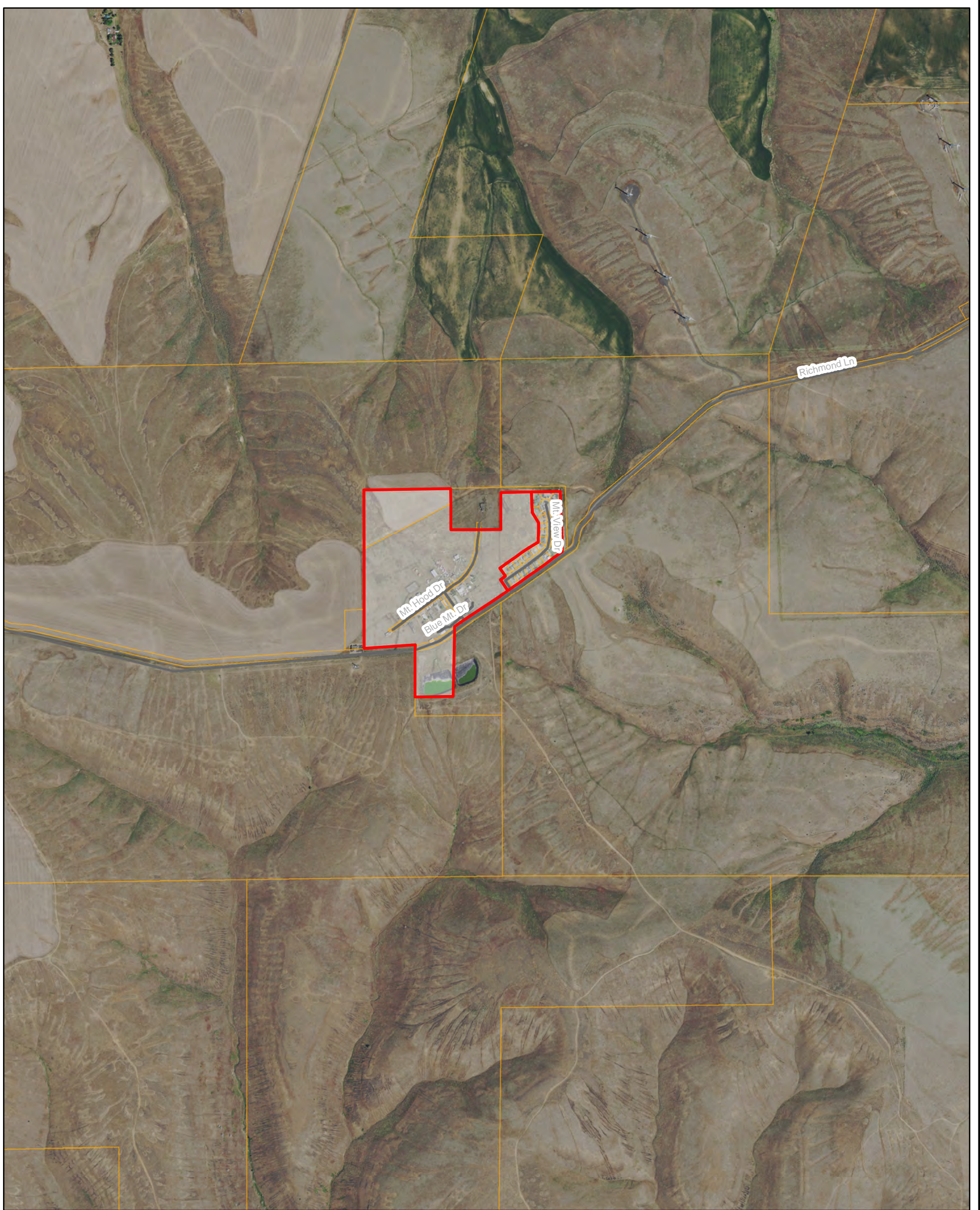


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative E Siting Considerations





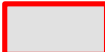





 Alternative	 Highways	Conflicting Zones
 1 Mile Locational Separation	 Railroads	 COMMERCIAL
 UGB	 County Roads	 RURAL RESIDENTIAL 2
 City Limits	 Rivers & Streams	 SINGLE FAMILY RESIDENTIAL
 Taxlots	 Faults	

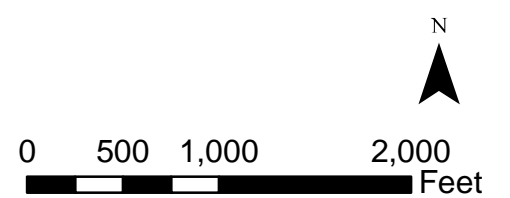




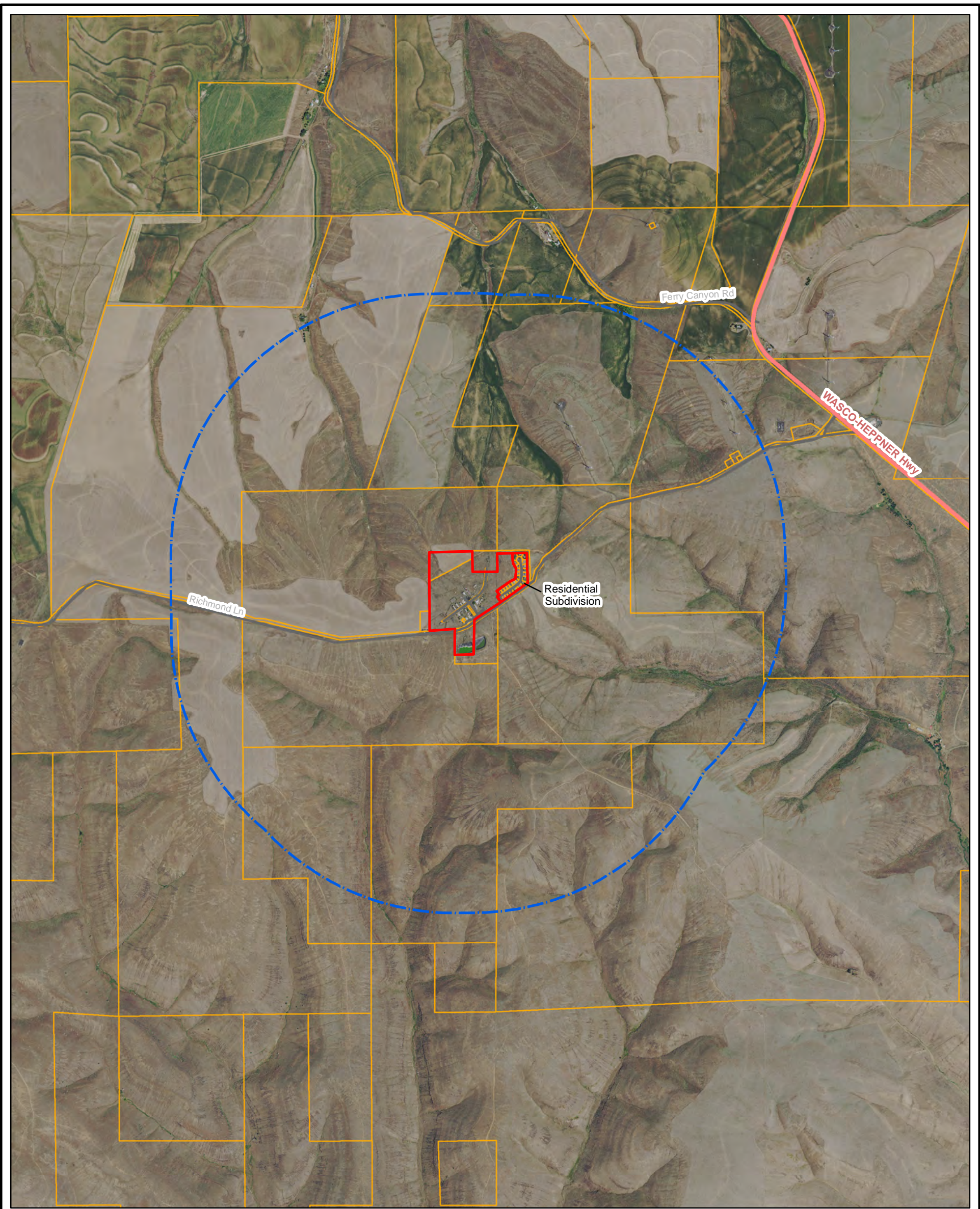
GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative F Siting Sufficiency

- | | | |
|--|--|--|
|  Alternative |  Highways | Zone |
|  Other Alternatives |  Railroads |  INDUSTRIAL GENERAL (M-G) |
|  Area Outside 1,000 ft Setback* |  County Roads | |
|  UGB |  Rivers & Streams | |
|  Taxlots | | |













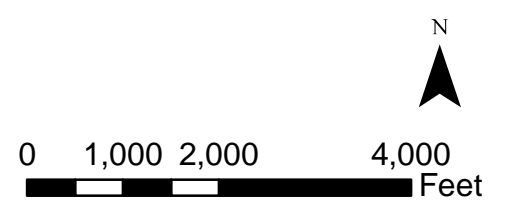
*No area is outside the 1,000 ft Prop Line Setback

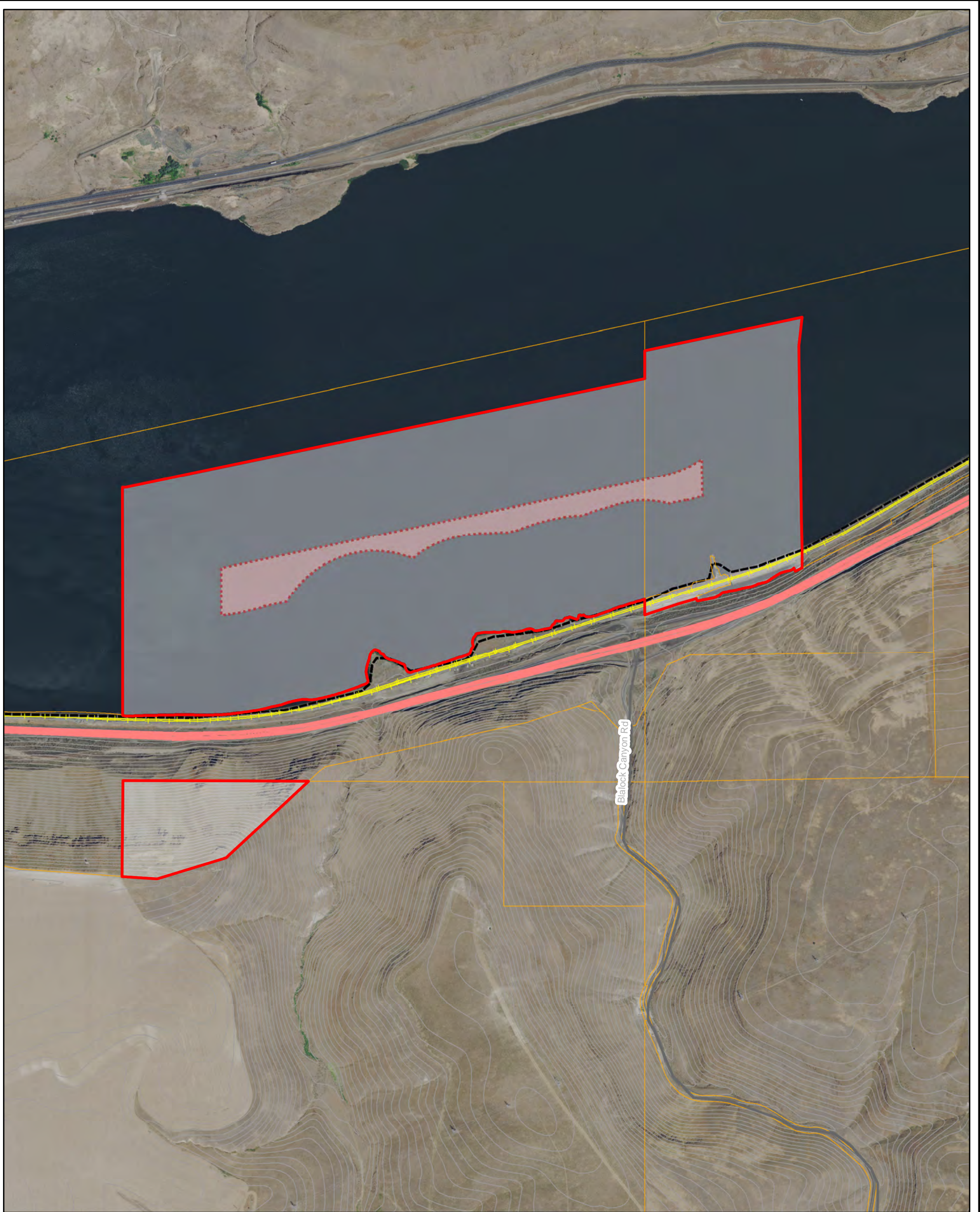


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative F Siting Considerations

- | | |
|--|--|
|  Alternative |  Highways |
|  1 Mile Locational Separation |  Railroads |
|  UGB |  County Roads |
|  City Limits |  Rivers & Streams |
|  Taxlots |  Faults |

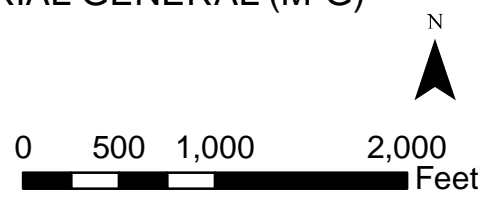


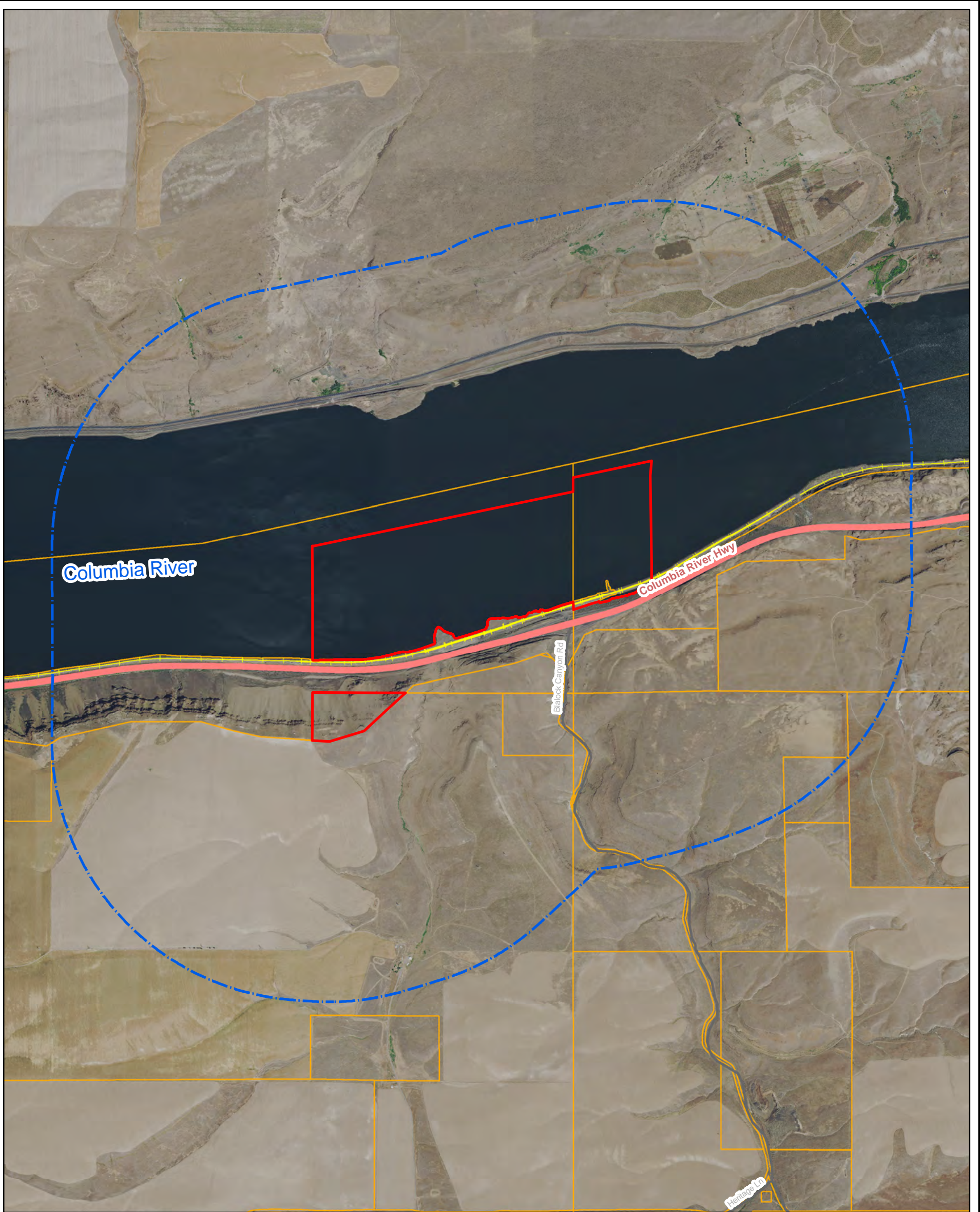


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative G Siting Sufficiency

- | | | |
|-------------------------------|------------------|--------------------------|
| Alternative | Gilliam County | 20 ft Elevation Contours |
| Other Alternatives | Highways | Zone |
| Area Outside 1,000 ft Setback | Railroads | INDUSTRIAL GENERAL (M-G) |
| UGB | County Roads | |
| Taxlots | Rivers & Streams | |

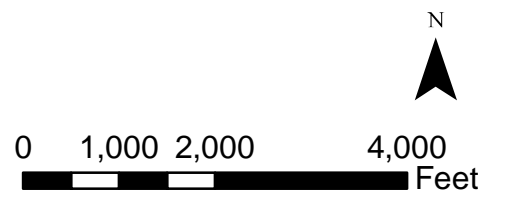


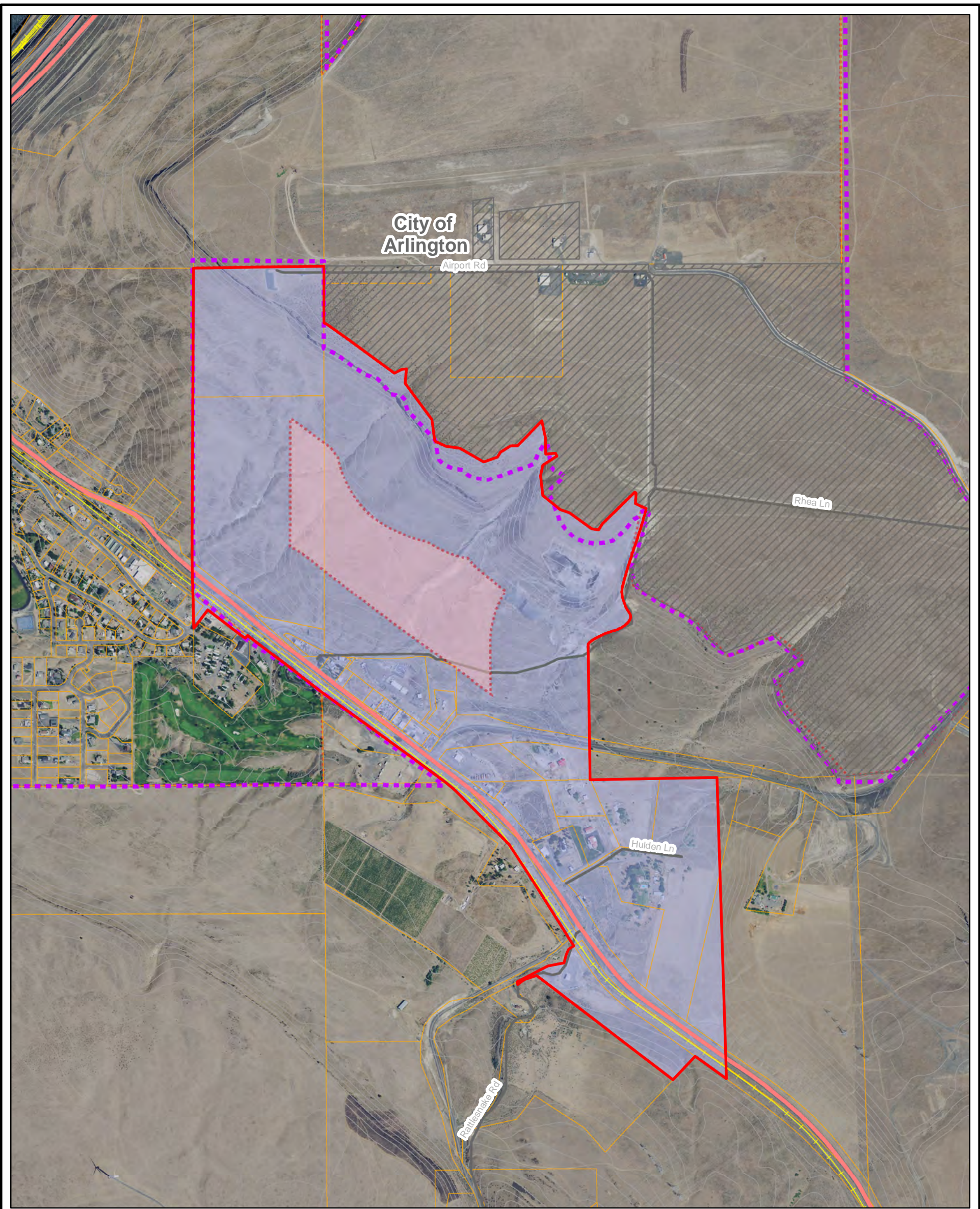


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative G Siting Considerations

- | | |
|------------------------------|------------------|
| Alternative | Highways |
| 1 Mile Locational Separation | Railroads |
| UGB | County Roads |
| City Limits | Rivers & Streams |
| Taxlots | Faults |

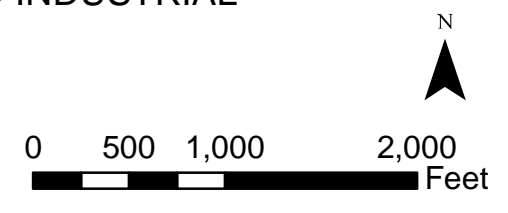


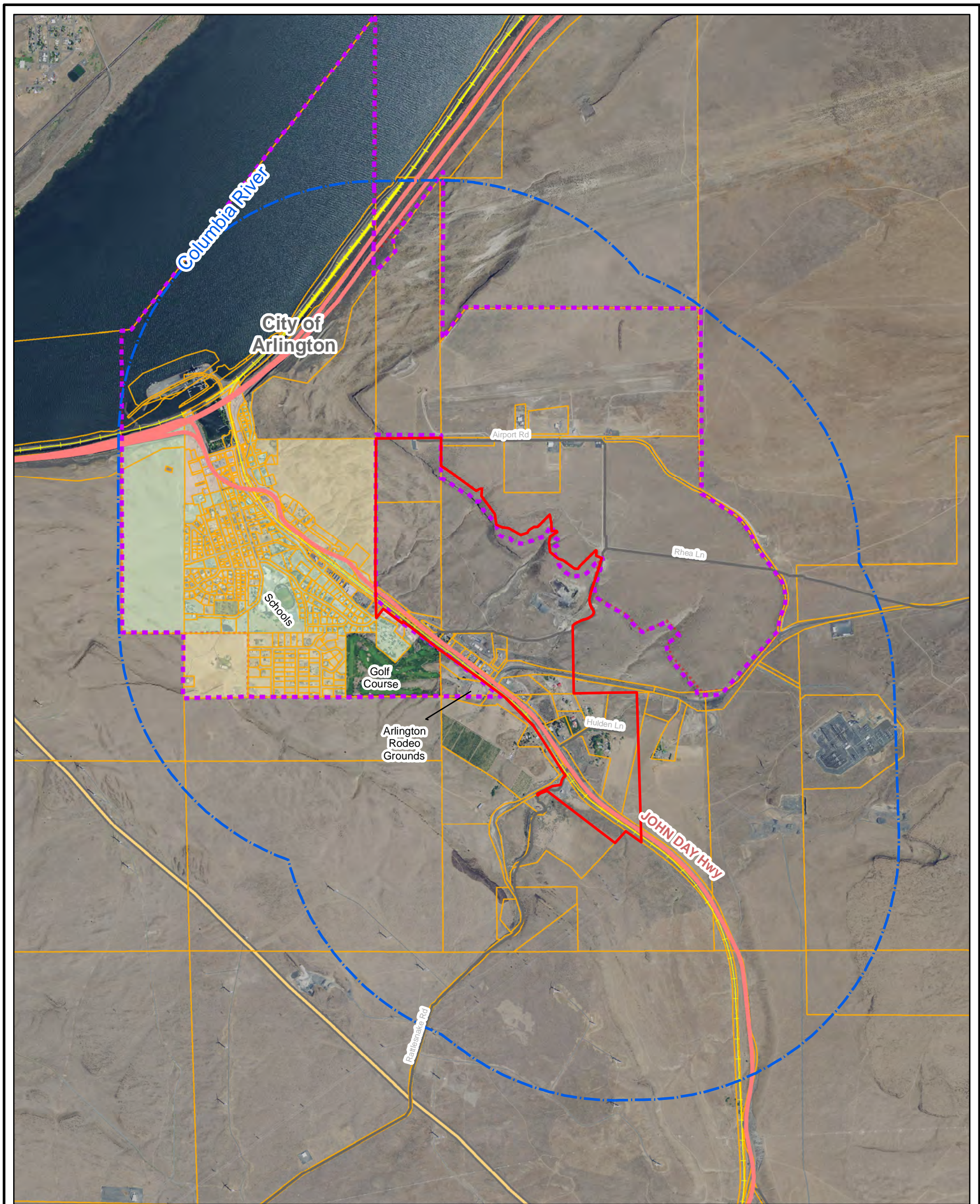


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative H Siting Sufficiency













- | | | |
|-------------------------------|------------------|--------------------|
| Alternative | Gilliam County | Elevation Contours |
| Other Alternatives | Highways | Zone |
| Area Outside 1,000 ft Setback | Railroads | LIMITED INDUSTRIAL |
| UGB | County Roads | |
| City Limits | Rivers & Streams | |
| Taxlots | | |

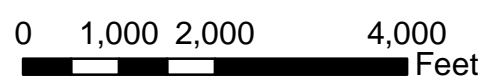


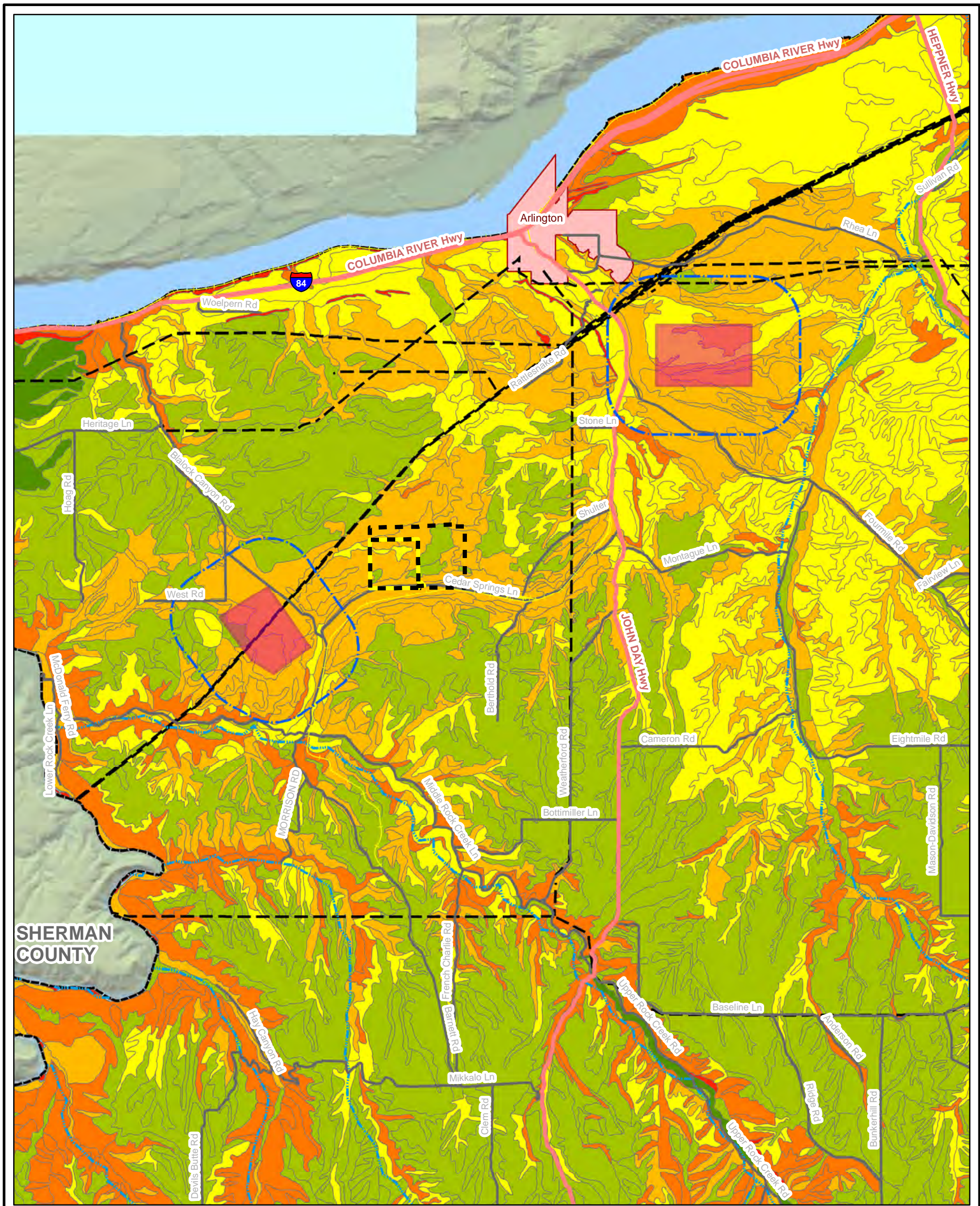


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Alternative H Siting Considerations










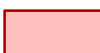


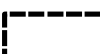

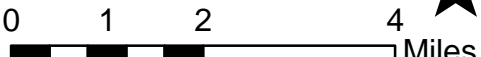

 Alternative	 Highways	Conflicting Zones
 1 Mile Locational Separation	 Railroads	 COMMERCIAL
 UGB	 County Roads	 MULTI FAMILY RESIDENTIAL
 City Limits	 Rivers & Streams	 SINGLE FAMILY RESIDENTIAL
 Taxlots	 Faults	

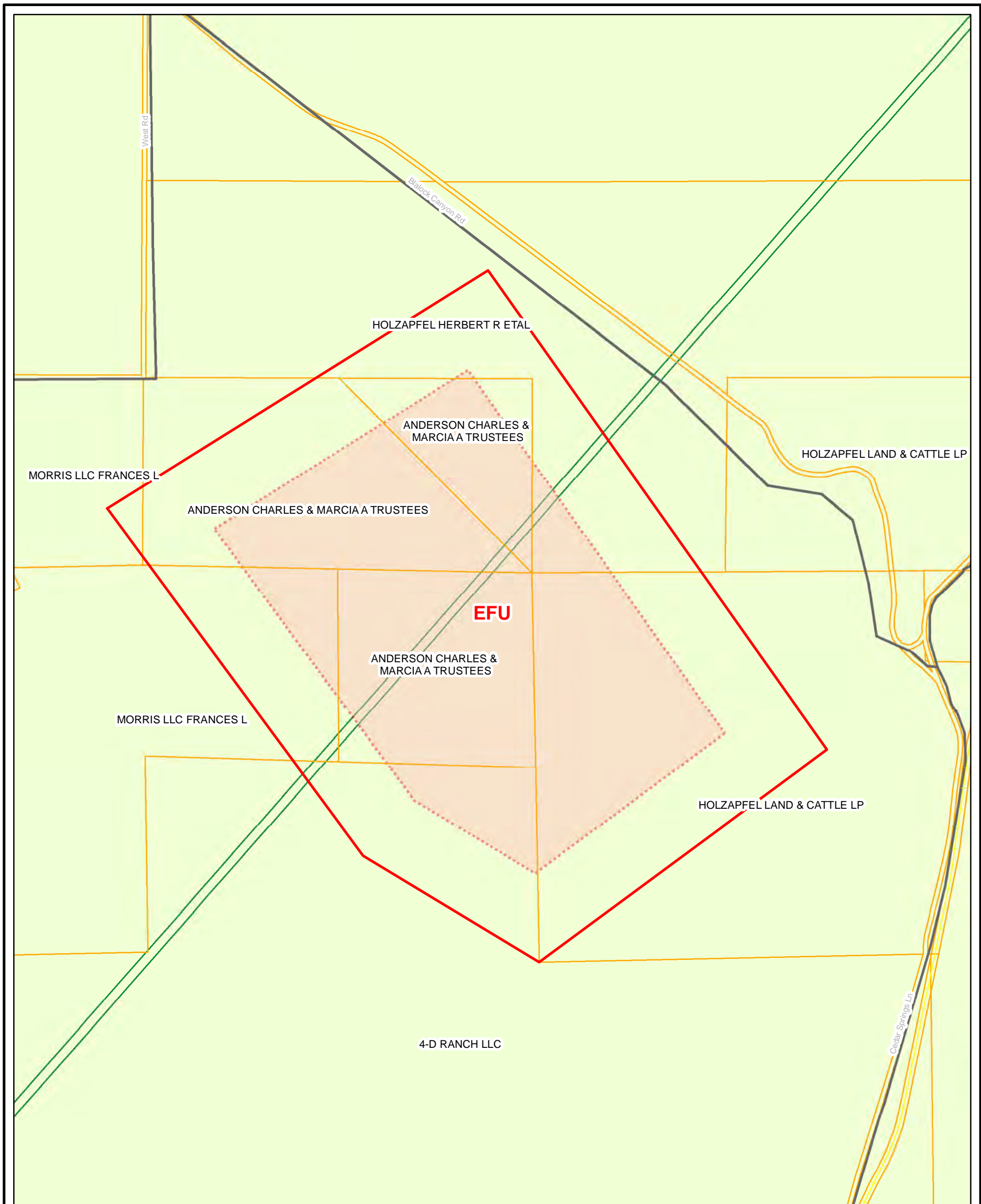




GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Theoretical Alternatives Requiring an Exception

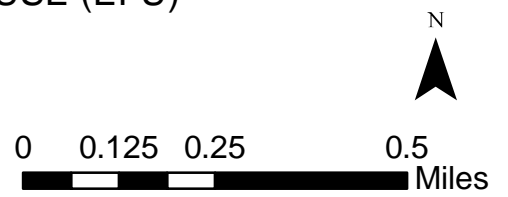
 Alternatives	 Highways	Non-Irrigated Soils Class	 6
 1 Mile Locational Separation	 Railroads		 7
 Existing Facility	 County Roads		 8
 City Limits	 Rivers & Streams		 4
 Gilliam County	 Major Transmission Lines	 	
Atlas Page 32			

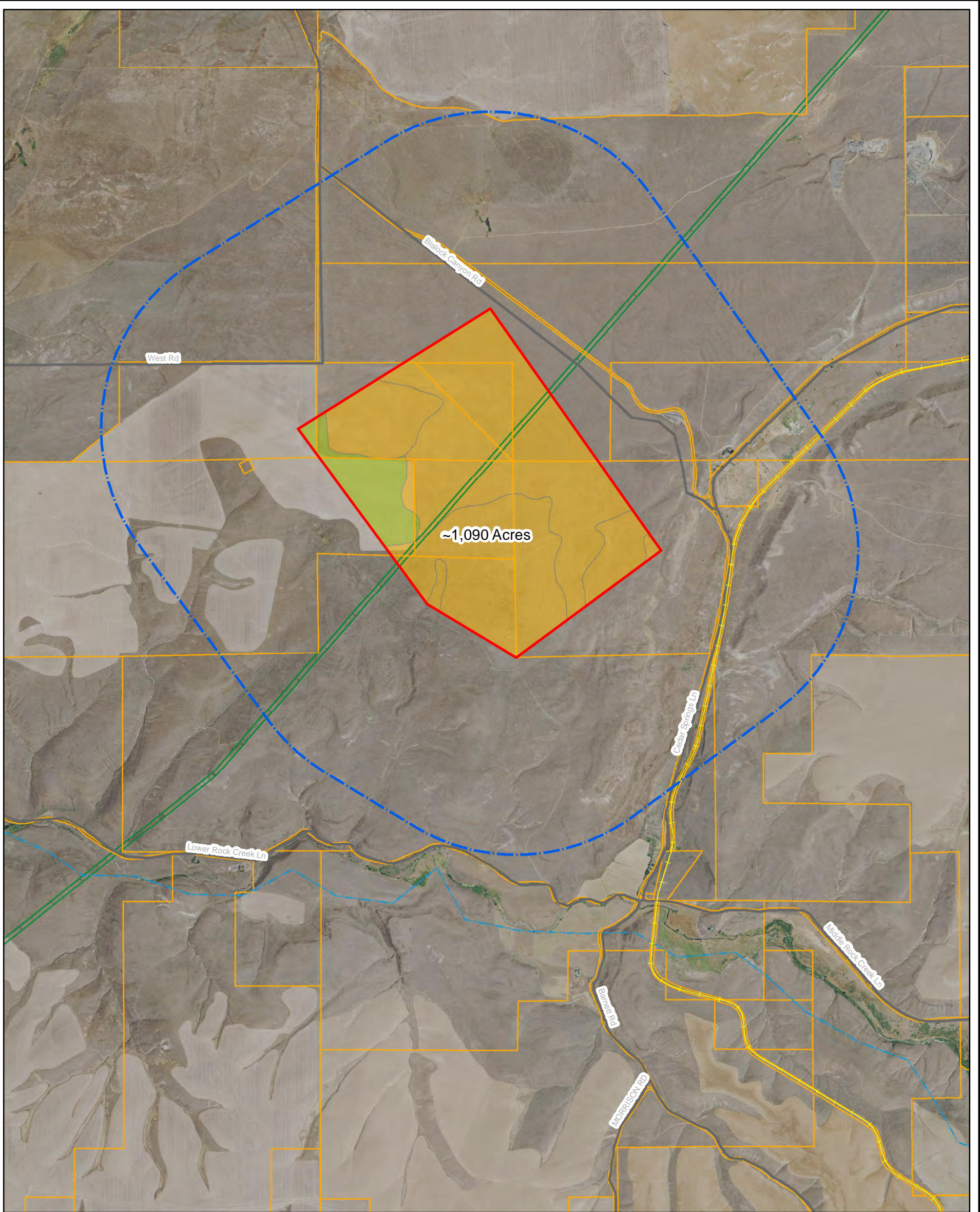


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Theoretical Site 1 ESEE Site Sufficiency











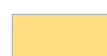


- | | | |
|-------------------------------|--------------------|----------------|
| Theoretical Alternative | Highways | Faults |
| Taxlots & Owners | Railroads | Zone |
| City Limits | County Roads | FARM USE (EFU) |
| UGB | Rivers & Streams | |
| Area Outside 1,000 ft Setback | Transmission Lines | |

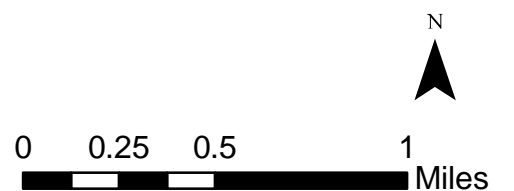


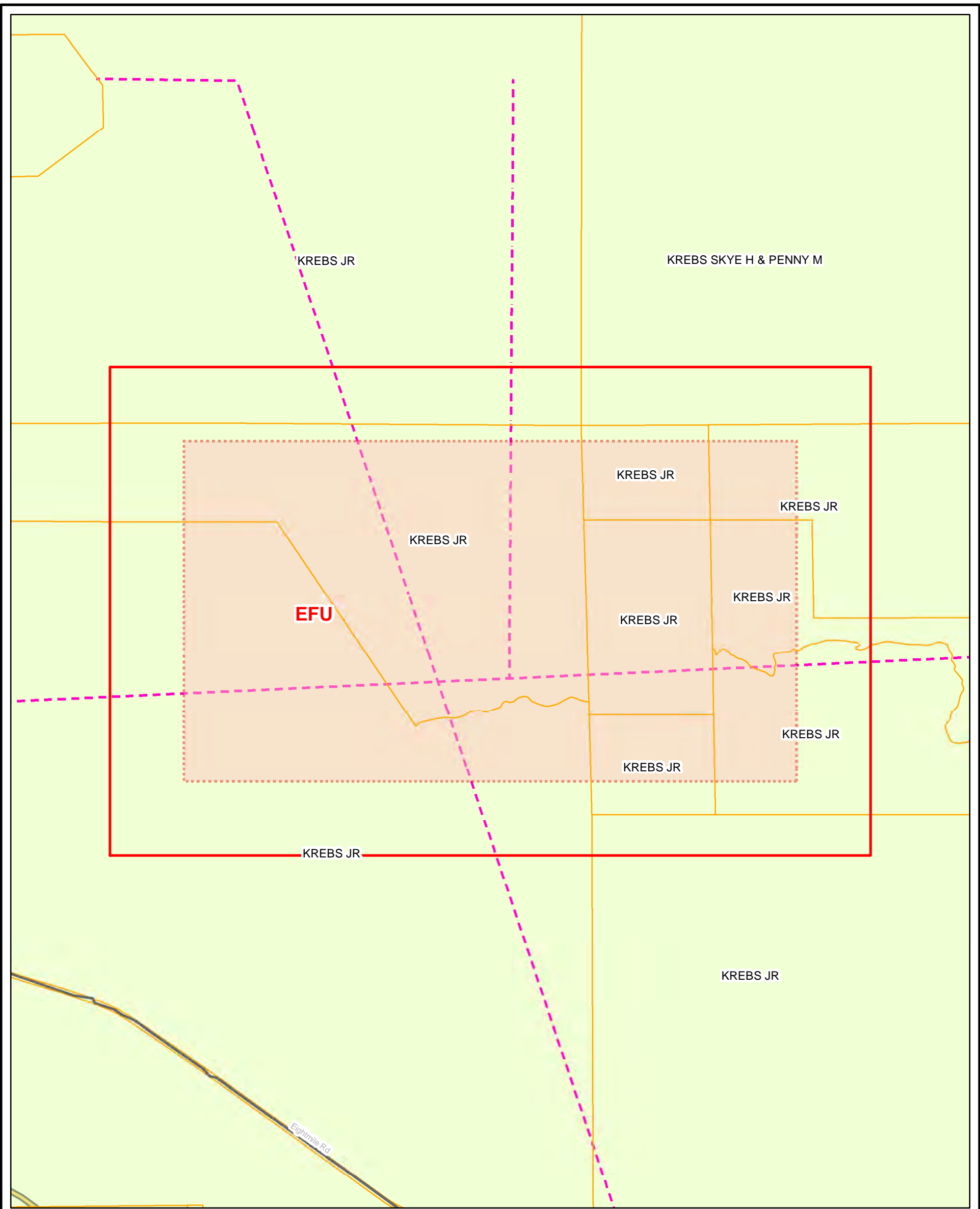


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Theoretical Site 1 ESEE Siting Considerations

- | | | |
|--|---|--|
|  1 Mile Locational Separation |  Highways |  Faults |
|  Theoretical Alternative |  Railroads | Non-Irrigated Soil Class |
|  UGB |  County Roads |  3 |
|  City Limits |  Rivers & Streams |  6 |
|  Taxlots |  Major Transmission Lines | |

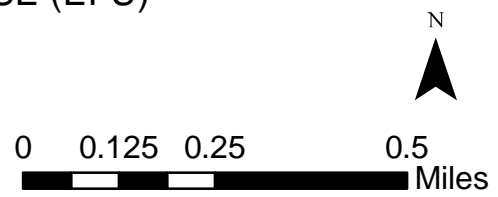


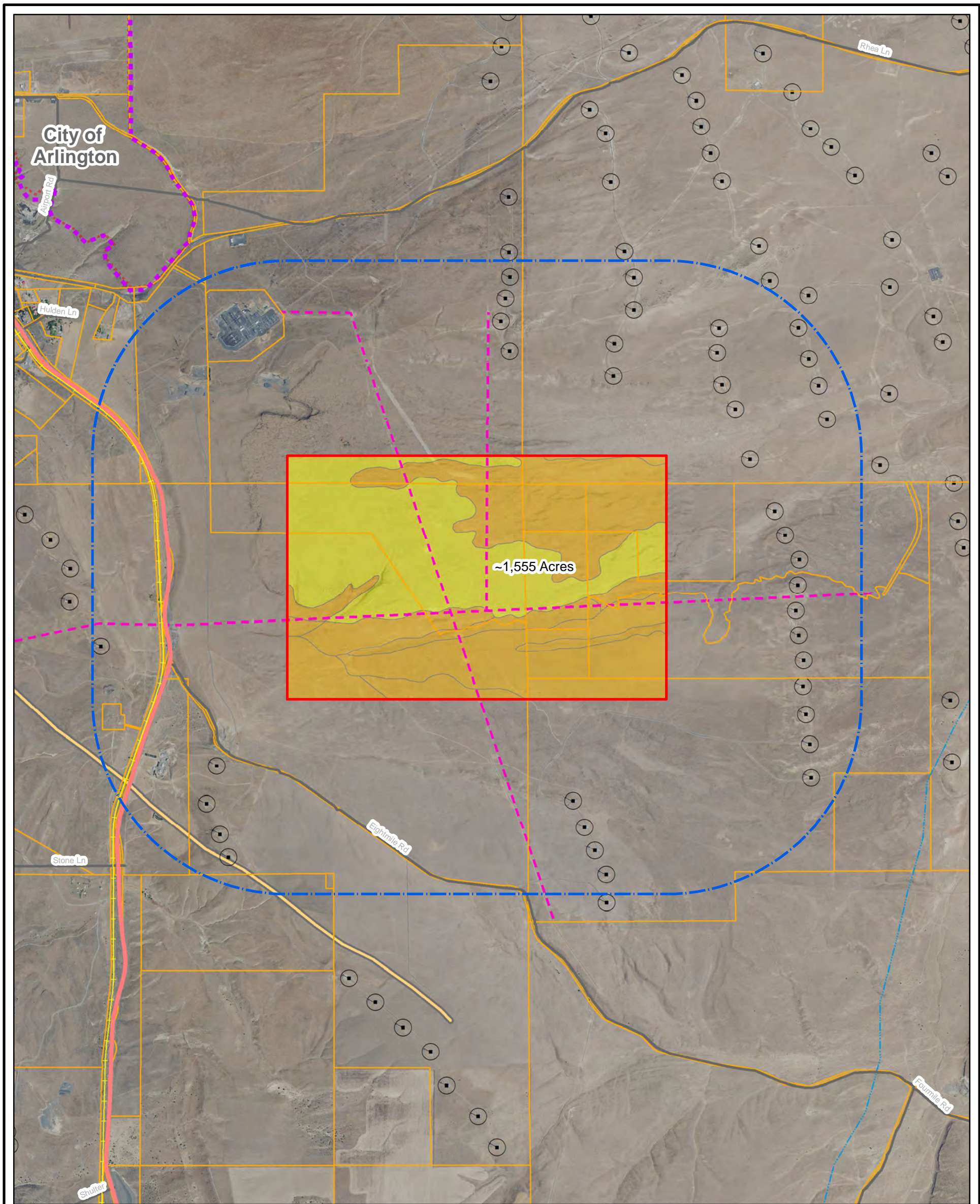


GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Theoretical Site 2 ESEE Site Sufficiency

Theoretical Alternative	Highways	Faults
Taxlots & Owners	Railroads	Zone
City Limits	County Roads	FARM USE (EFU)
UGB	Rivers & Streams	
Area Outside 1,000 ft Setback	Power Lines	

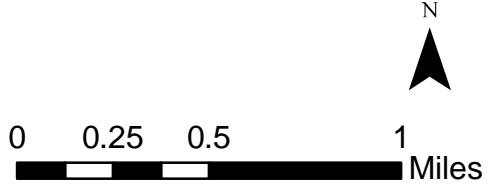




GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Theoretical Site 2 ESEE Siting Considerations

- | | | |
|------------------------------|------------------|---------------------------------|
| 1 Mile Locational Separation | Highways | Wind_Turbine |
| Theoretical Alternative | Railroads | Faults |
| UGB | County Roads | Non-Irrigated Soil Class |
| City Limits | Rivers & Streams | 4 |
| Gilliam Taxlots | Power_Lines | 6 |



Goal Exception, Zone Change, and Conditional Use Permit Application

Volume 3 *Alternatives Analysis and Compatibility Analysis*

Prepared for:
Chemical Waste Management
of the Northwest

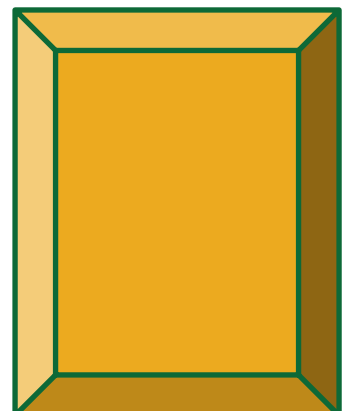
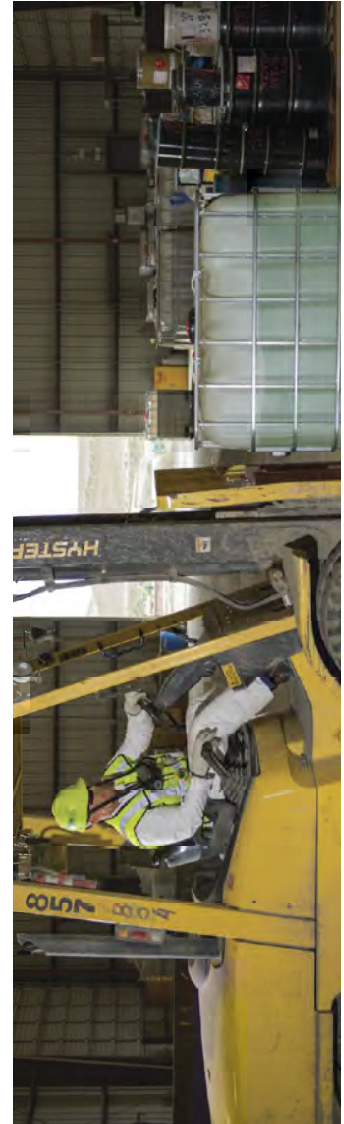
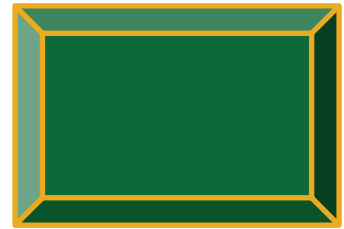


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March 30, 2022





March 30, 2022

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RE: Subtitle C TSDF Expansion & Goal Exception

This document constitutes Applicant's **Volume 3 Alternatives Analysis and Compatibility Analysis**. The analyses in this document are provided as evidentiary support of the application submittal in Applicant's Volume 1. This Volume 3 contains the following fundamental components:

- Analysis of Alternative Sites Not Requiring a new Goal Exception
- Analysis of Alternative Sites that would require a new Goal Exception
- Compatibility Analysis of the proposed use allowed by the Goal Exception with surrounding agricultural uses.

This document includes data and analysis prepared by land use planners with demonstrated expertise in the State of Oregon. The analysis directed to address the requirements of OAR 660 Division 04. On this basis, the data and analysis presented herein constitute facts upon which a reasonable person can base land use decisions, specifically regarding the analysis of alternative sites to satisfy the identified need for additional land to be planned for future hazardous waste treatment, storage and disposal at a Subtitle C TSDF in Gilliam County.

The required analysis is complex and some technical and analytical choices are required. Where such choices were necessary, this document employs methods to evaluate alternative lands based upon the best available data and CSA's understanding of proper application of the applicable State regulations. Volume 3 strikes a balance between rigorous methodology and analysis to comply with Division 04 but presented in a manner that is understandable to the lay reader.

Respectfully Submitted,

CSA Planning, Ltd.

A handwritten signature in blue ink, appearing to read 'Jay Harland', is written over a horizontal line.

Jay Harland
President

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ACRONYM AND ABBREVIATION LIST

CFR:	Code of Federal Regulations
CWMNW:	Chemical Waste Management of the Northwest, Inc.
DLCD:	Department of Land Conservation and Development
EFU:	Exclusive Farm Use [zone designation]
EPA:	United States Environmental Protection Agency
ESA:	Endangered Species Act
GCZO:	Gilliam County Development and Zoning Ordinance
LCDC:	Land Conservation and Development Commission
LDR:	Land Disposal Restrictions
LUCS:	Land Use Compatibility Statement
NRCS:	Natural Resource Conservation Service
OAR:	Oregon Administrative Rule(s)
ODEQ:	Oregon Department of Environmental Quality
ORS:	Oregon Revised Statute(s)
PFAS:	PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals
RCRA:	Resource Conservation and Recovery Act (Federal Law)
TPR:	Transportation Planning Rule
TSDF:	Treatment, Storage, and Disposal Facility
UGB:	Urban Growth Boundary



1 ALTERNATIVE SITES ANALYSIS METHODOLOGY

OAR 660-004 requires counties to undertake an Alternative Sites Analysis as part of a Goal Exception review. The purpose of the Alternative Sites Analysis is to evaluate the extent to which the use proposed in the Goal Exception can reasonably be accommodated either on land that would not require a new Goal Exception, and if not, evaluate if other alternative sites that would also require a Goal Exception would result in significantly less adverse economic, social, environmental and energy consequences. The specific criteria for Goal Exception are set forth in Applicant's Volume 1. Maps illustrating the Alternative Sites considered and evaluated in this analysis are provided in Volume 2; providing the maps in a separate volume allows the reader to more easily review the maps and read the text concerning different areas that were evaluated.

The Alternative Sites Analysis begins by setting out the site requirements for the use and locational considerations. These elements are then applied in the balance of the analysis to evaluate potential alternative sites.

1.1 Site and Use Requirements

As set forth in Volume 1, Sections 4.3 and 4.7, the existing Subtitle C treatment, storage, and disposal facility ("TSDf") has the need to expand in order to accommodate future hazardous waste flows. This section, with additional information in the Findings of Fact in Volume 1, sets out the site and use requirements for the Subtitle C TSDf. These requirements are then compared to alternative sites later in the analysis to assess the adequacy of, and the impacts of, a potential alternative site for a second Subtitle C TSDf in Gilliam County in lieu of expanding the existing TSDf.

1.1.1 Operational Facilities Requirements

Size Requirements

This type of use requires sufficient economy of scale to operate efficiently. The Alternative Sites Analysis herein is based on, and assumes as fact, the existence of the *land use need* identified in Section 4.3.4 and 4.7 of Applicant's Volume 1. That *land use need* determines the amount of land that should be planned for future Subtitle C TSDf needs and is then applied in the alternatives analysis in conjunction with the *minimum* acreage requirement of 200 acres set forth in the Gilliam County Development and Zoning Ordinance (GCZO Section 4.060 (B)(9)(a)).

Accessible via existing rail network/transportation in general

Immediate accessibility to a rail spur that is connected to a Class 1 railroad is strongly preferred. Such access reduces the road miles traveled between the rail spur and the TSDf. Rail is both the most efficient and safest method for transporting hazardous waste. Thus, immediate access to a rail spur that connects to a Class 1 railroad has the additional benefits of being the most energy efficient transportation option, provides the greatest reduction of greenhouse gas emissions, and reduces potential for trucks getting in accidents by reducing their time on the road.

Requires leachate facilities / Surface impoundment

Leachate ponds for liquid hazardous waste management are relatively expensive to construct and operate, even more so than similar facilities at Subtitle D facilities, and require special consideration.



Requires waste water treatment units

Hazardous liquids require treatment to meet Land Disposal Restrictions (“LDR”) standards, and wastewater treatment employs multiple technologies that are contaminant specific. The wastewater treatment units require specialized management and care.

Requires outdoor waste storage units

Waste arriving at the TSDF in some cases requires storage prior to treatment, or prior to being sent off-site for additional treatment. The outdoor storage requires specialized management and care.

Requires recovery facilities like petroleum recycling

Petroleum recovery facilities require specialized management and care. ODEQ permitting *strongly encourages* waste recovery facilities be integrated with hazardous waste disposal activities.

Requires sampling station

A sampling station is required where waste enters the facility. This station is used to take samples from shipments for processing at the on-site lab before the shipper can offload the waste and CWMNW can accept it.

Requires an on-site lab

An onsite lab is necessary. Loads need to be tested to verify the chemical contents are consistent with the shipper’s manifest before waste can be accepted at the facility. This type of chemical lab requires specialized equipment, personnel and recordkeeping to assure the TSDF is accepting only wastes that are consistent with its permits and the design and management of the TSDF.

Requires stabilization units

Stabilization units are used to mix wastes transported to the TSDF with reagents and other materials to stabilize the waste before landfilling. These treatment units and equipment require specialized management and care to assure that wastes are properly stabilized before being placed into the landfill.

Requires containment storage buildings

Containment storage buildings are required to hold wastes that require further processing before landfilling can occur. These buildings are also used to hold wastes as part of a mixed load a portion of which may need to be transferred to a different facility for permanent disposal. The containment storage buildings require specialized management and care.

Site Availability

In order to meet the need for a Subtitle C TSDF, the land must be at least *theoretically* acquirable for that purpose, otherwise it is not feasible to consider that land for a new facility. For example, public lands owned by the State of Oregon or Federal government are generally considered to be infeasible to acquire for the purposes of establishing the proposed use. Public land acquisition for private enterprise is a difficult task, generally, and acquisition for a hazardous waste disposal facility specifically would be expected to be virtually impossible.

1.1.2 Physical Site Requirements

Minimal Precipitation

Subtitle C TSDFs should not be located in places with high amounts of precipitation – if at all practicable. Precipitation creates leachate, especially prior to closure, and the more leachate a treatment unit has to deal with, the more time and resources are required, making the management



effort more expensive. According to maps provided by the State of Oregon, Gilliam County precipitation is more or less uniform and annual precipitation is relatively low, regardless of location in the County.

Geology/Hydrology

The geology needs to be stable. In other words, a relatively low likelihood of significant seismic activity that would have the potential to damage the engineered liners is necessary. The hydrology should not readily transport water from the site into nearby surface waters or aquifers.

Minimal Slopes

Landfill construction and management is safest, most cost effective, and most efficient when it is done on lands with minimal slopes. Most significantly, flat land makes runoff and leachate management less complicated.

1.2 Subtitle C TSD Locational Considerations

In addition to analyzing alternatives in relation to the site requirements, each alternative was examined for compatibility with their surrounding uses. Standards of compatibility are derived from several sources, including the Gilliam County Comprehensive Plan, Federal and State locational standards for hazardous waste facilities, and principals of sound land use planning. For example, the Gilliam County Comprehensive Plan maps natural resources that are to be protected, the State identifies natural and wildlife areas in the County, while the Federal Government requires all new hazardous waste be a certain distance from known geological faults.

A list of these locational considerations is described below:

Federal Location Standards: Standards for siting hazardous waste facilities¹ require that the portion of new facilities that contain treatment, storage, or disposal of hazardous waste must not be located within 61 meters (200 feet) of a fault which has displacement in the Holocene. They also require additional safety precautions and engineering when located in a 100-year floodplain.

Oregon Location Standards: In addition to Federal standards, the State of Oregon has its own regulatory requirements for siting hazardous waste TSDs. ORS 466.055 sets forth the statutory locational separation requirements for new facilities treating or disposing of hazardous waste. ORS 466.055(1)(c) requires that a new facility:

(c) Is situated sufficient distance from urban growth boundaries, as defined in ORS 197.286, to protect the public health and safety, accessible by transportation routes that minimize the threat to the public health and safety and to the environment and sufficient distance from parks, wilderness and recreation areas to prevent adverse impacts on the public use and enjoyment of those areas.

This statutory requirement is implemented by OAR 340-120-0010 and OAR 340-120-0015. Subsections 2(d)(A) and Subsection 2(e) of OAR 340-120-0010 separate landfill and treatment specific locational separation requirements. These subsections are reproduced here:

(d) Location:

(A) The facility shall be sited at least one mile from:

(i) Areas within urban growth boundaries as defined by ORS 197.295;

(ii) Wilderness, parks, and recreation areas as designated or identified (if appropriate) in the applicable local comprehensive plan or zoning maps;

¹ § 264.18 Location standards



(iii) Schools, churches, hospitals, nursing homes, retail centers, stadiums, auditoriums and residences except those owned by the applicant and necessary for the operation of the facility.

(B) The Department may consider a lesser distance for subparagraphs (2)(d)(A)(ii) and (iii) if the applicant demonstrates that the lesser distance adequately protects the public health and safety and the environment.

(e) Property Line Setback:

(A) Hazardous waste and PCB treatment and disposal facilities, other than land disposal facilities, on the site of waste generation shall have at least a 250-foot separation between active waste management areas and facilities, and property boundaries;

(B) Hazardous waste and PCB treatment and disposal facilities off the site of waste generation and land disposal facilities on the site of waste generation shall have at least a 1,000-foot separation between active waste management areas and facilities, and property boundaries.

Subsection 1 of OAR 340-120-0015 also has specific locational separation requirements. This subsection is reproduced below:

- (1) For facilities listed in OAR 340-120-0001(2), the land use compatibility statement of OAR 340-105-0013 must include findings that at least considered the following criteria:
 - (a) To assure low density populations around a facility, the facility shall be sited at least the following distances from an acknowledged urban growth boundary:
 - (A) One mile from areas within an urban growth boundary containing a population of 2500 people or less;
 - (B) Two miles from areas within an urban growth boundary containing a population between 2,500 and 10,000 people; and
 - (C) Three miles from areas within an urban growth boundary containing a population of 10,000 people or greater.
 - (b) The facility shall be sited at least one mile from the following, as designated or identified (if appropriate) in the comprehensive plan or on zoning maps:
 - (A) Schools, churches, hospitals, nursing homes, retail centers, stadiums, auditoriums or residences not owned by the applicant;
 - (B) Wilderness, parks, and recreation areas;
 - (C) Scenic view sites;
 - (D) Federal and state scenic waterways;
 - (E) Destination resorts;
 - (F) Rural communities and rural residential areas;
 - (G) Public airports.
 - (c) The facility shall be sited at least one quarter mile from the following, as designated or identified (if appropriate) in the comprehensive plan or on zoning maps:
 - (A) Perennial surface water (including rivers, streams, lakes, oceans, and reservoirs), estuaries and wetlands;
 - (B) Historic and cultural areas;
 - (C) Ecologically and scientifically significant natural areas;
 - (D) Municipal watersheds;
 - (E) Flood hazard areas;
 - (F) Slide hazard areas;
 - (G) Willamette River Greenway;
 - (H) Coastal shorelands, beaches and dunes;
 - (I) Active seismic faults.
 - (d) The proposed facility is allowable in the applicable zone and will comply with all applicable development standards in the local land use regulations;
 - (e) The facility shall not prevent the use of adjacent lands for uses permitted or otherwise allowed in the applicable zone;



- (f) Emergency services, including medical care, to respond to and address emergencies and accidents at the facility or involving wastes traveling on local transportation routes to the facility have been identified and their adequacy has been assessed;
- (g) The facility shall have more than one transportation highway to it;
- (h) The appropriate city, county and state highway or transportation departments have reviewed the local transportation routes to the facility for safety and their recommendations for improvements shall be implemented prior to first waste receipt at the facility.

Separation from Potentially Incompatible Uses: The OARs list a number of uses that should be locationally separated from new Subtitle C TSDFs. Although the purpose of Subtitle C TSDFs is to operate a facility for the safe treatment, storage, and disposal of hazardous wastes, residential uses, for example, should be locationally separated from a Subtitle C TSDF. Subtitle C TSDFs present unavoidable public perception challenges, if nothing else, and most people would prefer not to live near a hazardous waste TSDF. Industrial uses, which themselves often have negative externalities, are generally considered as not conflicting with a TSDF. This is evidenced by the fact that the existing TSDF is allowed only in an industrial zone in Gilliam County. Other niche uses may have conflicts with a TSDF use. In particular, both the State and Federal rules contain location restrictions for separating hazardous waste facilities from airports.

Goal 5 resources: All other things being held equal (*ceteris paribus*), any new facility should be sited away from Goal 5 resources as they are catalogued in Gilliam County's Comprehensive Plan. A Subtitle C facility may have additional visual impacts compared to other potential uses. This may not affect all Goal 5 resources equally. For example, the estimated visual impacts of a TSDF are minimal when near an aggregate mining operation, but potentially significant to the Columbia River waterfront whose intrinsic value is linked to the natural setting. Regardless, it is recommended to keep potential facilities distant from Goal 5 resources when possible. Such resources located Gilliam County include but are not limited to the following:

- Columbia River waterfront
- Fishery resources
- Rivers
- Big game winter habitat
- State of Oregon Wildlife Areas
- Upland – waterfowl habitats
- Natural resource sites identified by Nature Conservancy
- Significant aggregate resources

Endangered Species: A review of Endangered Species maps found in online resources from the U.S. Fish and Wildlife Service indicated that only one species presently classified as Endangered in the State of Oregon may be present in Gilliam County. The species, the Canadian Lynx, may have habitat that overlaps with the southerly portion of Gilliam County.

Impacts to Farm and Forest Lands: Conflicts with existing commercial farming or forestry uses should be avoided to the extent practicable. All things being equal, the use of high-value farmland or impacts to highvalue farmland should be avoided if possible.

Devoted to non-farm uses: According to the Oregon Energy Facilities Map published by the Oregon Department of Energy, Gilliam County is home to wind power facilities generating approximately 1,300 MW of energy. Sites that are built with wind power facilities are considered devoted to a non-farm use. Wind power facilities near or adjacent to a Subtitle C facility do not appear to be a substantial conflict based upon current land use patterns. However, a new Subtitle



C TSDf cannot be practicably sited on lands occupied by an existing wind power facility because those facilities have long-term leases that would prevent acquisition and development in addition to the additional costs and impracticality of trying to work around the generation facilities and other utilities on a wind power facility.

1.3 Geographic Extent

This Alternatives Sites Analysis broadly considers alternative sites throughout the entire geographic boundaries of the County. The applicable OARs do not prescribe a precise area in which an applicant must consider alternative sites. The rules also allow an applicant for a *reasons* Goal Exception to conduct an initial review and, during the hearing process, analyze any additional sites that are identified as feasible alternatives. With respect to rural industrial uses specifically, the rules expressly require an analysis of how alternative sites benefit the County's economy.

In light of the relatively homogenous nature of the County, with respect to its geographic nature, and the limited number of industrial-zoned sites in the County, CWMNW's initial analysis of alternative sites includes sites throughout the County and also includes every site zoned M-G. If other potentially feasible sites in the County are presented during the hearing, the Applicant will analyze those sites as well.

1.4 GIS Methods and Data Sources

ArcGIS 10 is a Geographic Information System (GIS) and was chosen as the primary mechanism for compiling data, performing the Alternative Sites Analysis, and creating the Atlas of Maps in Volume 2. GIS is a strong spatial analysis tool that supports rigorous database development and analysis. The Alternative Sites Analysis utilized GIS and land use planning professional best practices in all analytic procedures.

CSA obtained GIS base data from Gilliam County and from public agencies such as the Natural Resources Conservation Service ("NRCS") and the State of Oregon through its publicly accessible Spatial Data Library. CWMNW provided project design information. Aerial photos from Environmental Systems Research Institute ("ESRI") and Google Earth were geo-referenced and incorporated into the GIS layers for the Project. A tech memo that lists sources for data and explains general best practices for GIS analysis is provided in Appendix B.

2 ALTERNATIVES ANALYSIS NOT REQUIRING A NEW EXCEPTION

Section 2 herein analyzes potential alternative sites that would not require a new Goal Exception to site the proposed use. Sites not requiring a Goal Exception are those not located in a resource zone.² In Gilliam County, the only resource zone is the Exclusive Farm Use zone (EFU). Therefore, Section 2 examines those sites within a UGB³ or that are located outside of a UGB but

² Applicant observes that land that is not designated as agricultural or forest land, does not necessarily mean that the proposed use could be sited on that land without re-examining the original exception documentation to determine if a new exception would still be required. For purposes of the initial Alternatives Analysis, the analysis assumes that a new exception would not be required for lands not currently designated for agricultural or forest use.

³ Applicant analyzed lands within a UGB as a matter of thoroughness based upon the Division 004 language, however, Applicant observes here that ODEQ rules specify locational separation requirements from (meaning outside) UGBs.

not within the EFU zone. As a result, the Applicant has examined all lands that are zoned either Industrial or Commercial outside of an Urban Growth Boundary⁴

OAR 660-004-0020(2)(b)(B) requires that alternative lands be analyzed in accordance with the following requirements:

- (i) *Can the proposed use be reasonably accommodated on nonresource land that would not require an exception, including increasing the density of uses on nonresource land? If not, why not?*
- (ii) *Can the proposed use be reasonably accommodated on resource land that is already irrevocably committed to nonresource uses not allowed by the applicable Goal, including resource land in existing unincorporated communities, or by increasing the density of uses on committed lands? If not, why not?*
- (iii) *Can the proposed use be reasonably accommodated inside an urban growth boundary? If not, why not?*
- (iv) *Can the proposed use be reasonably accommodated without the provision of a proposed public facility or service? If not, why not?*

2.1 Alternative Sites Not Requiring a New Exception

This section analyzes the reasonableness of siting a second Subtitle C TSD elsewhere in Gilliam County in lieu of expanding the existing facility, and does so on a site-by-site basis.

2.1.1 Alternative Site A - Shutler Station Industrial Park and Intermodal Industrial Site

Alternative A, displayed on Atlas Pages 16 and 17, is located east of the existing site, at the intersection of Hwy 19 and Cedar Springs Ln. Alternative A is part of the Shutler Station Industrial Park and is zoned Intermodal Industrial (“II”). These II zoned lands consist of three separate tax lots, which total approximately 312 acres.

Taxlot 1706 is approximately 11.5 acres in size and owned by Mid Columbia Producers, Inc. The property is developed with three separate grain piles. The grain piles are part of a larger network owned by Mid Columbia Producers.

Taxlot 1104 is an industrial park owned by Gilliam County. This taxlot is split into three separate pieces by existing roadways. The largest area is approximately 63 acres. The site is along a railroad and has a crane and cargo handling infrastructure. This area also hosts a grain blending facility operated by Ardent Mills, other agricultural related facilities, and a small office building. Additionally, a southerly parking area has been used as a staging area for wind turbines. A second area of the property, on the east side of Hwy 19, is developed with a large, graveled parking area of approximately 13 acres and additional undeveloped open space. The final area consists of an undeveloped ~10 acre triangular piece at the intersection of Cedar Springs Ln and Hwy 19.

The third and final taxlot is privately owned and approximately 200 acres in size. It makes up the most southerly portion of Shutler Station Industrial Park. There are no structures on the site.

⁴ There exist other small areas that are presently zoned for residential areas and outside of an existing UGB, such as Olex and Mikkalo. However, these areas are less than the 200-acre minimum identified in the M-G zone for Subtitle C TSDs. Given their small size and residential nature, they have been excluded as reasonable alternatives that would not require an exception.

Alternative A is surrounded entirely by lands zoned EFU. They do not appear to be intensively cultivated.

2.1.1.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE A

Shutler Station has over 200 acres of undeveloped land. Implementing the 1,000-foot property line setback required by OAR 340-120-0010(2)(e)(B) and the Gilliam County Comprehensive Plan leaves an area of approximately 25 acres for waste disposal facilities. Therefore, the right to create the property line setback would have to be acquired from neighboring parcels to end up with even a minimally economically sized area for a Subtitle C TSDF.

Alternative Site A is located on a rail line and has existing capability to handle rail cargo, such as grain shipments and wind turbine components. It is approximately 6.5 miles from Interstate 84 and the Port of Arlington.

Siting hazardous waste facilities on Alternative Site A would require a new leachate facility. It would also likely require a new sampling station, stabilization bins, containment storage buildings, and waste recovery facilities among other infrastructure.

The property appears to be moderately sloped with some flatter areas.

2.1.1.2 ALTERNATIVE SITE A LOCATIONAL CONSIDERATIONS

The site is consistent with most of the locational separation requirements set forth in OAR 340-120-0010(2)(d)(A) and OAR 340-120-0015(1):

- Alternative Site A is not located within or near either Big Game Winter Habitat or within the territory of a known endangered species.
- Alternative Site A is not located within a natural resources site identified by the Nature Conservancy in the adopted Goal 5 plan.
- Alternative Site A is not next to or within the riparian area of a river. Alternative Site A is significantly distanced from the Columbia River.

A portion of the Oregon Historic Trail runs through Alternative Site A, although CSA was not able to identify this as being protected as a Goal 5 Historic or Cultural Resource in the Gilliam County Comprehensive Plan.

A portion of Shutler Station is developed with an agricultural use, the grain piles that are discussed above. Storing of grains in a location partially underground and downgradient from the area available for any TSDF is not a desirable siting condition.

Impacts to EFU zoned lands appear moderate. EFU lands to south and southeast are sited with wind power facilities. Lands to the west, across Cedar Springs Lane, feature more wind power facilities and no farm uses. The lands to the west are owned by Oregon Waste Systems which operates the Subtitle D landfill adjacent to the Subject Property.

2.1.1.3 ALTERNATIVE SITE A CONCLUSIONS

Alternative Site A is not found to be a reasonable location for a new Subtitle C TSDF for at least the following reasons:

- After Accounting for the 1000-foot property line setback requirement, Site A would contain only 25 acres of land available for TSDF activities. Significant additional land acquisition outside the M-G area would be required for the 1000-foot property line setback to supply a new TSDF that is sized with sufficient economy of scale to function properly.



- Existing uses of the site would be incompatible with a hazardous waste TSD. The site contains open air grain bins that are partially underground and near the center of the industrial zoned area located between the majority of the vacant industrially designated area and the rail yard facilities. This would require hazardous waste handling between the railyard and any disposal site to go around (but very near) those open-air grain bins with the TSD constructed upgradient from the grain bins.
- In addition to the locational separation issues, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources when compared to an expansion of the existing facility, such as leachate collection and treatment systems, labs, scales, and stabilization bins, as well as all the people to operate and maintain them.

2.1.2 Alternative Site B - Arlington Mesa Industrial Park

Alternative Site B consists of the ~450 acre Arlington Mesa Industrial Park. Arlington Mesa is located on a plateau above the Columbia River and within the Urban Growth Boundary and the municipal boundaries of the City of Arlington; Alternative Site B is depicted on Atlas Pages 18 and 19. The industrial park makes up the northeast corner of the city.

It consists entirely of lands owned by the City of Arlington or the Port of Arlington. Most of the property is zoned either M2 and M1, which are industrial designations. Two small taxlots, which are located by the airport, are zoned for Airport Development. Over ~350 contiguous acres appear to be available and undeveloped.

Outright permitted uses in the M2 and M1 zones are a subset of Transportation Improvements. Conditionally allowed uses include heavy industrial, which are defined as below:

(32) **INDUSTRIAL.** The making of commodities by manufacturing, assembling, fabrication, or compounding by manual labor or machinery. The term includes physical or chemical processes or combinations thereof;

(A) *Light Industrial*—is defined as those activities listed above which occur totally within an enclosed structure. There is no odor, vibration, dust, or noise discernable to the human sensory perception beyond the exterior walls of the structure.

(B) *Heavy Industrial*—is defined as those activities listed above which can occur outside an enclosed structure. The uses include outside storage, loading and unloading, stockpiling, etc. for which there is no odor, vibration, dust, or noise discernable to the human sensory perception beyond the property line of the site.

Arlington Mesa is surrounded immediately by non-residential uses. The northerly border consists of the Arlington Municipal Airport, which has a single dirt runway. To the east and southeast are lands zoned EFU. Improvements are few, but there is the Statt Substation to the southeast. To the south are lands outside of the municipal city limits. These are steeply sloped lands that are zoned for industrial uses and feature an existing aggregate mine. They are otherwise generally undeveloped. To the west are more undeveloped industrial lands.

Despite being relatively close to the Columbia River, the Alternative Site B is outside of the regulatory floodplain. Alternative Site B does not have any known fault lines nor unusual environmental or hazardous attributes.

2.1.2.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE B

Unlike Alternative Site A, Arlington Mesa does not have direct access to a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads.

Application of the 1,000-foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves an area of approximately 36 acres for waste disposal facilities

Arlington Mesa is within just a couple of miles of Interstate 84 and the Port of Arlington. According to the Port of Arlington, Arlington Mesa has water, septic, power, and fiber optic service existing on site.

According to the Port of Arlington, a Phase 1 Environmental Site Assessment was prepared for Arlington Mesa. The results did not show any Recognized Environmental Conditions on the site and no further recommendation or analysis was recommended. Further studies did not show any potential effects to endangered species or wetlands.

Existing land use regulations appear to prohibit the use because a hazardous waste facility is not listed as an allowed uses in the existing zones. Even if a hazardous waste facility were allowed inside a UGB under ODEQ administrative rules, the City of Arlington is under no obligation to rezone the properties or allow the proposed use on site, either through a conditional use permit or amendment to the existing zoning ordinance.

Constructing a new hazardous waste TSDf would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities.

2.1.2.1 ALTERNATIVE SITE B SITE LOCATIONAL CONSIDERATIONS

Site B is inside a UGB and therefore “within a mile” of a UGB. Most of the City of Arlington is located within one mile from the edges of Alternative B. A search of Google maps shows that uses within this one-mile use separation distance include a high school, childcare facilities, at least two churches, a golf course, and many residences.

Conflicting uses are located adjacent or near Alternative B. The site immediately abuts the Arlington Municipal Airport. A portion of Arlington Mesa is zoned for airport activities. In addition, the property is approximately ½ mile away from the center of Arlington. A mixture of commercial and residentially zoned properties are located within this range.

There do not appear to be Goal 5 resources within the industrial park. The Columbia River is less than a mile from Alternative B, but the river is located approximately 550 feet below Alternative B, and thus there not expected to be many visual impacts.

No portion of Alternative B appears to be within the Big Game Habitat or coincide with the range of an endangered species.

Areas to the east and south are zoned EFU, but do not appear to have intensive farm uses.

2.1.2.2 ALTERNATIVE SITE B CONCLUSIONS

Alternative Site B is not found to be a reasonable location for a new Subtitle C TSDf for at least the following reasons:

- After Accounting for the 1,000-foot property line setback, Site B would contain only 36 acres of land available for landfill activities. Significant additional land acquisition outside the M-G area would be required for the 1000-foot property lines setback to supply a landfill size with sufficient economy of scale to function properly.



- The site is within a mile of a UGB (actually inside a UGB) which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. In addition to proximity of the UGB generally, the site is also too close under the separation requirements of those administrative rules including churches, schools, residential areas and airports.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.1.3 Alternative Site C - Other Industrial, Non-Resource Sites

Alternative Site C is a 2,000+ acre series of Limited Industrial lands in northeast Gilliam County that are immediately adjacent to and often overlap with the Columbia River. Alternative Site C is depicted on Atlas Pages 20 and 21. These lands are narrow and slope towards the Columbia River. At their widest, they stretch approximately 1,500 feet on land. Nearly all of the properties within Alternative C are owned by either the State of Oregon or by the Federal Government.

2.1.3.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE C

As noted above, a significant portion of Alternative Site C that is zoned for industrial use overlaps with the Columbia River.

Application of the 1,000 foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves no area available for siting a landfill. Rights to additional abutting lands would likely be necessary.

Alternative C does not appear to possess a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads

Constructing a new hazardous waste TSDF would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities.

As noted above, being able to purchase and control the site is likely difficult or impossible because the lands within Alternative C are almost entirely owned by the State of Oregon or the Federal government.

This area is not appropriate for a hazardous waste facility. Much of the area outside of the river is significantly sloped and would present significant constructability and safety challenges for a Subtitle C TSDF.

2.1.3.2 ALTERNATIVE SITE C LOCATIONAL CONSIDERATIONS

The Columbia River is immediately adjacent and overlaps with Site Alternative C. No part of Alternative Site C is separated from the Columbia River by more than a mile. The construction of a hazardous waste TSDF here would create significant negative visual impacts with the most significant natural resource in Gilliam County, the Columbia River and the upland that forms the Columbia River Gorge.

2.1.3.3 ALTERNATIVE SITE C CONCLUSIONS

Alternative Site C is not found to be a reasonable location for a new Subtitle C TSDF for at least the following reasons:



- After Accounting for the 1000-foot property line setback, Site C would not contain any land available for landfill and other TSD activities. Significant additional land acquisition outside the industrial designated areas would be required for the 1000-foot property line setback to supply any land available for landfilling that would comply with the setback requirement and still yield a landfill size with sufficient economy of scale to function properly.
- The site is within a mile of a UGB and it is much too close to the Columbia River, which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015.
- The land outside the river is steep and would be difficult, if not impossible, on which to construct a TSD.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.1.4 Alternative Site D - Other Industrial, Non-Resource Sites

Alternative Site D is an ~1,980-acre area near the northeast corner of Gilliam County. Alternative Site D is depicted on Atlas Pages 22 and 23. Zoned Limited Industrial, it is located next to a rail line and the intersection of Interstate 84 and Highway 74. To the west is the Shepherds Flat North wind power facility. To the east is Willow Lake and its tributary, Willow Creek. Lands to the south are lands zoned for Exclusive Farm Use, and active farm uses appear to be a mixture of field crops and rangeland. Ownership of the area is split between three different private entities, with small portions owned by the State Highway Commission and the Federal government.

2.1.4.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE D

The site appears to have sufficient area and in such a configuration as to provide enough land for the identified need, however, if the one-mile separation is maintained from the Willow Creek Recreation Area, then the amount of land is reduced significantly. Application of the 1,000-foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves an area of almost 700 acres for waste disposal facilities.

The railroad runs along the east boundary of the property. There is no rail yard, but there is existing rail track spur that dead ends on Alternative D.

Constructing a new hazardous waste TSD would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities. If such infrastructure were not required, operational inefficiencies would be introduced by maintaining the existing facilities on a separate site.

It appears to be feasible to construct infrastructure for water, septic, and power.

Although the site does have some topographical variation, the majority of it is relatively flat. There is significant slope from the plateau area down to Willow Creek.

The site has the Columbia River downgradient to the north and Willow Creek which feeds directly into the Columbia River downgradient to the east.

2.1.4.2 ALTERNATIVE SITE D LOCATIONAL CONSIDERATIONS

There are no abutting residential or commercial uses that may conflict with the proposed use.

There are at least two uses that should be locationally separated, as defined by OAR 340-120-0010(2)(d)(A), within 1 mile of the site. The first, Willow Lake, immediately abuts Alternative D. Willow Lake is fed by Willow Creek, which runs north-south through Alternative D. Willow Lake has been designated as by the State of Oregon as a Wildlife Habitat (see Atlas Page 10) and is identified in the Goal 5 Element of the Comprehensive Plan, see Goal 5 Element Page 2. In addition to Willow Lake serving as a Wildlife Habitat, it is a source of water for local agricultural operations. It also runs unimpeded to the Columbia River. The existing railroad is distanced from Willow Lake by approximately 125 feet at the narrowest point.

2.1.4.3 ALTERNATIVE SITE D CONCLUSIONS

Alternative Site D is not found to be a reasonable location for a new Subtitle C TSD for at least the following reasons:

- The vast majority of the site is within one mile of a State identified recreation area, Willow Creek which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.
- While the site has potential for rail access, the location of the railroad is down along Willow Creek. Inter-modal transloading is one of the areas of risk for facility operation, so putting this in a location so close to a natural area that the TSD itself is supposed to be separated at least a mile is not a reasonable alternative. Moreover, the area where the rail is located is steep in most areas and there is not much flat land area in which to construct a new railyard.

2.1.5 Alternative Site E - Other Industrial, Non-Resource Sites

Alternative Site E is a ~190 acre area zoned General Industrial (M-G), immediately to the north of the City of Condon. Alternative Site E is depicted on Atlas Pages 24 and 25. These lands share a border with Condon's UGB. The area to the south is zoned for residential uses and developed with a mixture of commercial, agricultural, and residential uses. Immediately to the east is the Condon Airport, with a runway approximately 500 feet from the Alternative Site E boundary. Lands to the west and north are actively farmed. This area is more than 30 miles from the Interstate 84 corridor and not near a rail spur. Alternative Site E does not have any known fault lines nor unusual environmental attributes.

2.1.5.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE E

Alternative Site E does not have direct access to a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads.

Application of the 1,000 foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves an area of approximately 25 acres for waste disposal facilities.

Constructing a new hazardous waste TSD would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and



waste recovery facilities. If such infrastructure were not required, operational inefficiencies would be introduced by maintaining the existing facilities on a separate site.

It appears to be feasible to construct infrastructure for water, septic, and power.

Although the site does have some topographical variation, the majority of it is relatively flat.

2.1.5.2 SITE LOCATIONAL CONSIDERATIONS

Alternative E has numerous conflicting uses immediately adjacent as defined by OAR 340-120-0010(2)(d)(A). While not technically within a UGB, the southerly portion of this Alternative shares a border with the Condon UGB. Nearly the entirety of the City of Condon is within 1 mile to the south of Alternative Site E. Conflicting uses within a mile include schools, residences, businesses, government offices, parks, and more. As noted above, lands immediately to the east include the Condon Airport. The airport runway is approximately the same elevation as the nearest portion of Alternative Site E and is approximately 500 feet distant.

In addition to residential uses and the airport, lands to the west appear to be actively farmed for grain or field crops.

Alternative Site E does not have direct access to a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads.

There do not appear to be any Goal 5 conflicts with the location.

2.1.5.3 ALTERNATIVE SITE E CONCLUSIONS

Alternative Site E is not found to be a reasonable location for a new Subtitle C TSD for at least the following reasons:

- After accounting for the property line setback, Site E would contain only 25 acres of land available for landfill activities. Significant additional land acquisition outside the M-G area would be required for the 1000-foot property line setback to supply a landfill size with sufficient economy of scale to function properly.
- The site is within a mile of a UGB (actually immediately adjacent to a UGB) which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. In addition to proximity of the UGB generally, the site is also too close under the separation requirements of those administrative rules including churches, schools, residential areas and airports.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.1.6 Alternative Site F - Other Industrial, Non-Resource Sites

Alternative Site F is the Columbia Plateau Industrial Park, which consists of ~58 acres of lands zoned for General Industrial. Alternative Site F is depicted on Atlas Pages 26 and 27. Alternative F is located five miles to the west of the City of Condon. This industrial park is one of the smallest contiguous areas zoned for industrial uses on County lands. Lands to the north, south, east, and west are zoned EFU. It is unclear if these lands are actively farmed, but they may be used as rangelands. One ~1.8 acre property at the southwest corner of Alternative F is owned by CenturyLink and hosts communications infrastructure. Alternative F is more than 30 miles from the Interstate 84 corridor and not near any known rail spur.



2.1.6.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE F

The site is considerably too small to satisfy the identified need of the proposed exception. As noted above, the site consists of only ~58 acres in total. Of these ~58 acres, approximately 18 have some level of development. This includes a subdivision of 27 single family lots. Application of the 1,000-foot property line setback as required by OAR 340-120-0010(2)(e)(B) and the Gilliam County Comprehensive Plan would leave zero acres for the construction of a new TSDf.

This location is relatively distant from any existing rail spur and would require additional truck traffic to handle the transfer of waste between the spur and the site.

Constructing a new hazardous waste TSDf would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities. If such infrastructure were not required, operational inefficiencies would be introduced by maintaining the existing facilities on a separate site.

It appears to be feasible to construct infrastructure for water, septic, and power.

Although the site does have some topographical variation, the majority of it is relatively flat.

2.1.6.2 SITE LOCATIONAL CONSIDERATIONS

Other site locational considerations could be considered, but between the lack of constructable land and the immediate presence of conflicting uses, as discussed above, Alternative Site F does not warrant additional analysis.

There do not appear to be any Goal 5 conflicts with the location.

2.1.6.3 ALTERNATIVE SITE F CONCLUSIONS

Alternative Site F is not found to be a reasonable location for a new Subtitle C TSDf for at least the following reasons:

- After accounting for the 1000-foot property line setback, Site F would not contain any land available for landfill activities. Significant additional land acquisition outside the industrial designated areas would be required for the 1000-foot property line setback to supply any land available for landfilling that would comply with the property line setback requirement and yield a landfill size with sufficient economy of scale to function properly.
- The site contains a residential subdivision, which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.1.7 Alternative Site G - Other Industrial, Non-Resource Sites

A roughly 400-acre area of General Industrial lands on the Columbia River near Myers and Blalock Canyon. Of these lands, approximately 375 acres are located in the Columbia River with the majority of the remaining acreage on a steep escarpment above Highway 84, see Atlas Pages 28 and 29.



2.1.7.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE G

Nearly all of Alternative Site G zoned for industrial use overlaps with the Columbia River. This area is not appropriate for a hazardous waste facility. Most of the area outside of the river is significantly sloped and would present significant constructability and safety challenges for a TSDF.

Application of the 1,000-foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves an area of approximately 30 acres for waste disposal facilities. All 30 of these acres are located directly in the Columbia River.

Alternative Site G does not appear to possess a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads

Constructing a new hazardous waste landfill would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities.

2.1.7.2 SITE LOCATIONAL CONSIDERATIONS

Other site locational considerations could be considered, but between the lack of constructable land and the inability of the site to meet basic site requirement characteristics, as discussed above, it does not appear that Alternative Site G warrants additional analysis.

2.1.7.3 ALTERNATIVE SITE G CONCLUSIONS

Alternative Site G is not found to be a reasonable location for a new Subtitle C landfill for at least the following reasons:

- After accounting for the 1000-foot property line setback, Site G would not contain any land outside of the Columbia River available for landfill activities.
- The site is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015 because it is too close to or overlaps with the Columbia River.
- The land outside the river is steep and would be difficult, if not impossible, to construct a TSDF with a landfill on.
- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.1.8 Alternative Site H - Arlington Limited Industrial Site

A roughly 480-acre area of Limited Industrial (“LI”) lands and M-L immediately adjacent to the City of Arlington and the UGB. Alternative Site H is depicted on Atlas Pages 30 and 31. Highway 19 runs through the southwesterly edge of Alternative Site H. The portion zoned ML and located to the south of Highway 19 is owned by the Arlington Saddle Club and home to the Arlington Jackpot Rodeo. A small portion of approximately 15 acres is zoned ML and located to the south of Highway 19. Most of the Alternative Site H lands are significantly sloped. A Google Earth elevation profile estimated the average slope of the property at approximately 16%.

The parcels located within Alternative Site H that are along northeast edge of Highway 19 consist of a mixture of residential and commercial uses.



Ownership of the LI parcels are split between multiple owners, although the City of Arlington owns the largest individual parcels.

Alternative H is sandwiched between the Arlington Mesa industrial park to the east and the City to the west. Adjacent City properties are a mix of zoning, including Open Space, low and high density Residential, and Commercial. Lands to the south and southeast are zoned EFU. At least one parcel, such as Maplot 3N-21E-34-101, appears to be intensively cultivated with row crops.

2.1.8.1 SITE REQUIREMENT SUFFICIENCY FOR POTENTIAL ALTERNATIVE SITE H

Application of the 1,000-foot property line setback as required by OAR 340-120-0010(2)(e)(B) leaves an area of approximately 53 acres for waste disposal facilities. These 53 acres are centered on the property and consist of some of the steepest slopes. Aside from these 53 acres, Alternative H has substantial areas of steep slopes. Sections of these existing grades slope towards the City. These existing grades would present tremendous constructability challenges and would significantly increase the complexity of managing runoff and leachate facilities.

Alternative Site H does not have direct access to a rail spur, which would necessitate additional handling and truck trips containing hazardous waste materials on local roads.

Constructing a new hazardous waste TSD at Alternative Site H would also require a new leachate facility and sampling station. A new facility may also require new stabilization bins, containment storage buildings, and waste recovery facilities.

2.1.8.2 SITE LOCATIONAL CONSIDERATIONS

Most of the City of Arlington is located within one mile from the Alternative H. Uses within this one-mile buffer include a high school, childcare facilities, at least two churches, a golf course, and many residences. Some conflicting uses, such as residential and commercial uses, are located outright within the Alternative, typically along Highway 19.

This alternative does not appear to have Goal 5 resource conflicts. It is not far from the Columbia River, but existing topography appears to visually buffer the Alternative from areas immediately adjacent to the river.

No portion of Alternative Site H appears to be within the Big Game Habitat, an established natural area, or coincide with the range of an endangered species.

As noted above, there does appear to be at least one location of relatively intensive farm use located near Alternative H.

2.1.8.3 ALTERNATIVE SITE H CONCLUSIONS

Alternative Site H is not found to be a reasonable location for a new Subtitle C TSD for at least the following reasons:

- After accounting for the 1,000-foot property line setback, Site H would contain only 53 acres of land available for landfill activities. Significant additional land acquisition outside the L-I area would be required for the 1000-foot property line setback to supply a landfill size with sufficient economy of scale to function properly.
- The site is within a mile of a UGB (actually adjacent to a UGB) which is not consistent with the locational separation requirements set forth in OAR 340-120-0010 and 0015. In addition to proximity of the UGB generally, the site is also too close under the separation requirements of those administrative rules including proximity to churches, schools, residential areas and airports.

- In addition to inconsistency with ODEQ locational separation requirements, the site would be at a comparative economic disadvantage because it would require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

2.2 Alternative Sites Not Requiring an Exception Conclusions

After examining all available lands not planned for agricultural use in Gilliam County, agricultural lands devoted to non-resource uses, and areas within UGBs, it is concluded there are no alternative sites that would not require an exception that could reasonably accommodate a new Subtitle C TSDF. Alternative sites that would not require an exception lack one or more key physical or spatial characteristics necessary for the use to function properly. therefore, sites not requiring a goal exception cannot serve as a reasonable alternative.

2.3 Resource Lands Irrevocably Committed to Nonresource uses

In order to find Resource Lands irrevocably committed to nonresource uses, CSA used two methods. First, CSA performed a visual examination of recent aerials of EFU lands for those that were obviously committed to nonresource uses. Second, GIS was used to select tax lots located in EFU lands in Gilliam County. These were then examined for property class assessments that may have indicated a nonresource use.

One unique condition in Gilliam County is the presence of wind power facilities. Wind power facilities are specifically designed to be compatible and allow farming between individual wind turbine towers. OAR 660-033-130(37)(b)(A) requires that wind power facilities do not create unnecessary negative impacts on agricultural operations conducted on their subject property. As such, lands with wind power facilities should not be considered committed to nonfarm uses for purposes of evaluating alternative sites for a second Subtitle C TSDF.

Even though a few small lots were found, none of them were of a size large enough to plausibly to accommodate the established need. Both of these methods found zero properties that would appear to match the description of resource lands committed to nonresource lands.

3 ALTERNATIVE SITES ANALYSIS REQUIRING A NEW EXCEPTION

After determining that the identified need cannot be practicably accommodated through alternatives not requiring a Goal Exception, as shown in the analysis herein above, analysis of alternatives requiring an exception is regulated by Statewide Planning Goal 2, Part II C(3) and implemented by OAR 660-004-0020(c). The exception analysis shall compare the long term economic, social, environmental, and energy consequences of proposed alternative locations requiring an exception. The exception analysis also determines net adverse impacts between the alternatives in order to judge if any alternative sites would have impacts that are significantly less adverse than the subject property.

3.1 *General ESEE Analysis of Resource Land Alternatives*

This section includes a general ESEE analysis of other resource designated parcels to accommodate the use. The ESEE Table represents how the Subject Property compares relative to any other site located in the county on resource lands. For example, if the table says “Existing rail serves site”, that is to mean that the Subject Property is served by rail, whereas most other potential sites that would also require an exception sites are not.



	<i>Gilliam County Goal Exception</i>	<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Site Characteristics	Sufficient Acreage to Accommodate Established Need	Economy of scale. A single, concentrated site is much more efficient than multiple small Subtitle C TSDs	Economy of scale. A single, concentrated site will have fewer social impacts than multiple small Sub C TSDs	Economy of scale. A single, concentrated site will have fewer environmental impacts than multiple small Sub C TSDs	Economy of scale. A single, concentrated site is much more efficient than multiple small Sub C TSDs
	Accessible via existing rail network/transportation	Existing rail serves site	n/a	Less handling, less risk of incident, safer than truck	Rail most efficient shipping method
	Leachate facilities / Surface impoundment	Duplicates are expensive and need to continue until closure completed and potentially indefinitely	Duplicates are expensive and need to continue until closure completed and potentially indefinitely	Duplicates are expensive and need to continue until closure completed and potentially indefinitely	Duplicates are expensive and need to continue until closure completed and potentially indefinitely
	Waste recovery facilities such as petro chemical recycling	Existing facility is expensive and would need to be relocated or duplicated	n/a	Existing facility is expensive and would need to be relocated or duplicated	Existing facility is expensive and would need to be relocated or duplicated
	On-site lab	Existing facility is expensive and would need to be relocated or duplicated	n/a	n/a	Existing facility is expensive and would need to be relocated or duplicated
	Stabilization bins	Has bins on site. Duplicates are expensive	Has bins on site. Duplicates are expensive	Has bins on site. Duplicates are expensive	Has bins on site. Duplicates are expensive
	Containment storage buildings	Has storage on site. Duplicates are expensive	Has storage on site. Duplicates are expensive	Has storage on site. Duplicates are expensive	Has storage on site. Duplicates are expensive
	Sampling station	Has sampling station on site. Duplicates are expensive	Has sampling station on site. Duplicates are expensive	Has sampling station on site. Duplicates are expensive	Has sampling station on site. Duplicates are expensive
	Minimal precipitation	Gilliam County precipitation has limited variation. Neutral	Gilliam County precipitation has limited variation. Neutral	Gilliam County precipitation has limited variation. Neutral	Gilliam County precipitation has limited variation. Neutral
	Site Geology	Negative for any areas with significant basalt rock	n/a	Faults are a negative	Negative for any areas with significant basalt rock (expensive to dig!)
	Hydrology	The more hydro issues present the more expensive it will be to design and construct	Potential for community concerns regarding groundwater in hydro sensitive areas	<i>E ceteris paribus</i> , better to put away from hydro sensitive areas	The more hydro issues present the more expensive it will be to design and construct
	Flat Topography	Greater slopes create constructability issues and greater expense. Existing site is well known and relatively flat.	More visible if sloped	Difficult to capture runoff where sloped	Slopes create constructability issues and greater expense

	<i>Gilliam County Goal Exception</i>	<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Potentially Incompatible Uses	Residential	Would be expected to devalue residential properties	Living next to a chem waste TSDf is not desirable	n/a	n/a
	Commercial	Would be expected to devalue commercial properties	Commercial activities that might involve eating, sleeping, working, shopping, etc. will be less desirable next to a chem waste TSDf	n/a	n/a
	Devoted to conflicting non-farm uses	Uneconomic to remove many non-farm uses, such as wind turbines and the powerlines that serve them	Non-farm uses are likely needed or provide benefit, replacing them may involve loss of other farmland	If wind power facility, increase carbon emissions and reliance on fossil fuels	If wind power facility, increase carbon emissions and reliance on fossil fuels
	Airport	Significant negative consequences if incident involving aircraft and TSDf	Significant negative consequences if incident involving aircraft and TSDf	Significant negative consequences if incident involving aircraft and TSDf	Significant negative consequences if incident involving aircraft and TSDf
	<i>Gilliam County Goal Exception</i>	<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Goal 5 Resources	Columbia River Waterfront	Tourism is major driver of area economy, no one wants a TSDf next to fishing spot	Conflicts with natural setting of Columbia river	<i>E ceteris paribus</i> , better to put away from hydro sensitive areas	n/a
	fishery resources	Fishing is an economic activity, no one wants a TSDf next to fishing spot	Conflicts with natural setting of rivers	<i>E ceteris paribus</i> , better to put away from hydro sensitive areas	n/a
	John Day River	Fishing is an economic activity, no one wants a TSDf next to fishing spot	Conflicts with natural setting of rivers	<i>E ceteris paribus</i> , better to put away from hydro sensitive areas	n/a
	Big Game Winter habitat	Big game provides hunting, which is an economic activity.	Conflicts with natural setting of big game habitat.	May reduce area available as big game habitat. <i>E ceteris paribus</i> , better to put away from habitat	n/a
	Upland-Waterfowl habitat (Map is...inconclusive)	Hunting is an economic activity, no one wants a TSDf next to a hunting spot	Upland-waterfowl habitat is a natural setting that may be disturbed by nearby TSDfs	May reduce area available as big game habitat. <i>E ceteris paribus</i> , better to put away from habitat	n/a
	Natural resources sites (need to map)	n/a	n/a	Siting of TSDf in Nat resource sites may conflict with environmental resources	n/a

	Endangered/Critical species	Endangered species may serve as a tourist attraction and economic activity	Endangered species are highly valued by portions of the public	Siting may cause displacement of endangered species and reduction of habitat. <i>E ceteris paribus</i> , better to put away from habitat	n/a
	Gilliam County Goal Exception	Economic	Social	Environmental	Energy
Farm Implications	Nearby farm uses and practices	Loss of farmland value, could require changes to practices	<i>E ceteris paribus</i> , farmers would rather farm away from Subtitle C TSDf than near it.	Potential for minor dust from trucking	n/a
	Soils and farm use potential	Future farm investments, especially intensive farm investments, may be less likely	<i>E ceteris paribus</i> , farmers would rather farm away from Subtitle C TSDf than near it	n/a	n/a

3.2 Net ESEE Consequences for General Analysis of Other Lands Requiring an Exception

It is expected that the Subject Property has the least adverse ESEE consequences for the following summary reasons:

Economic: The net adverse economic consequences caused by creating a second Subtitle C TSDF on other lands requiring an exception is negative. The infrastructure to support a Subtitle C TSDF already exists at the Subject Property and does not require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility.

Social: The net consequences of creating a second Subtitle C TSDF on other lands requiring an exception are somewhat negative, as the existing site is appropriately located and a second site would potentially have negative aesthetic impacts to residential and commercial lands, along with potential visual impacts on Goal 5 resources. Moreover, it would disperse social impacts into lands not already located near landfill activities.

Environmental: The net consequences of environmental impacts of creating a second Subtitle C TSDF on other lands requiring an exception are somewhat negative, as the existing site is appropriately located given existing geology, hydrology, and distance from all known environmental resources, and all things being equal, siting a second Subtitle C TSDF nearer to environmental resources is undesirable.

Energy: The net adverse energy consequences of creating a second Subtitle C TSDF on other lands requiring an exception are negative, as the rail and road infrastructure to provide efficient transportation of hazardous waste to the Subject Property is already in place, and other resource lands would likely lack direct access to a railyard and require either additional handling and shipping via trucks or the construction of a new yard.

3.3 Identification of Specific Potential Alternative Sites Requiring an Exception

Applicant does not believe that there are specific lands requiring an exception that provide obvious ESEE advantages, but in an abundance of caution the analysis identifies two alternatives. The specific alternatives were identified first and foremost by their lack of potential resource value, as identified by their poor soil qualities. See Atlas Page 9 for a map of Gilliam County as rated by NRCS Non-Irrigated Soil Quality⁵. After considering sites with relatively poor soil quality, preference was given to lands that are relatively flat, away from riparian corridors, did not contain an identified fault, and were not already irrevocably committed to a non-farm use (such as wind power facilities). After applying these qualifiers, relatively few coherent, large blocks of resource land remain in the county. Two such sites were selected to represent theoretical alternatives. Finding enough land to provide sufficient acreage while incorporating the 1,000 foot property line setback required by OAR for landfills was challenging. Therefore, the potential sites do not closely

⁵ A map showing irrigated soil quality would show a very similar pattern.



follow existing tax lots or follow existing ownership patterns. These Theoretical Alternative Sites are depicted on Atlas Pages 32 through 36.

3.4 Description of Potential Alternative Sites Requiring an Exception:

3.4.1 Theoretical Alternative Site 1

Theoretical Alternative Site 1, the westerly of the two sites, is approximately 1,090 acres in size and sited on EFU lands. It is located west of the intersection of Blalock Canyon Rd. Ownership is split between 4 different owners. Theoretical Alternative Site 1 is depicted on Atlas Pages 33 and 34. Historical imagery shows Site 1 has been actively used as rangeland, with evidence of cattle and farm equipment. To the west is an area of cropland with Class II Soils. Some Class II soils overlap with Site 2. The shape of the site could be adjusted to avoid these lands, but there few, if any, practical adjustments that would allow a sufficiently sized site to avoid adjacency to relatively good soils and consist of flat land suitable for construction that avoid riparian areas.

3.4.2 Theoretical Alternative Site 2

Site 2, the easterly of the two sites, is approximately 1,555 acres in size and located on EFU lands. It is located southeast of the City of Arlington, east of the junction between the John Day Hwy and Eightmile Road. Theoretical Alternative Site 2 is depicted on Atlas Pages 35 and 36. Historical imagery shows Site 2 has been actively used as rangeland, with evidence of cattle and farm equipment. Wind power facilities are located to the north, east and south of the site, but leave sufficient space for the proposed use. Site 2 is one of the few sites in Gilliam County that allows for a large block of lands to be used for the proposed use without overlapping or immediately abutting lands with soils better than Class IV.

3.5 ESEE Analysis of Specific Sites Requiring an Exception

As with the general ESEE herein above, this section will provide a detailed “matrix” site-by-site ESEE analysis of specific potential alternative sites. Each site is broken out individually and compared to the Subject Property.

3.5.1 Site 1

<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Site Characteristics	Sufficient Acreage	Neutral, as the site is of sufficient size to accommodate a new TSD	Neutral, as the site is of sufficient size to accommodate a new TSD	Neutral, as the site is of sufficient size to accommodate a new TSD	Neutral, as the site is of sufficient size to accommodate a new TSD
	Accessible via existing rail network/transportation in general	Negative	n/a	Negative	Negative
	Requires leachate facilities / Surface impoundment	Negative	Negative	Negative	Negative
	Requires waste recovery facilities like petro chemical recycling	Negative	n/a	Negative	Negative
	Requires an on-site lab	Negative	n/a	n/a	Negative
	Requires stabilization bins	Negative	Negative	Negative	Negative
	Requires containment storage buildings	Negative	Negative	Negative	Negative
	Requires sampling station	Negative	Negative	Negative	Negative
	Minimal precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation
	Geology (preliminary assessment based upon available data)	Neutral, as the site is mapped as the same geological unit	n/a	Neutral, as there do not appear to be near substantial faults	Neutral, as the site is mapped as the same geological unit
Hydrology (preliminary assessment based upon available data)	Somewhat Negative, as the site is closer to Rock Creek	Somewhat Negative, as the site is closer to Rock Creek	Somewhat Negative, as the site is closer to Rock Creek	Somewhat Negative, as the site is closer to Rock Creek	
Flat Topography	Neutral	Neutral	Neutral	Neutral	
<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Potentially Incompatible Uses within 1 mile Buffer	Residential	Somewhat Negative - No lands zoned residential, but a handful of residences on EFU lands are within the 1 mile	Somewhat Negative - No lands zoned residential, but a handful of residences on EFU lands are within the 1 mile	n/a	n/a
	Commercial	Neutral, as there are no commercial facilities within 1 mile	Neutral, as there are no commercial facilities within 1 mile	n/a	n/a
	Devoted to conflicting non-farm uses	Somewhat Negative, as two transmission lines approximately 1.25 miles in length run through the subject site and would require additional effort to accommodate	Neutral, as the accommodation of transmission lines would not be expected to have social consequences	Neutral, as the accommodation of transmission lines would not be expected to have environmental consequences	Neutral, as the accommodation of transmission lines would not be expected to have energy consequences
	Airport	Neutral, as there is no airport within 1 mile	Neutral, as there is no airport within 1 mile	Neutral, as there is no airport within 1 mile	Neutral, as there is no airport within 1 mile
<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Goal 5 Resources	Columbia River Waterfront fishery resources	Neutral	Neutral	Neutral	n/a
	John Day River	Neutral	Neutral	Neutral	n/a
	Big Game Winter habitat	Neutral	Neutral	Neutral	n/a
	Upland-Waterfowl habitat	Neutral	Neutral	Neutral	n/a



	Natural resources sites (need to map)	n/a	n/a	Neutral	n/a
	Endangered/Critical species	Neutral	Neutral	Neutral	n/a
	Gilliam County Goal Exception	Economic	Social	Environmental	Energy
Farm Implications	Surrounding Farm uses and practices compatibility	Negative - Historical imagery shows lands have been actively used as rangelands, with evidence of cattle and farm equipment. Lands are part of a large contiguous holding	Somewhat Negative - Many EFU lands abut the property. A similar use abuts existing facility, but Site 1 would disrupt existing patterns.	Somewhat Negative - Trucks delivering hazardous waste could generate new sources of dust next to existing EFU lands	n/a
	Farm to Nonfarm Conversion	Somewhat Positive. Soils are marginally productive, with the majority being Class VI and rated worse than subject (nonirrigated)	Somewhat Negative; location between two existing TSDs less impactful	n/a	n/a

3.5.2 Site 2

<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Site Characteristics	576+ acres (or whatever we settle upon)	Neutral, as the site is of sufficient size to accommodate a new landfill	Neutral, as the site is of sufficient size to accommodate a new TSD	Neutral, as the site is of sufficient size to accommodate a new TSD	Neutral, as the site is of sufficient size to accommodate a new TSD
	Accessible via existing rail network/transportation in general	Negative	n/a	Negative	Negative
	Requires leachate facilities / Surface impoundment	Negative	Negative	Negative	Negative
	Requires waste recovery facilities like petro chemical recycling	Negative	n/a	Negative	Negative
	Requires an on-site lab	Negative	n/a	n/a	Negative
	Requires stabilization bins	Negative	Negative	Negative	Negative
	Requires containment storage buildings	Negative	Negative	Negative	Negative
	Requires sampling station	Negative	Negative	Negative	Negative
	Minimal precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation	Neutral, as the site is located relatively close to the Subject Property and is not expected to have differing precipitation
	Geology (preliminary assessment based upon available data)	Somewhat Negative, as the site has portions mapped as Saddle Mountain Basalt (Unit Tcs)	n/a	Neutral, as there do not appear to be substantial faults near this site	Somewhat Negative, as the site has portions mapped as Saddle Mountain Basalt (Unit Tcs)
	Hydrology	Somewhat Negative, as the site is closer to Eightmile Canyon Creek	Somewhat Negative, as the site is closer to Eightmile Canyon Creek	Somewhat Negative, as the site is closer to Eightmile Canyon Creek	Somewhat Negative, as the site is closer to Eightmile Canyon Creek
Flat Topography	Neutral	Neutral	Neutral	Neutral	
<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Potentially Incompatible Uses within 1 mile Buffer	Residential	Somewhat Negative - No lands zoned residential, but a handful of residences on EFU lands are within 1 mile	Somewhat Negative - No lands zoned residential, but a handful of residences on EFU lands are within 1 mile	n/a	n/a
	Commercial	Somewhat Negative - No lands zoned commercial, but a handful of commercial uses on EFU lands are within 1 mile	Somewhat Negative - No lands zoned commercial, but a handful of commercial uses on EFU lands are within 1 mile	n/a	n/a
	Devoted to conflicting non-farm uses	Somewhat Negative- Substantial quantities of wind power facilities are sited within 1 mile, but conflicts expected to be minimal. However, the site also has approximately 4 miles of power lines that would need to be avoided and managed around	Neutral - Substantial quantities of wind power facilities are sited within 1 mile, conflicts expected to be minimal, and power lines accommodation is not expected to have social consequences	Neutral - Substantial quantities of wind power facilities are sited within 1 mile, conflicts expected to be minimal, and power lines accommodation is not expected to have energy consequences	Neutral - Substantial quantities of wind power facilities are sited within 1 mile, conflicts expected to be minimal, and power lines accommodation is not expected to have energy consequences
	Airport	Neutral, as there is no airport within 1 mile buffer	Neutral, as there is no airport within 1 mile buffer	Neutral, as there is no airport within 1 mile buffer	Neutral, as there is no airport within 1 mile buffer
<i>Gilliam County Goal Exception</i>		<i>Economic</i>	<i>Social</i>	<i>Environmental</i>	<i>Energy</i>
Goal 5 Resources	Columbia River Waterfront fishery resources	Neutral - distanced from Columbia River	Neutral - distanced from Columbia River	Neutral - distanced from Columbia River	n/a
	John Day River	Neutral	Neutral	Neutral	n/a
	Big Game Winter habitat	Neutral	Neutral	Neutral	n/a
		Neutral	Neutral	Neutral	n/a



	Upland-Waterfowl habitat (Map is...inconclusive)	Neutral	Neutral	Neutral	n/a
	Natural resources sites (need to map)	n/a	n/a	Neutral	n/a
	Endangered/Critical species	Neutral	Neutral	Neutral	n/a
	Gilliam County Goal Exception	Economic	Social	Environmental	Energy
Farm Implications	Nearby farm uses and practices	Negative - Historical imagery shows lands have been actively used as rangelands, with evidence of cattle and farm equipment. Lands are part of a large contiguous holding	Somewhat Negative - Many EFU lands abut the property. A similar use abuts existing facility, but Site 2 would disrupt existing patterns.	Somewhat Negative - Trucks delivering hazardous waste could generate new sources of dust next to existing EFU lands	n/a
	Farm to Nonfarm Conversion	Somewhat Positive. Soils are marginally productive, with the majority being Class VI and rated worse than subject (nonirrigated)	Somewhat Negative; location between two existing TSDFs less impactful	n/a	n/a

3.6 ESEE Conclusions for Lands Requiring a New Exception

3.6.1 Economic:

Although both theoretical alternatives requiring an exception could feasibly be large enough to meet the proposed need, they have significant drawbacks. After examining the sites, the most cumulative economic benefits come from the Subject Property. Most crucially, Sites 1 and 2 would require significant capital expenditures to create required infrastructure that already exists on the Subject Property. This would in essence require that money be spent to duplicate existing infrastructure. The existing transmission and power lines on both sites would also require either significant expenditure to move the lines or changes in operation and design to accommodate the existing infrastructure, potentially creating long term inefficiencies.

Transportation costs would also rise, as a railroad siding is not available immediately on either site, requiring additional trucking. The additional miles traveled may not be large, but it could add 4 or more miles in driving to each round trip.

Site 1 and 2 also have potentially negative impacts to farm uses, as they would disrupt lands presently used for the raising of cattle and rangeland. This could impose costs as farm practices are adjusted to accommodate new hazardous waste facilities. The soils on the theoretical alternative sites are marginally worse, but these are all non-irrigated rangeland that receives very little precipitation so the economic loss of using slightly better rated soils is miniscule in comparison to the expensive facilities that would need to be relocated or duplicated.

There are a few residences within 1 mile of each of the proposed alternatives. These residential uses could see a loss in property value with the location of a new hazardous waste facility.

3.6.2 Social:

Existing farmlands around both Theoretical Alternatives Sites would potentially be less desirable by being placed next to a new Subtitle C TSDf. Existing rangeland does surround the Subject Property, but a new TSDf would disrupt existing patterns more significantly.

Lands next to the proposed alternative sites would see negative social consequences in the forms of aesthetic impacts. Unlike the Subject Property, which has been operating as a hazardous waste TSDf for decades and therefore has known impacts, a new site would spread the social impacts to new areas.

3.6.3 Environmental:

The proposed alternatives have mostly neutral environmental impacts in comparison to the Subject Property. Both of the sites identified are located at least one mile from known environmental resources, such as wildlife areas, rivers, or other amenities.

Both sites would require more handling and trucking hazardous waste greater distances, which could increase the risk of road accidents involving hazardous materials.

3.6.4 Energy:

The proposed alternatives would slightly negative energy impacts. This comes primarily from the embodied energy required to construct duplicative facilities on either alternative site. In addition, the additional trip distance for trucks would require more energy expenditure or require the construction of new rail infrastructure.



3.6.5 Net Adverse ESEE Consequences Assessment

3.6.5.1 THEORETICAL ALTERNATIVE SITE 1

It is expected that the Subject Property will have the least adverse ESEE consequences in comparison to Theoretical Alternative Site 1 for the following reasons:

Economic: The net adverse economic consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 1 are negative, as the infrastructure to support a Subtitle C TSD already exists at the Subject Property and does not require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility. In addition, accommodation of the existing transmission lines may require a costly relocation or introduce long term operational inefficiencies.

Social: The net social consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 1 are somewhat negative, as there are a handful of residences within the 1 mile buffer of Site 1 and existing farm practices may be disrupted or become less desirable.

Environmental: The net environmental consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 1 are somewhat negative, as more truck handling would likely be required in order to ship hazardous waste to the site and it is slightly closer to a creek (Rock Creek) than the Subject Property.

Energy: The net adverse economic consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 1 are somewhat negative, as the Site 1 would require either the construction of new rail infrastructure to serve the site or require additional truck handling and trips to ship waste to the site.

3.6.5.2 THEORETICAL ALTERNATIVE SITE 2

It is expected that the Subject Property will have the least adverse ESEE consequences in comparison to Theoretical Alternative Site 2 for the following reasons:

Economic: The net adverse economic consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 2 are negative, as the infrastructure to support a Subtitle C TSD already exists at the Subject Property and does not require duplication of many facilities and resources such as leachate collection and treatment systems, labs, scales, stabilization bins, etc. as well as all the people to operate and maintain them when compared to an expansion of the existing facility. In addition, accommodation of the existing power lines may require a costly relocation or introduce long term operational inefficiencies.

Social: The net social consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 2 are somewhat negative, as there are a handful of residences and commercial uses within the 1 mile buffer of Site 1 and existing farm practices may be disrupted or become less desirable.

Environmental: The net environmental consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 2 are somewhat negative, as more truck handling would likely be required in order to ship hazardous waste to the site and it is slightly closer to a creek (Eightmile Canyon Creek) than the Subject Property.

Energy: The net adverse economic consequences caused by creating a second Subtitle C TSD on Theoretical Alternative Site 2 are somewhat negative, as the Site 1 would require either the construction of new rail infrastructure to serve the site or require additional truck handling and trips to ship waste to the site.

4 USE COMPATIBILITY ANALYSIS

This section will evaluate the compatibility of the proposed use with adjacent resource uses and surrounding natural resources.

4.1 *Inventory of Adjacent Resource Uses*

4.1.1 Resource Use Identification and Geography

All properties surrounding the existing Subtitle C TSDF and the proposed expansion area are designated for and zoned EFU, with the nearest non-resource zoned land being located at the Intermodal Industrial zoned lands at evaluated as Alternative Site A in Section 2, approximately 3.25 miles east of the Subtitle C TSDF. Beyond this site the next closest non-resource zoned lands are those within the City of Arlington approximately 6 miles to the northeast.

4.1.2 Resource Use Characteristics and Practices

According to the 2017 Agricultural Census undertaken by the United State Department of Agriculture, the vast majority of crops in Gilliam County are either wheat or cattle. The table below presents relevant data from the 2017 Agricultural Census:

Commodity	Acres	Percent
Corn for Silage and Greenchop	0	0.00%
Wheat	77,543	90.14%
Oats	0	0.00%
Barley	1,072	1.25%
Hay and Forage	5,178	6.02%
Vegetables	14	0.02%
Orchards	3	0.00%
Total Harvested Acres		86,027
Cattle Sales including Calves (Head)		6,960

The EFU lands to the north, west, and south of the Applicant’s site are owned by Herbert R. Holzapfel, Et Al, and/or Holzapfel Land & Cattle LP and are known locally as the Cedar Springs Ranch. These lands comprise several thousand acres and are used primarily for cattle grazing, along with aggregate mining within a small portion of Map Lot 2N-20E-2318 immediately west of the aggregate quarry site on the Applicant’s property (2N-20E-2313) that is zoned General Industrial. According to Gilliam County records, the Holzapfel aggregate use is not a Goal 5 protected aggregate site. According to historic Google Earth imagery, the aggregate mine began operations sometime between 2006 and 2011, long after the Subtitle C TSDF had begun operations. The EFU zoned lands to the east and northeast of the Subtitle C TSDF are owned in fee simple by the Applicant (related Waste Management ownership entities), with Map Lot 2N-21E-1101 containing the Applicant’s Subtitle D TSDF and the other lands being occupied by wind power facilities and the grazing of cattle.

4.2 *Inventory of Surrounding Natural Resources*

4.2.1 Natural Resource Identification and Geography

Goal 5 of Oregon’s Statewide Planning Goals and Guidelines serves “To protect natural resources and conserve scenic and historic areas and open spaces.” Gilliam County conducted an inventory of all the resources that are required to be reviewed and protected under the provisions of Goal 5, and its policies are set forth in the Goal 5 Chapter of the Gilliam County Comprehensive Plan. While there are numerous natural resources that were identified throughout the county, including fish and wildlife resources and portions of the John Day River, there are no Goal 5 protected resources within proximity of the subject site. An aggregate quarry is located on lands to the west of the subject site. However, per Gilliam County, it is not a Goal 5 protected resource. There are a number of wind power facilities on lands in the surrounding area and throughout the county, a fact that is noted in the County’s Goal 5 findings for the Comprehensive Plan.

4.2.2 Resource Management Characteristics and Practices

This section provides an initial summary of accepted farm practices associated with farm uses identified on surrounding lands. CSA sought data and information on farm practices from published sources where such data was readily available. As indicated in aerial photos, fieldwork, and published data, the farm practices near the subject property are limited in type to cattle grazing. This section identifies the practices associated with this farm use.

4.2.2.1 FARM PRACTICES FOR CATTLE GRAZING

Grazing can be generally described as the production of meat, milk, and other animal products through the conversion of cellulose on lands that are typically marginally productive for other crops. Management of cattle grazing operations aspires to maximize production of cattle through optimal stocking rate. Stocking rate is a measure of the number of animals on a given amount of land over a defined period of time. Grazing systems vary, depending on factors such as ownership, size, land productivity, and location.

Continuous grazing allows animals unfettered access to a single pasture. This is typically the lowest cost form of grazing and requires the least management. However, it results in greater forage loss, uneven grass growth, and ultimately lower yields.

Rotational grazing rotates animals between pastures, allowing for great control and precision. More frequent movement of animals has naturally higher management costs and requires more investment in fencing, water, and infrastructure. By rotating, pastures are allowed to rest and regrow and increases availability of forage for cattle. Proper rotational grazing is based upon the soil capability along with corresponding levels of management, infrastructure, and operational complexity. In general, the more intensive management, the greater the productivity for a given soil/rangeland quality.

4.3 *Compatibility Factors*

4.3.1 Historic Compatibility Issues of Existing Use

The existing Subtitle C TSDf was first licensed by the DEQ in February 1976 and has been in continuous use now for more than 45 years. Typical operational practices are described in Volume 1 Section 4.3.1. include measures to limit potential impacts to neighboring properties, such as groundwater infiltration or dust. For example, Subtitle C TSDf’s are constructed with an engineered liner system with both a primary and secondary liner. Dust is treated onsite to keep it to a minimum and air quality is monitored.



While all the surrounding lands are zoned EFU, those immediately to the east are owned by the Applicant and contain a Subtitle D landfill that has been in use since the early 1970's. Shipments of hazardous waste materials reach the Subtitle C site either by truck or via rail lines, and do not cross over any private lands not owned by the Applicant. A 1,000-foot property line setback is maintained from adjacent property lines for the landfill consistent with the Gilliam County Comprehensive Plan. Other lands surrounding the site that are not owned by the Applicant have been used for grazing for many decades, and more recently for wind power facilities, neither of which have given rise to compatibility conflicts of which the Applicant is aware. As noted above, the aggregate mine on Map Lot 2N-20E-2318 began operating long after the Subtitle C TSDF was operational.

4.3.2 Novel Compatibility Issues

Nearly all of the lands that immediately abut the resource lands to the west are already zoned M-G (See Atlas Pages 2 and 3) and could be developed with a landfill without a goal exception. A small portion of lands immediately to the north of Map Lot 2N-20E-2313 will be made available for landfilling as a result of the proposed goal exception, as illustrated on Atlas Page 5. Given the long presence of the TSDF, measures already in place to limit impacts, and lack of readily apparent compatibility issues, applicant examines the potential of new and novel issues that may arise from the expansion of the TSDF area in this section.

4.3.2.1 ADJACENT RESOURCE USES

The Gilliam County Comprehensive Plan will require that the proposed Subtitle C TSDF activities will occur at least 1,000 feet from the Subject Property's boundaries. This will ensure that any neighboring farm practices will continue to be substantially distanced from any portion of the TSDF. For many of the lands immediately to the west of Map Lot 2N-20E-2313, these 1,000 buffers are already in place and will remain unchanged. As noted, Map Lot 2N-20E-2313 is already zoned M-G and could be developed with landfilling activities to within 1,000 feet of the property lines.

Given the nature of the proposed goal exception, no new uses are expected to be impacted by the proposal. Instead, existing uses may in some case be moving closer to a landfilling area. Because there has been no evidence of compatibility issues in the past of which the Applicant is aware, no novel conflicts issues are identified. As discussed above and in Volume 1 Section 4.3.1, substantial measures are already in place to limit negative impacts to surrounding lands. The externalities that may be more difficult to mitigate, such as aesthetic impacts, are likely to have minimal negative consequences for the adjacent resource uses. For example, it is not expected that the profitability of an aggregate quarry would be in any way affected by its view of a landfill. Likewise, if dust is managed and groundwater protected, cattle are unlikely to be affected by the visual proximity of a landfill that is still at least a 1,000 feet distant.

The Applicant is proposing evaporation ponds near the north boundary of the project. Along the north boundary, the Applicant is proposing eight evaporation ponds. The northernmost ponds will be at least 25-feet from the north property line. These ponds will be used to evaporate liquid wastes. The ODEQ permitting for these evaporation ponds will not permit release of any waste and the design, construction, operation, and maintenance is specifically intended to ensure compliance with ODEQ permitting. The north property line is fenced and the no likelihood of compatibility issues due to cattle grazing near that property line is expected.

In the northeast corner of the project, the existing aggregate quarry used for on-site road building, landfill cell construction, and similar activities is planned to be expanded over time. Lands to the west are grazed as part of the Cedar Springs Ranch, however that same area of the Cedar Springs



Ranch contains its own aggregate quarry and so the ranching activity has already been operating in a compatible manner with the aggregate quarry that is on the ranch itself.

4.3.2.2 SURROUNDING NATURAL RESOURCES

As discussed herein above, there are no known Goal 5 protected resources in proximity to the Subject Site or the proposed expansion area⁶. Therefore, the project is not expected to result in negative externalities with the potential to significantly impact a Goal 5 or natural resource in the area.

4.3.3 Compatibility Determination

The existing uses surrounding the subject property consist of a mixture of cattle grazing, an aggregate quarry, and wind power facilities. These uses have co-existed with the existing Subtitle C TSDf and do not appear to show any evidence of incompatibility. So long as the existing operational measures as described in Volume 1 Section 4.3.1 at the CWMNW facility continue to remain in place and the 1,000-foot property line setback for the landfill that is required by the Gilliam County and Oregon rule locational separation standards is applied, it is expected that the expanded Subtitle C TSDf will remain compatible with surrounding farm practices and resource uses.

5 CONCLUSIONS

All lands that could be conceivably considered as alternatives not requiring an exception were individually analyzed herein above in Section 2. As detailed there, each Alternative Site was found to not be a reasonable location for a new Subtitle C TSDf.

Alternative lands that were representative of those requiring an exception were analyzed in section 3. Therein, it was determined that the Subject Property will have the least adverse ESEE consequences in comparison to both the general ESEE analysis and the theoretical alternative sites 1 and 2.

In Section 4, the compatibility of the Subject Property was examined in relation to its immediate surrounds and neighboring uses. As determined in Section 4, the existing operational practices and 1,000-foot landfill setback required by the Gilliam County Comprehensive Plan and Oregon Administrative Rule are sufficient to render the Subject Property compatible with surrounding uses.

Given the preponderance of evidence and the reasoning herein, a second Subtitle C TSDf elsewhere in the County is undesirable and not a reasonable alternative when compared to expansion of the existing facility on the Subject Property.

⁶ Applicant reserves the right to supplement the record related to Goal 5 resources in the event that conflicts are raised during the proceedings as an important issue.

6 TECHNICAL APPENDICES

This section will include any technical appendices that support specific elements of the alternatives and compatibility analyses.

APPENDIX A

Soil Survey of Gilliam County (Excerpts)



SOIL SURVEY OF GILLIAM COUNTY, OREGON

By Richard E. Hosler, Soil Conservation Service

Fieldwork by Richard E. Hosler, David R. Johnson,
Duane K. Monte, George L. Green, Terry A. Dallin,
and Dal F. Ames, Soil Conservation Service

United States Department of Agriculture, Soil Conservation Service,
in cooperation with Oregon Agricultural Experiment Station

Gilliam County is in the north-central part of Oregon (see facing page). It has a total area of 779,520 acres, or 1,218 square miles (8). Condon, the county seat, has a population of 930.

General nature of the county

This section provides general information about the climate; physiography, relief, and drainage; farming and ranching; natural resources; and history and development of Gilliam County.

Climate

This section was prepared by the National Climatic Center, Asheville, North Carolina.

The Rocky Mountains partly shield Gilliam County from strong Arctic winds. Although the county is cold in winter, the winters are generally not severe. In summer, Pacific Ocean winds are partially blocked; days are hot but nights are fairly cool. Precipitation is scant in summer. In many places during the cooler part of the year, precipitation is adequate for nonirrigated small grain or range. The snowpack accumulation at high elevations supplies water for irrigation in parts of the lowland.

Tables 1 and 2 give temperature and precipitation for the survey area, as recorded at Arlington and Condon, Oregon, for the period 1951-73. Tables 3 and 4 show probable dates for the first freeze in fall and the last freeze in spring. Tables 5 and 6 provide data on length of the growing season.

In winter the average temperatures at Arlington and Condon are 37 and 33 degrees, respectively. The lowest temperature, -22 degrees, occurred at Arlington on January 27, 1957. In summer the average temperature is 73 degrees at Arlington and 64 degrees at Condon. The average daily maximum temperature is about 84. The

highest recorded temperature, 115 degrees, occurred at Arlington on August 4, 1961.

Growing degree days, shown in tables 1 and 2, are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 9 inches at Arlington and about 14 inches at Condon. Of this, 30 percent usually falls in April through September, which includes the growing season for most crops. The heaviest 1-day rainfall during the period of record was 2.27 inches at Arlington on December 22, 1964. Thunderstorms occur on about 10 days each year, and most occur in summer.

Average seasonal snowfall is 9 inches at Arlington and 32 inches at Condon. The greatest snow depth at any one time during the period of record was 10 inches at Arlington and 17 inches at Condon. On the average, 3 days at Arlington and 10 days at Condon have at least 1 inch of snow on the ground, but the number of such days varies greatly from year to year.

The average relative humidity in midafternoon is about 50 percent. Humidity is higher at night, and the average at dawn is about 70 percent. The percentage of possible sunshine is 70 in summer and 30 in winter. The prevailing wind is from the southwest. Average windspeed is highest, 10 miles per hour, in spring.

Physiography, relief, and drainage

Gilliam County is mainly within the Columbia Plateau physiographic province. An area in the southeastern part of the county is in the Blue Mountain section of this province. Generally, the rest of the county is a plain that was covered by molten basalt and then uplifted. The basalt in the floor of the plain is overlain by wind-deposit-

ed silt. Elevation of the plain ranges from about 250 feet along the Columbia River to about 3,600 feet near the border of the Blue Mountain section. Relief is dominantly nearly level to rolling on the stream dissected terrain.

The Blue Mountain section is a tilted, folded, and faulted uplift of the Columbia River basalt and older underlying rocks. This section is characterized by flattopped ridges, broad flats, and steep walled canyons. Topography is mainly the result of erosion and stream cutting in the basalt. Ash deposited during the past volcanic activity in the Cascade Mountains has influenced the soils in the Blue Mountain section, especially north-facing exposures (4). Elevation ranges from about 2,600 feet along some canyon bottoms to about 4,300 feet on the ridges.

The drainage pattern in the county is controlled mainly by the surface of the underlying basalt. The mantle of loess has had little effect on modifying this pattern. Stream gradient is determined by the tilt of the basalt.

About 584,400 acres of the county is drained to the west into the John Day River. The river forms the western boundary of Gilliam County. The major drainages in this watershed are Rock Creek, Thirtymile Creek, Hay Creek, Ferry Canyon, Lonerock Creek, and Lost Valley Creek. The rest of the county is drained to the north into the Columbia River, which forms the northern boundary of Gilliam County. The major drainages in this watershed are Quinton Creek, Blalock Canyon, Alkali Canyon, Eight-mile Canyon, Fourmile Canyon, and Willow Creek.

Elevation of the main towns and communities in the county are Arlington, 285 feet; Olex, 1,000 feet; Mikkalo, 1,460 feet; Condon, 2,844 feet; Mayville, 2,946 feet; and Lonerock, 2,840 feet.

Farming and ranching

The first non-Indian settlers in Gilliam County were mainly ranchers who raised cattle, horses, and sheep. Farming became important when homesteaders began arriving in the 1870's and 80's. They settled in an area from Shutler Flat and Rock Creek in the north to Lonerock and Mayville in the south. They broke out the native bunchgrasses and grew mainly wheat in a crop-fallow rotation. In 1881, the first wheat crop in the county was raised and threshed on Shutler Flat. Because of poor transportation and the long distance to market, most crops were consumed locally until an adequate road system was constructed. In 1905 a railroad line was built from Arlington to Condon. This opened up outside markets for the farmers' crops (Unpublished "History of Gilliam County" by Mariam C. Thouvenel and Lovena S. Palmer, 1952).

The advent of gasoline and diesel powered tillage and harvesting machinery has resulted in large increases in the size of operating units.

Winter wheat and spring barley are grown almost exclusively in the dryland areas. At present, about 90 percent of the irrigated land is adjacent to the major

streams. Alfalfa hay and wheat are generally grown in these areas. Where irrigation water is available, many soils in Gilliam County have high potential for such irrigated crops as potatoes, corn, wheat, and alfalfa hay.

In past years the raising of cattle and sheep was very important in Gilliam County, but in recent years its importance has declined. The sheep raised in the county now are mainly in the northern part. Many farmers maintain a herd of beef cattle in addition to their main grain operation.

Since the "Dust Bowl" years of the 1930's, interest in soil conservation has increased. In 1946, the Gilliam County Soil and Water Conservation District was organized.

Natural resources

The major natural resources in Gilliam County are the soil; the Columbia River and other perennial streams; underground water; wildlife; and recreation areas.

The soil is the most important natural resource in Gilliam County. About 90 to 95 percent of the inhabitants of the county are directly or indirectly associated with the soil. The major source of income is from crops or from livestock.

The Columbia River is an important resource to the entire county. It provides an avenue for barge transportation of crops to larger ports. It also provides hydroelectric power from the John Day Dam and other dams. At the present time, however, the Columbia River provides little water for irrigation in Gilliam County. The soils suitable for irrigation are at elevations and distances that make pumping of water from the river uneconomical.

Underground water supplies are tapped by deep wells throughout the county. These provide water for domestic use and for some irrigation. Most irrigation water is taken from perennial streams and is used to irrigate the adjacent bottom lands. Major perennial streams are the John Day River, Rock Creek, Thirtymile Creek, Willow Creek, and Lonerock Creek. Ninety percent of the irrigated land in the county is adjacent to these streams.

Gilliam County has a variety of wildlife. The wildlife is an important natural resource, especially game species. In rangeland and dryfarmed areas, mule deer, chukar, and Hungarian partridge are important game species. In the irrigated areas along streams, ring-necked pheasant and mule deer are common. Besides these game species, many other animals and birds, such as rabbits, coyotes, badgers, hawks, owls, and golden eagles, inhabit the area. Along the Columbia River, large flocks of geese and ducks congregate at certain times of the year. The Columbia River and some of the major streams in the county provide suitable habitat for such fish as salmon, steelhead, and sturgeon.

Recreational pursuits in Gilliam County include sight-seeing, photography, visiting historical sites, boating and

swimming on the Columbia and John Day Rivers, and arrowhead hunting.

History and development

The Lewis and Clark expedition of 1805-06 passed the northern end of what is now Gilliam County. The expedition traveled by boat on the Columbia River but did not land and explore the area. Wagon trains traveled the Oregon Trail in the 1840's and 50's. The Trail crossed the northern end of the county about 5 to 10 miles south of the Columbia River. These travelers did not settle in Gilliam County, however.

The first permanent settlers arrived in the early 1860's and settled along the lower part of Rock Creek. They were mostly stockmen who grazed their cattle and horses on the bunchgrass rangeland. The first sheep came into the area in 1875 near Lonerock in the extreme southern part of the county.

Most early settlers came from the Willamette Valley in the 1870's and 80's. They traveled by wagon to Portland and then by ferry to The Dalles. From The Dalles they continued by wagon over the Oregon Trail to Gilliam County. Most of these people settled along Rock Creek, although many settled in the towns that are now known as Lonerock, Mayville, and Condon. Many homesteaders were farmers and grew wheat on the rolling hills from Shutler Flat in the north to Mayville in the south.

Gilliam County was organized in 1885. It was originally part of Wasco County. For the first 5 years, Alkali, now known as Arlington, was the county seat. In 1890 the county seat was moved to Condon. The population of the county was 3,600 in 1890 and increased to 3,960 in 1920. In 1976, the population was 2,200.

How this survey was made

Soil scientists made this survey to learn what kinds of soil are in the survey area, where they are, and how they can be used. The soil scientists went into the area knowing they likely would locate many soils they already knew something about and perhaps identify some they had never seen before. They observed the steepness, length, and shape of slopes; the size of streams and the general pattern of drainage; the kinds of native plants or crops; the kinds of rock; and many facts about the soils. They dug many holes to expose soil profiles. A profile is the sequence of natural layers, or horizons, in a soil; it extends from the surface down into the parent material, which has been changed very little by leaching or by the action of plant roots.

The soil scientists recorded the characteristics of the profiles they studied, and they compared those profiles with others in counties nearby and in places more distant. Thus, through correlation, they classified and

named the soils according to nationwide, uniform procedures.

After a guide for classifying and naming the soils was worked out, the soil scientists drew the boundaries of the individual soils on aerial photographs. These photographs show woodlands, buildings, field borders, roads, and other details that help in drawing boundaries accurately. The soil map at the back of this publication was prepared from aerial photographs.

The areas shown on a soil map are called soil map units. Some map units are made up of one kind of soil, others are made up of two or more kinds of soil, and a few have little or no soil material at all. Map units are discussed in the sections "General soil map for broad land use planning" and "Soil maps for detailed planning."

While a soil survey is in progress, samples of soils are taken as needed for laboratory measurements and for engineering tests. The soils are field tested, and interpretations of their behavior are modified as necessary during the course of the survey. New interpretations are added to meet local needs, mainly through field observations of different kinds of soil in different uses under different levels of management. Also, data are assembled from other sources, such as test results, records, field experience, and information available from state and local specialists. For example, data on crop yields under defined practices are assembled from farm records and from field or plot experiments on the same kinds of soil.

But only part of a soil survey is done when the soils have been named, described, interpreted, and delineated on aerial photographs and when the laboratory data and other data have been assembled. The mass of detailed information then needs to be organized so that it is readily available to different groups of users, among them farmers, managers of rangeland and woodland, engineers, planners, developers and builders, homebuyers, and those seeking recreation.

General soil map for broad land use planning

The general soil map at the back of this publication shows, in color, map units that have a distinct pattern of soils and of relief and drainage. Each map unit is a unique natural landscape. Typically, a map unit consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up one unit can occur in other units but in a different pattern.

The general soil map provides a broad perspective of the soils and landscapes in the survey area. It provides a basis for comparing the potential of large areas for general kinds of land use. Areas that are, for the most part, suited to certain kinds of farming or to other land uses can be identified on the map. Likewise, areas of soils

having properties that are distinctly unfavorable for certain land uses can be located.

Because of its small scale, the map does not show the kind of soil at a specific site. Thus, it is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The kinds of soil in any one map unit differ from place to place in slope, depth, stoniness, drainage, or other characteristics that affect their management.

Areas dominated by moderately deep to very deep, well drained and excessively drained soils formed in eolian sands, alluvium, and lacustrine material in a 7 to 11 inch precipitation zone

These soils are on terraces near the Columbia River. Slope is 0 to 40 percent. These soils are well drained in most areas, but in some areas they are somewhat excessively drained. The hazard of soil blowing is moderate or severe.

These soils are in four map units. Most areas of these soils are used for range. Because of the low precipitation, crops are not suited unless irrigated. About 30 percent of the acreage of these soils is suited to irrigation, and if irrigated is suited to a wide variety of crops.

1. Quincy-Sagehill

Very deep, well drained and excessively drained fine sandy loams and loamy fine sands

This map unit consists of soils that formed in mixed sands, loess, and calcareous lacustrine sediment. These soils are on terraces. Slope is 0 to 40 percent. The native vegetation is needleandthread, Indian ricegrass, bluebunch wheatgrass, Sandberg bluegrass, and associated shrubs and forbs. Elevation is 500 to 1,200 feet. The average annual precipitation is 7 to 9 inches, and the average annual temperature is 49 to 54 degrees F. The frost-free period is 140 to 200 days at 32 degrees and 180 to 215 days at 28 degrees.

This map unit makes up 1 percent of the county. It is about 45 percent Quincy soils and 40 percent Sagehill soils. Rock outcrop and Dune land make up about 10 percent of this map unit. Roloff and Nansene soils make up about 5 percent.

The Quincy soils to a depth of 60 inches or more are very dark grayish brown loamy fine sand.

The Sagehill soils have a surface layer of dark brown fine sandy loam. The subsoil is dark brown fine sandy loam and very fine sandy loam. The substratum to a depth of 60 inches or more is dark grayish brown and grayish brown silt loam.

The soils in this map unit are used for irrigated potatoes, alfalfa hay, and winter wheat. They are also used for range and wildlife habitat.

Areas of this map unit provide habitat for a small number of mule deer. Birds and small animals are common. Such upland game birds as ring-necked pheasant are in areas of irrigated crops. Areas of this unit near the Columbia River, especially areas of cropland, are used by waterfowl. Areas that border the Columbia River have potential for fishing for steelhead and salmon.

In areas of this map unit, runoff is slight to moderate and sedimentation as a result of runoff is low to moderate. The hazard of soil blowing is high. Maintaining maximum plant cover on rangeland and irrigated fields and using proper irrigation methods on cropland help reduce erosion.

2. Roloff

Moderately deep, well drained silt loams

This map unit consists of soils that formed in loess and alluvial sand over basalt. These soils are on terraces. Slope is 0 to 20 percent. The native vegetation is needleandthread, Indian ricegrass, bluebunch wheatgrass, and associated shrubs and forbs. Elevation is 250 to 900 feet. The average annual precipitation is 7 to 10 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 140 to 200 days at 32 degrees and 180 to 215 days at 28 degrees.

This map unit makes up 2 percent of the county. It is about 80 percent Roloff soils. Blalock, Olex, Quincy, and Sagehill soils and Rock outcrop make up about 20 percent of this map unit.

The Roloff soils have a surface layer of very dark grayish brown silt loam. The subsoil and substratum are dark brown silt loam. Basalt is at a depth of 20 to 40 inches.

The soils in this map unit are used mainly for range. A few areas are used for irrigated pasture, and some areas are used for wildlife habitat.

Areas of this map unit provide habitat for a small number of mule deer. Birds and small animals are common. Such upland game birds as ring-necked pheasant are in areas of irrigated crops. Areas of this unit near the Columbia River, especially areas of cropland, are used by waterfowl. Areas that border the Columbia River have potential for fishing for steelhead and salmon.

In areas of this map unit, runoff is slight and sedimentation as a result of runoff is low. Maintaining maximum plant cover on rangeland and irrigated pasture and using proper irrigation methods on cropland help reduce erosion.

3. Olex-Krebs

Deep, well drained silt loams and gravelly silt loams

This map unit consists of soils formed in loess and very gravelly alluvial deposits. Slope is 0 to 40 percent. The native vegetation is bluebunch wheatgrass, Sandberg bluegrass, and a variety of perennial forbs. Eleva-

tion is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

This map unit makes up 5 percent of the county. It is about 70 percent Olex soils and 20 percent Krebs soils. Blalock, Roloff, Sagehill, and Willis soils make up about 10 percent of this map unit.

The Olex soils are on terraces. The surface layer is dark brown or very dark grayish brown silt loam. The subsoil is dark brown or brown gravelly silt loam. The upper part of the substratum is dark brown or brown very gravelly silt loam, and the lower part of the substratum to a depth of 60 inches or more is brown, calcareous extremely gravelly silt loam.

The Krebs soils are on uplands. The surface layer is very dark grayish brown silt loam and silty clay loam. The subsoil is dark brown, brown, and pale brown silty clay loam and silty clay. The substratum is pale brown silty clay loam. Diatomite is at a depth of 40 to 60 inches.

The soils in this map unit are used mainly for range. They are also used for wildlife habitat.

Areas of this map unit provide habitat for a small number of mule deer. Birds and small animals are common.

Runoff in areas of this map unit is mainly from the steeper slopes. Sedimentation as a result of runoff is moderate or high. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

4. Warden-Sagehill

Very deep, well drained fine sandy loams and silt loams

This map unit consists of soils that formed in loess and calcareous lacustrine sediment. Slope is 2 to 40 percent. The native vegetation is bluebunch wheatgrass, Sandberg bluegrass, needleandthread, and associated shrubs and forbs. Elevation is 500 to 1,200 feet. The average annual precipitation is 8 to 9 inches, and the average annual temperature is 49 to 53 degrees F. The frost-free period is 140 to 180 days at 32 degrees and 180 to 215 days at 28 degrees.

This unit makes up 5 percent of the county. It is about 55 percent Warden soils and 40 percent Sagehill soils. Blalock, Olex, and Willis soils make up about 5 percent of this map unit.

The Warden soils are on uplands. The surface layer is dark brown silt loam. The subsoil is dark brown and brown silt loam. The upper part of the substratum is brown silt loam, and the lower part of the substratum is calcareous, grayish brown and dark grayish brown silt loam. Basalt is at a depth of 60 inches or more.

The Sagehill soils are on terraces. The surface layer is dark brown fine sandy loam. The subsoil is dark brown fine sandy loam and very fine sandy loam. The substratum is dark grayish brown and grayish brown silt loam.

The soils in this map unit are used mainly for small grain in a crop-fallow rotation. Wheat and barley are the main crops. These soils are also used for range and wildlife habitat. Where water is available for irrigation, these soils have potential for irrigated wheat, potatoes, corn, and alfalfa hay.

Areas of this map unit provide habitat for a small number of mule deer. Birds and small animals are common. In the steeper areas and along drainageways this map unit provides suitable habitat for chukar.

In areas of this map unit, runoff is mainly from the steeper dryfarmed soils on side slopes. Sedimentation, as a result of runoff, is moderate or high. The hazard of soil blowing is high on the Sagehill soils. The use of stubble mulch tillage, minimum tillage, and diversions helps reduce erosion. Maintaining maximum plant cover on rangeland and seeding and cultivating at the proper time also help reduce erosion.

Areas dominated by very deep, well drained and somewhat excessively drained soils formed in recent alluvium in an 8 to 14 inch precipitation zone

These soils are on bottom lands along Rock and Willow Creeks and in Eightmile Canyon. Slope is mainly 0 to 3 percent. These soils are somewhat excessively drained in about half of the areas and are well drained in the rest. The hazard of streambank erosion is severe, and in about half of the acreage the hazard of soil blowing is moderate.

These soils are in one map unit. About half of the acreage of these soils is used for irrigated hay and pasture.

5. Xeric Torrifluvents-Kimberly

Very deep, well drained and somewhat excessively drained fine sandy loams

This map unit consists of soils that formed in recent mixed alluvium. Slope is 0 to 3 percent. The native vegetation is giant wildrye, shrubs, and forbs. Elevation is 300 to 1,200 feet. The average annual precipitation is 8 to 12 inches, and the average annual temperature is 49 to 53 degrees F. The frost-free period is 140 to 180 days at 32 degrees and 180 to 215 days at 28 degrees.

This map unit makes up about 2 percent of the county. It is about 40 percent Xeric Torrifluvents and 30 percent Kimberly soils. Hermiston, Powder, and Stanfield soils and Riverwash make up about 30 percent of this map unit.

The Xeric Torrifluvents are somewhat excessively drained. The surface layer is dark brown fine sandy loam. The upper part of the substratum is brown fine sandy loam and loamy fine sand, and the lower part of the substratum is dark brown loamy fine sand and grav-

elly loamy sand. Bedrock is at a depth of more than 60 inches.

The Kimberly soils are well drained. The surface layer is dark brown fine sandy loam. The substratum is moderately calcareous, dark brown and very dark grayish brown fine sandy loam and sandy loam. Bedrock is at a depth of more than 60 inches.

The soils in this map unit are used for irrigated alfalfa hay and winter wheat and for range.

Areas of this map unit provide food and cover for upland game birds, such as ring-necked pheasant and valley quail. Chukar use areas of these soils and adjacent slopes for food and cover. Areas provide food and limited cover for mule deer and smaller animals. Willow creek, which flows through this unit, is suitable trout habitat and has potential for fishing.

Areas of this map unit are susceptible to rare flooding. Streambanks need to be properly sloped and stabilized to minimize bank cutting and sediment pollution of streams at times of heavy runoff.

Areas dominated by very shallow to very deep, well drained soils formed in loess and colluvium in a 9 to 14 inch precipitation zone

These soils are on ridges and side slopes throughout the county, except in the northeastern and southeastern parts. Slope is 0 to 70 percent. The hazard of water erosion is moderate to severe in many areas.

These soils are in five map units. About half of the areas are farmed, and most of these are in a grain-fallow rotation. The rest are used mainly for range.

6. Walla Walla

Very deep, well drained silt loams

This map unit consists of soils formed in loess and small amounts of volcanic ash. These soils are on ridgetops and side slopes. Slope is 1 to 35 percent. The native vegetation is bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, shrubs, and forbs. Elevation is 900 to 1,200 feet. The average annual precipitation is 12 to 14 inches, and the average annual temperature is 49 to 54 degrees F. The frost-free period is 150 to 170 days at 32 degrees and 170 to 210 days at 28 degrees.

This map unit makes up 2 percent of the county. It is about 75 percent Walla Walla soils. Lickskillet soils make up about 10 percent of this map unit and Nansene, Roloff, and Wrentham soils make up about 15 percent.

The Walla Walla soils have a surface layer of very dark grayish brown silt loam. The subsoil is brown and dark brown silt loam, and the substratum is calcareous, brown silt loam. Bedrock is at a depth of more than 60 inches.

The soils in this map unit are used mainly for winter wheat in a grain-fallow rotation. Soils that are too steep for cultivation are used for range. Where water is available, these soils have high potential for irrigated crops.

Areas of this map unit provide food and cover for mule deer and small animals. In the steeper breaks along the Columbia River and along drainageways, habitat is suitable for chukar. Where this map unit borders the Columbia River, it is used by a large variety of waterfowl. The fishing potential for steelhead and salmon is good.

Runoff is a concern to management in all but the more level areas of this map unit. Sedimentation from runoff is moderate or high. Using stubble mulch tillage, minimum tillage, and other proper practices on cropland helps reduce erosion. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

7. Ritzville-Mikkalo

Moderately deep and very deep, well drained silt loams

This map unit consists of soils that formed in loess. These soils are on ridgetops and side slopes. Slope is 0 to 40 percent. The native vegetation is bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, shrubs, and forbs. Elevation is 900 to 2,500 feet. The average annual precipitation is 9 to 12 inches, and the average annual temperature is 48 to 51 degrees F. The frost-free period is 130 to 180 days at 32 degrees and 150 to 200 days at 28 degrees.

This map unit makes up about 25 percent of the county. It is about 65 percent Ritzville soils and 20 percent Mikkalo soils. Bakeoven, Lickskillet, and Willis soils and Rock outcrop make up about 15 percent of this map unit.

The Ritzville soils have a surface layer and subsoil of dark brown silt loam. The substratum is calcareous, brown silt loam. Bedrock is at a depth of more than 60 inches.

The Mikkalo soils are on ridgetops and south-facing exposures. The surface layer is very dark grayish brown and dark brown silt loam. The subsoil is dark brown silt loam, and the substratum is calcareous, brown silt loam. Basalt is at a depth of 20 to 40 inches.

The soils in this map unit are used mainly for wheat and barley in a grain summer-fallow rotation. Soils that are too steep for cultivation are used for range. The soils in a few areas are irrigated and used for wheat and alfalfa hay.

Areas of this map unit provide food and cover for mule deer and small animals. The major bottom lands provide food and cover for upland game birds, such as ring-necked pheasant and valley quail. The areas on steeper breaks and along drainageways provide suitable habitat for chukar.

Runoff is a concern to management in all but the more level areas of this map unit. Sedimentation from runoff is moderate or high. Using stubble mulch tillage, minimum

tillage, and diversions on cropland helps reduce erosion. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

8. Lickskillet-Wrentham

Shallow and moderately deep, well drained very gravelly silt loams and very stony loams

This map unit consists of soils that formed in loess mixed with colluvium from basalt (fig. 1). Slope is 7 to 70 percent. The native vegetation is bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, shrubs, and forbs. Elevation is 260 to 3,600 feet. The average annual precipitation is 10 to 14 inches, and the average annual temperature is 45 to 52 degrees F. The frost-free period is 60 to 150 days at 32 degrees and 100 to 210 days at 28 degrees.

This map unit makes up 26 percent of the county. It is about 50 percent Lickskillet soils and 15 percent Wrentham soils. Bakeoven, Condon, Valby, Nansene, Mikkalo, Morrow, and Rhea soils make up about 35 percent of this map unit.

The Lickskillet soils are on generally south-facing exposures. The surface layer is dark brown very stony

loam. The subsoil is dark brown very gravelly loam and clay loam. Basalt is at a depth of 12 to 20 inches.

The Wrentham soils are on steep, north-facing exposures. The surface layer is very dark brown silt loam. The subsoil is gravelly and very gravelly silt loam. Basalt is at a depth of 20 to 40 inches.

The soils in this map unit are used for range and wildlife habitat.

The steep areas in this map unit and the adjacent bottom lands provide good habitat for chukar and other upland game birds, such as ring-necked pheasant and valley quail. Mule deer use areas of the Wrentham soil in summer and fall because of the cooler temperatures and proximity to cover. They use areas of the Lickskillet soil during spring and winter because of the warmer temperatures and proximity to cover. A variety of small animals are common. Rock Creek and Thirtymile Creek, which flow through this map unit, are suitable trout habitat and provide potential for fishing. The John Day and Columbia Rivers, which border this map unit, provide habitat for steelhead, salmon, and other fish.

The hazard of water erosion is high in this map unit. Sedimentation from runoff is low or moderate. Maintain-

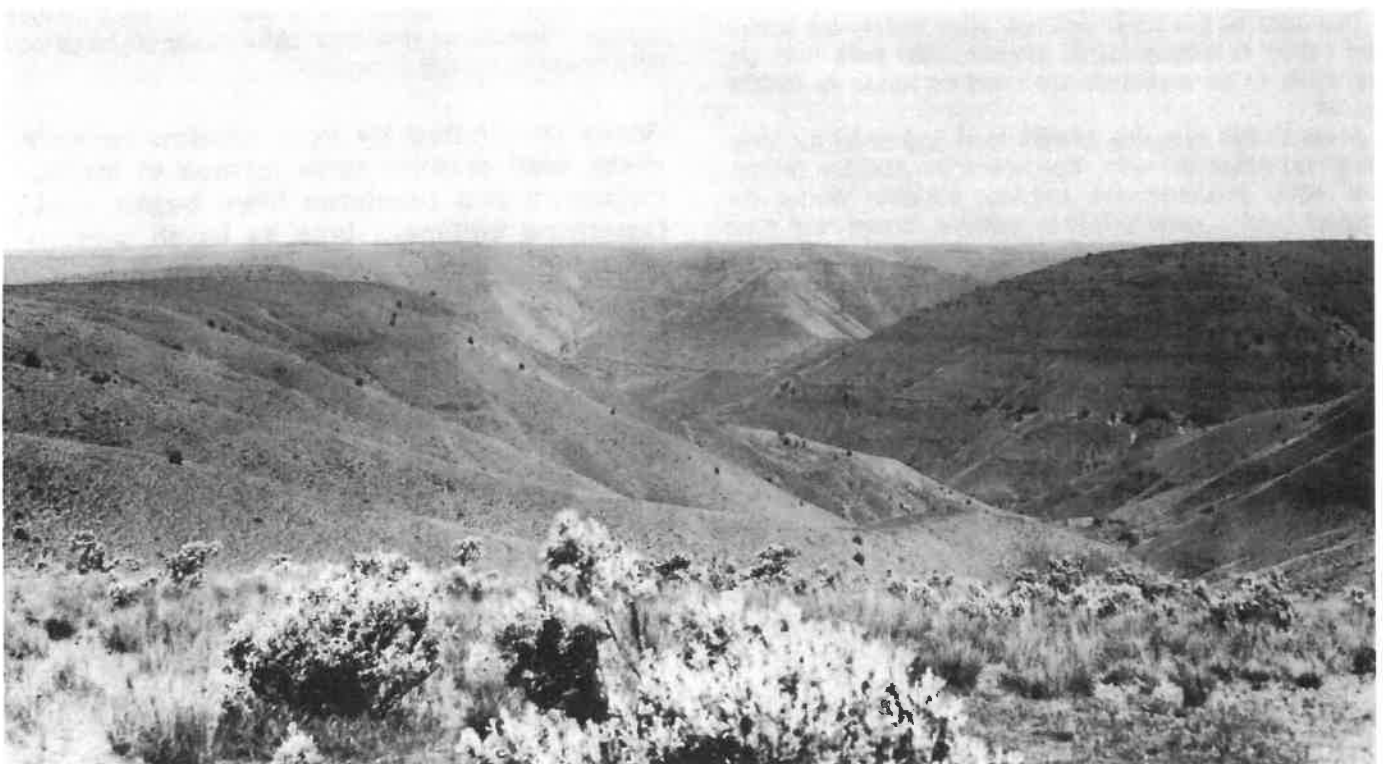


Figure 1.—Area of the Lickskillet-Wrentham unit on the general soil map. In left middle is Wrentham-Rock outcrop complex, 35 to 70 percent slopes. In right middle and background is Lickskillet-Rock outcrop complex, 40 to 70 percent slopes.

ing maximum plant cover on rangeland minimizes the hazard of erosion.

9. Condon-Valby

Moderately deep, well drained silt loams

This map unit consists of soils that formed in loess. These soils are on uplands. Slope is 1 to 35 percent. The native vegetation is bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, shrubs, and forbs. Elevation is 1,600 to 3,100 feet. The average annual precipitation is 11 to 14 inches, and the average annual temperature is 47 to 51 degrees F. The frost-free period is 100 to 150 days at 32 degrees and 150 to 200 days at 28 degrees.

This map unit makes up 14 percent of the county. It is about 60 percent Condon and Valby soils. Bakeoven, Lickskillet, Rhea, and Wrentham soils and Rock outcrop make up about 40 percent of this unit.

The Condon soils have a surface layer of very dark brown silt loam. The subsoil is very dark grayish brown and dark brown silt loam, and the substratum is dark brown silt loam. Basalt is at a depth of 20 to 40 inches.

The Valby soils have a surface layer of very dark brown silt loam. The subsoil is very dark grayish brown and dark brown silt loam, and the substratum is calcareous, brown silt loam. Basalt is at a depth of 20 to 40 inches.

The soils in this map unit are used mainly for wheat and barley in a crop-fallow rotation. The soils that are too steep to be cultivated are used for range or wildlife habitat.

Areas of this map unit provide food and cover for mule deer and small animals. The areas on steeper breaks and along drainageways provide suitable habitat for chukar. Rock Creek provides suitable habitat for trout and has potential for fishing.

Runoff in areas of this map unit is mainly from the steeper dryfarmed side slopes. Sedimentation as a result of runoff is moderate or high. Using stubble mulch tillage and diversions in cropland helps reduce erosion. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

10. Morrow-Bakeoven

Very shallow and moderately deep, well drained silt loams and very cobbly loams

This map unit consists of soils that formed in loess and in colluvium from basalt. These soils are on ridgetops. Slope is 1 to 70 percent. The native vegetation is bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, shrubs, and forbs. Elevation is 1,000 to 3,100 feet. The average annual precipitation is 11 to 14 inches, and the average annual temperature is 47 to 52 degrees F. The frost-free period is 100 to 150 days at 32 degrees and 140 to 180 days at 28 degrees.

This map unit makes up 12 percent of the county. It is about 60 percent Morrow soils and 20 percent Bakeoven soils. Lickskillet and Wrentham soils and Rock outcrop make up about 20 percent of this map unit.

The Morrow soils have a surface layer of very dark brown silt loam. The subsoil is dark grayish brown and brown silty clay loam, and the substratum is brown silt loam. Basalt is at a depth of 20 to 40 inches.

The Bakeoven soils have a surface layer of dark brown very cobbly loam. The subsoil is dark brown very cobbly loam and very cobbly clay loam. Basalt is at a depth of 4 to 12 inches.

The soils in this map unit are mainly used for range and wildlife habitat. They are also used for wheat and barley in a crop-fallow rotation.

Areas of this map unit provide food and cover for mule deer and small animals. The main bottom lands provide food and cover for upland game birds, such as ring-necked pheasant and valley quail. The areas on steeper breaks and along drainageways provide suitable habitat for chukar. Rock Creek and Thirtymile Creek, which dissect this unit, are suitable habitat for trout and have potential for fishing.

Runoff in areas of this map unit is mainly from the steeper dryfarmed slopes of the Morrow soils. Sedimentation as a result of runoff is moderate. Using stubble mulch tillage and diversions in cropland helps reduce erosion. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

Areas dominated by very shallow to very deep, well drained soils formed in loess, colluvium and residuum from basalt, and lacustrine sediment in a 14 to 18 inch precipitation zone

These soils are on ridgetops and side slopes on uplands in the southeastern part of the county. Slope is 1 to 70 percent. The hazard of water erosion is moderate to severe in many areas.

These soils are in two map units. Most areas of these soils are in rangeland. About 10 percent of the acreage is farmed, and most of this is in a grain-fallow rotation.

11. Waha-Gwinly-Rockly

Very shallow to moderately deep, well drained silt loams, very cobbly loams, and very cobbly silt loams

This map unit consists of soils that formed in loess and in colluvium and residuum from basalt. Slope is 1 to 70 percent. The native vegetation is Idaho fescue, bluebunch wheatgrass, Sandberg bluegrass, shrubs, and forbs. Elevation is 3,000 to 4,300 feet. The average annual precipitation is 14 to 18 inches, and the average annual temperature is 45 to 49 degrees F. The frost-free

period is 90 to 120 days at 32 degrees and 110 to 150 days at 28 degrees.

This map unit makes up 5 percent of the county. It is about 45 percent Waha soils, 20 percent Gwinly soils, and 15 percent Rockly soils. Kahler, Tub, and Ukiah soils and Rock outcrop make up about 20 percent of this map unit.

Waha soils are on ridgetops, and where sloping are mainly on north-facing exposures. The surface layer is very dark brown silt loam. The subsoil is dark brown and brown silty clay loam and extremely cobbly silt loam. Basalt is at a depth of 20 to 40 inches.

The Gwinly soils are on south-facing exposures. The surface layer is very dark grayish brown very cobbly silt loam. The subsoil is very dark grayish brown and dark yellowish brown very cobbly silty clay loam and extremely cobbly clay. Basalt is at a depth of 12 to 20 inches.

The Rockly soils are on ridgetops. The surface layer is dark brown very cobbly loam. The subsoil is dark brown extremely cobbly clay loam. Basalt is at a depth of 5 to 12 inches.

The soils in this map unit are used for wheat and barley in a crop-fallow rotation. They are also used for range and wildlife habitat.

Areas of this map unit provide food and cover for mule deer and small animals.

Runoff is mainly from the steeper dryfarmed areas of Waha soils and the steeper areas of Gwinly soils. Using stubble mulch tillage and diversions in cropland helps reduce erosion. Maintaining maximum plant cover on rangeland minimizes the hazard of erosion.

12. Tub-Simas-Ukiah

Moderately deep and very deep, well drained stony silt loams, cobbly silty clay loams, and stony silty clay loams

This map unit consists of soils that formed in loess and in colluvium and residuum from old lacustrine sediment and volcanic tuff. Slope is 1 to 40 percent. The native vegetation is Idaho fescue, bluebunch wheatgrass, Sandberg bluegrass, shrubs, and forbs. Elevation is 3,000 to 3,900 feet. The average annual precipitation is 14 to 18 inches, and the average annual temperature is 45 to 49 degrees F. The frost-free period is 90 to 130 days at 32 degrees and 100 to 150 days at 28 degrees.

This map unit makes up 1 percent of the county. It is about 55 percent Tub soils, 25 percent Simas soils, and 15 percent Ukiah soils. Gwinly, Schrier, and Kahler soils make up about 5 percent of this map unit.

The Tub soils are on uplands, and where sloping are mainly on north-facing exposures (fig. 2). The surface layer is black stony silty clay loam. The subsoil is black and dark grayish brown cobbly clay and silty clay loam. The substratum to a depth of 60 inches or more is calcareous, dark brown silty clay loam.

The Simas soils are on south-facing exposures. The surface layer is dark grayish brown very stony silt loam and very cobbly silty clay loam. The subsoil is dark brown cobbly clay. The substratum to a depth of 60

inches or more is calcareous, yellowish brown very cobbly clay loam.

The Ukiah soils are on uplands, and where sloping are mainly on south-facing exposures. The surface layer is very dark brown cobbly silty clay loam. The subsoil is dark brown cobbly clay. The substratum is dark brown and strong brown silty clay loam and gravelly loam. Volcanic tuff is at a depth of 20 to 40 inches.

The soils in this map unit are used for wheat and barley for grain and hay in a crop-fallow rotation. These soils are also used for range and wildlife habitat.

Areas of this map unit provide food and cover for mule deer, small animals, and upland game birds.

Runoff is mainly from the steeper dryfarmed areas of Tub and Ukiah soils but is also from steeper areas of all soils in this map unit. Using stubble mulch tillage in cropland and maintaining maximum plant cover on rangeland minimize the hazard of erosion.

Broad land use considerations

Most areas of soils in the Quincy-Sagehill map unit west of Willow Creek are developed for irrigation. If irrigated, vegetables, small grain, hay, and many specialty crops are well suited to soils in this map unit. Before irrigation was provided, the areas were only suitable for limited grazing by livestock in winter.

Soils in the Roloff, Warden-Sagehill, Walla Walla, and Ritzville-Mikkalo map units are currently used for dry-farmed small grain. Large areas of these units, however, are well suited to irrigation. Development of irrigation in extensive areas of these map units depends on the feasibility of providing adequate irrigation water. If soils in these units are irrigated, potential is good for a large variety of crops. A few areas of deep soils in the Ritzville-Mikkalo map unit are irrigated from deep wells.

Some areas of soils in the Walla Walla, Warden-Sagehill, and Ritzville-Mikkalo map units and most areas in the Roloff map unit are underlain by bedrock or hardpan at a depth of less than 40 inches. If these soils or the adjacent, higher lying soils are overirrigated, a high water table readily develops. The pattern of these soils needs to be considered to properly locate irrigation systems.

Soils in the Quincy-Sagehill, Warden-Sagehill, Walla Walla, and Ritzville-Mikkalo map units are generally well suited to community uses. An important consideration, however, in the Quincy-Sagehill and Warden-Sagehill map units is susceptibility of the sandy soils to soil blowing. Areas of soils in the Walla Walla and Ritzville-Mikkalo map units that are moderately deep over bedrock or hardpan and most areas of the Roloff map unit require design modifications for sanitary facilities and various other uses.

Areas of soils in the Olex-Krebs map unit are used mainly for range and wildlife habitat. Many soils in this map unit are not well suited to irrigation or community uses because of the gravelly and very gravelly subsoil.

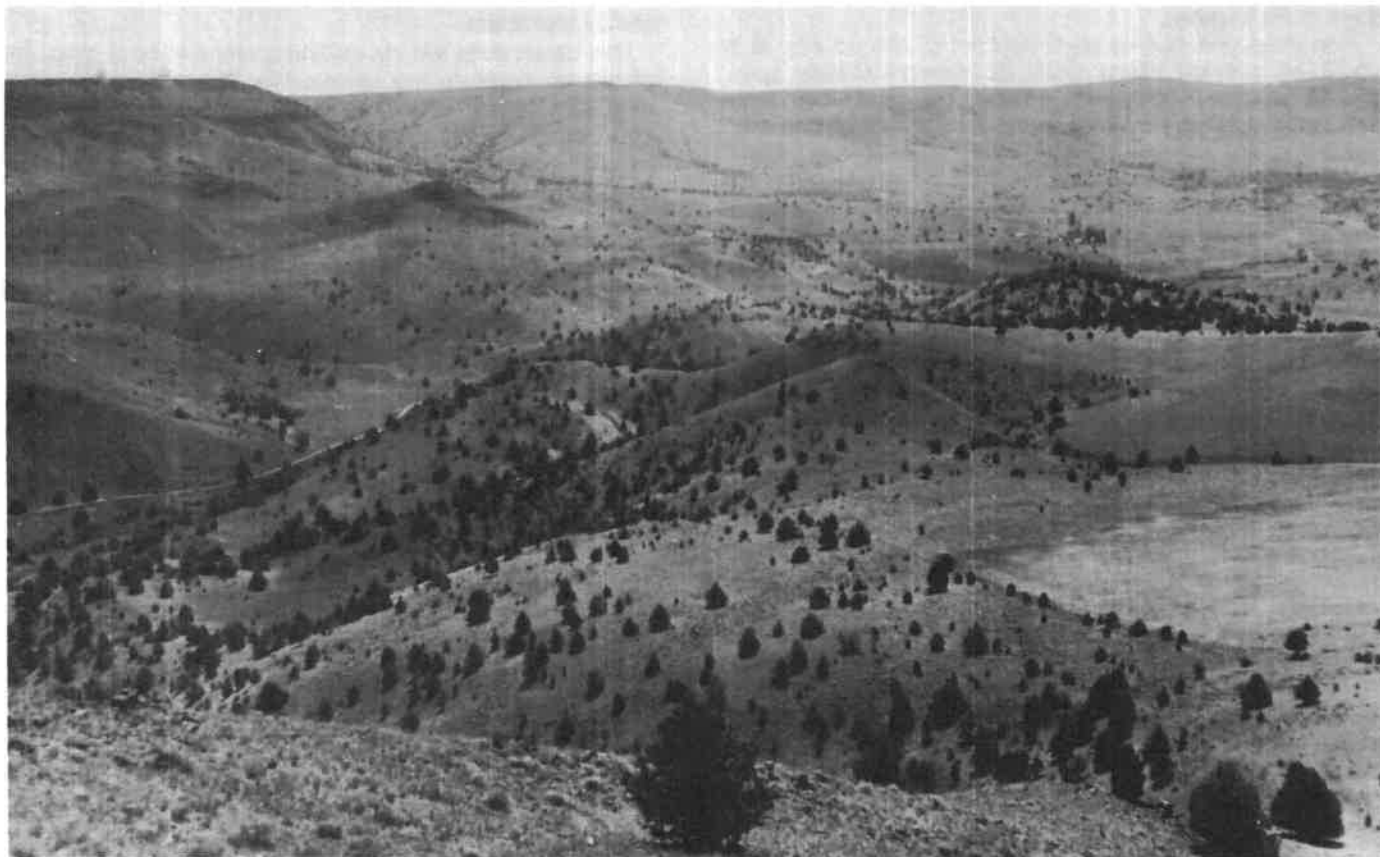


Figure 2.—Tub stony silty clay loam, 12 to 40 percent slopes, in center of picture. Tub gravelly clay loam, 2 to 12 percent slopes, in summer fallow on the right.

Arable soils in the Condon-Valby, Morrow-Bakeoven, and Waha-Gwinly-Rockly map units are currently used in a grain-fallow rotation. In the absence of water for irrigation, grain-fallow cropping will probably continue to be used on soils in these map units.

Soils in the Licksillet-Wrentham map unit are steep and rocky. These soils are used for rangeland and wildlife habitat and are poorly suited to other uses.

Areas of soils in the Xeric Torrifluvents-Kimberly map unit are mainly on flood plains along Willow and Rock Creeks and in Eightmile Canyon. Although nearly all these soils are deep and well drained, they are subject to rare flooding and are not well suited to community uses and sanitary facilities. Almost all areas of Kimberly soils in this map unit are irrigated and used for alfalfa hay and pasture, even though they are well suited to a wide variety of crops. The Xeric Torrifluvents are used mostly for range, but if irrigated, these soils can be used for a wide variety of crops.

Soils in the Tub-Simas-Ukiah map unit, mostly in the Lonerock and Lost Valley areas, are mainly used for livestock grazing and alfalfa hay. A few areas are used for dryfarmed small grain and grain-hay crops. Most soils in this map unit are limited for community developments unless design modifications are made.

Soil maps for detailed planning

The map units shown on the detailed soil maps at the back of this publication represent the kinds of soil in the survey area. They are described in this section. The descriptions together with the soil maps can be useful in determining the potential of a soil and in managing it for food and fiber production; in planning land use and developing soil resources; and in enhancing, protecting, and preserving the environment. More information for each map unit, or soil, is given in the section "Use and management of the soils."

needs in managing the Morrow soil are protection of the soil from water erosion and the conservation of soil moisture for plant growth. Areas of Morrow soil that are dryfarmed need stubble mulch tillage and minimum tillage in combination with a crop-fallow rotation to minimize erosion and help maintain soil moisture. In addition, contour tillage helps prevent severe erosion that results from rapid runoff during periods of high-intensity rainfall and snowmelt.

This complex is severely limited for community uses because of slope and depth to rock. Extensive design modifications are needed for development of dwellings, small buildings, and sanitary facilities. This complex is severely limited for recreational facilities because of slope and depth to rock.

This complex is in capability subclass IVe dryland.

22F—Nansene silt loam, 35 to 70 percent slopes. This very deep, well drained soil is on north-facing exposures, mainly along the Columbia River and Rock Creek. It formed in loess. Average slope is 50 percent. Elevation is 300 to 1,900 feet. The average annual precipitation is 11 to 13 inches, and the average annual temperature is 48 to 52 degrees F. The frost-free period is 140 to 170 days at 32 degrees and 170 to 200 days at 28 degrees.

Typically, the surface layer is very dark brown and dark brown silt loam about 21 inches thick. The subsoil is dark brown and brown silt loam about 24 inches thick. The substratum is brown silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 20 percent Ritzville, Rhea, and Wrentham soils and 5 percent Licksillet soils and Rock outcrop.

Permeability of the Nansene soil is moderate. Effective rooting depth is more than 60 inches. Available water capacity is 6.5 to 12 inches. Water supplying capacity is 8 to 12 inches. Runoff is rapid, and the hazard of erosion is high.

Areas of this soil are used for grazing by livestock and for wildlife habitat.

The native plant community on this soil is mainly Idaho fescue. Bluebunch wheatgrass and Cusick bluegrass are prominent. Sandberg bluegrass and a wide variety of perennial forbs occur throughout the stand in minor amounts. Shrubs are minor in the stand.

When range deteriorates on this soil, Idaho fescue and Cusick bluegrass decrease and bluebunch wheatgrass increases. If deterioration is severe, the forage bunchgrasses are nearly eliminated or greatly reduced in vigor and annual grasses and low-value forbs are dominant. Because of steep slopes, seedbed preparation and seeding of poor condition range are not practical.

Mule deer use areas of this soil in summer and late in fall because of the cooler temperatures and proximity to cover.

This soil is severely limited for community and recreation uses because of steep slopes. The extensive design modifications which are necessary generally are not practical for the development of dwellings, small buildings, sanitary facilities, and recreational facilities.

This soil is in capability subclass VIIe.

23B—Olex silt loam, 0 to 5 percent slopes. This very deep, well drained soil is on high terraces north of Rock Creek. It formed in loess and very gravelly alluvial deposits. Average slope is about 3 percent. Elevation is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

Typically, the surface layer is dark brown silt loam about 12 inches thick. The subsoil is dark brown gravelly silt loam about 12 inches thick. The upper part of the substratum is dark brown very gravelly silt loam about 8 inches thick, and the lower part of the substratum is calcareous, brown extremely gravelly silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 10 percent Roloff and Krebs soils and 5 percent Blalock, Sagehill, and Willis soils.

Permeability of the Olex soil is moderate. Effective rooting depth is 20 to 40 inches. Available water capacity is 4.0 to 6.5 inches. Water supplying capacity is 6.5 to 8.0 inches. Runoff is slow, and the hazard of erosion is slight.

Areas of this soil are used for range and wildlife habitat. Where irrigation water is available, this soil is suited to such irrigated crops as wheat, corn, and alfalfa hay.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for sanitary facilities because of seepage. Design modifications are needed for sewage lagoons, septic tank absorption systems, and sanitary landfills. This soil is suited to other community and recreational uses.

This soil is in capability subclass VIe.

23C—Olex silt loam, 5 to 12 percent slopes. This very deep, well drained soil is on high terraces north of Rock Creek. It formed in loess and very gravelly alluvial deposits. Average slope is about 9 percent. Elevation is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

Typically, the surface layer is dark brown silt loam about 12 inches thick. The subsoil is dark brown gravelly silt loam about 12 inches thick. The upper part of the substratum is dark brown very gravelly silt loam about 8 inches thick, and the lower part of the substratum is calcareous, brown extremely gravelly silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 10 percent Roloff and Krebs soils and 5 percent Blalock, Sagehill, and Willis soils.

Permeability of the Olex soil is moderate. Effective rooting depth is 20 to 40 inches. Available water capacity is 4.0 to 6.5 inches. Water supplying capacity is 6.5 to 8.0 inches. Runoff is slow to medium, and the hazard of erosion is slight to moderate.

Areas of this soil are used for range and wildlife habitat. Where irrigation water is available, this soil is suited to such irrigated crops as wheat, corn, and alfalfa hay.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for sanitary facilities because of seepage and slope. It is limited for dwellings and small buildings and recreational facilities because of slope. Design modifications are needed in places.

This soil is in capability subclass VIe.

23D—Olex silt loam, 12 to 20 percent slopes. This very deep, well drained soil is on high terraces north of Rock Creek. It formed in loess and very gravelly alluvial deposits. Average slope is about 15 percent. Elevation is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

Typically, the surface layer is dark brown silt loam about 12 inches thick. The subsoil is dark brown gravelly silt loam about 12 inches thick. The upper part of the substratum is dark brown very gravelly silt loam about 8 inches thick, and the lower part of the substratum is calcareous, brown extremely gravelly silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 10 percent Roloff and Krebs soils.

Permeability of the Olex soil is moderate. Effective rooting depth is 20 to 40 inches. Available water capacity is 4.0 to 6.5 inches. Water supplying capacity is 6.5 to 8.0 inches. Runoff is medium, and the hazard of erosion is moderate.

Areas of this soil are used for range and wildlife habitat.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for sanitary facilities because of seepage and slope and for other community and recreational uses because of slope. Design modifications are necessary in places.

This soil is in capability subclass VIe.

24D—Olex gravelly silt loam, 5 to 20 percent slopes. This very deep, well drained soil is on uplands north of Rock Creek. It formed in loess and very gravelly alluvial deposits. Average slope is about 12 percent. Elevation is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 30 degrees and 180 to 210 days at 28 degrees.

Typically, the surface layer is very dark grayish brown and dark brown gravelly silt loam about 12 inches thick. The subsoil is brown gravelly and very gravelly silt loam about 12 inches thick. The upper part of the substratum is brown very gravelly silt loam about 18 inches thick, and the lower part of the substratum is calcareous, brown extremely gravelly silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 10 percent Roloff and Krebs soils and 5 percent Blalock, Sagehill, and Willis soils.

Permeability of the Olex soil is moderate. Effective rooting depth is 20 to 40 inches. Available water capacity is 2.5 to 6.5 inches. Water supplying capacity is 6.5 to 8.0 inches. Runoff is medium, and the hazard of erosion is moderate.

Areas of this soil are used for range and wildlife habitat.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for sanitary facilities because of seepage and slope. It is limited for other community uses because of slope and for recreational facilities because of slope, small stones, and a dusty surface. Design modifications are necessary in places.

This soil is in capability subclass VIe.

24E—Olex gravelly silt loam, 20 to 40 percent slopes. This very deep, well drained soil is on uplands north of Rock Creek. It formed in loess and very gravelly alluvial deposits. Average slope is about 25 percent. Elevation is 500 to 1,200 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

Typically, the surface layer is very dark grayish brown and dark brown gravelly silt loam about 12 inches thick. The subsoil is brown gravelly and very gravelly silt loam about 12 inches thick. The upper part of the substratum is brown very gravelly silt loam about 18 inches thick, and the lower part of the substratum is calcareous, brown extremely gravelly silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 10 percent Roloff and Krebs soils and 5 percent Blalock, Sagehill, and Willis soils.

Permeability of the Olex soil is moderate. Effective rooting depth is 20 to 40 inches. Available water capacity is 2.5 to 6.5 inches. Water supplying capacity is 6.5 to 8.0 inches. Runoff is rapid, and the hazard of erosion is high.

Areas of this soil are used for range and wildlife habitat.

The native plant community on this soil is mainly bluebunch wheatgrass. Sandberg bluegrass and Thurber needlegrass are prominent. A variety of perennial forbs occur throughout the stand in minor amounts. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and Thurber needlegrass increase. If deterioration is severe, the forage bunchgrasses are nearly eliminated, a large amount of ground is left bare, and the potential for soil erosion is high. Because the soil is very gravelly and steep, seedbed preparation and seeding of poor condition range generally are not practical.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is severely limited for community uses and recreational facilities because of slope. The extensive design modifications which are necessary generally are not practical.

This soil is in capability subclass VIIe.

25D—Olex-Roloff complex, 5 to 20 percent slopes. These soils are on uplands south of Arlington (fig. 4). Average slope is about 12 percent. Elevation is 700 to 1,000 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 50 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 210 days at 28 degrees.

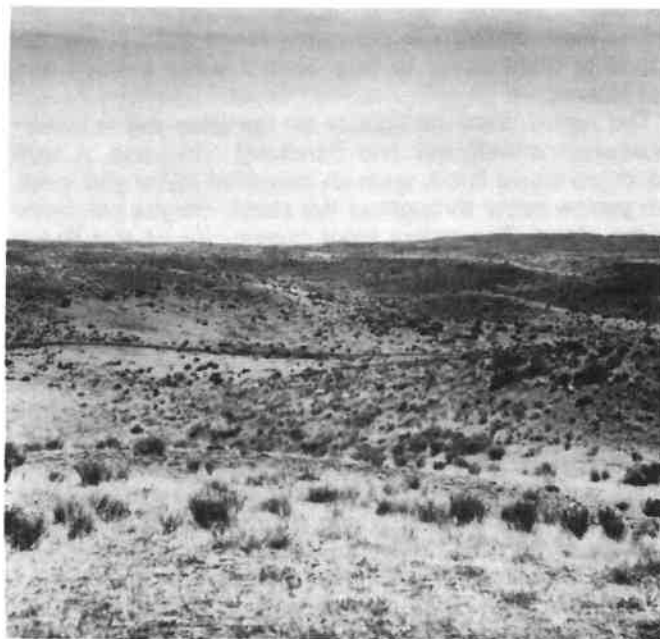


Figure 4.—A typical area of Olex-Roloff complex, 5 to 20 percent slopes.

frequent applications of irrigation water are needed. A suitable cropping system in irrigated areas is 1 to 3 years of wheat followed by 3 to 5 years of alfalfa. However, if wheat is grown more than 1 year, controlling weeds and diseases can be a serious concern in management. Split applications of fertilizer are desirable because plant nutrients are readily leached from the root zone. Streambanks can be stabilized by maintaining streamside vegetation, especially giant wildrye and riparian shrubs such as lilac or willow. Such vegetation also serves as important wildlife cover and should be considered in wildlife management. Where streambank erosion is severe, practices such as rock riprap are needed in places in addition to plant cover.

Areas of this soil provide important food and cover for upland game birds, such as ring-necked pheasant and valley quail. Mule deer and small animals use areas of this soil for food and cover.

This soil is limited for community uses because it is on flood plains of streams and subject to rare flooding. Design modifications are needed if this soil is used for sanitary facilities, dwellings, and small buildings. This soil is well suited to recreational uses, except for campgrounds where flooding may be a problem.

This soil is in capability class I irrigated.

14B—Krebs silt loam, 2 to 5 percent slopes. This deep, well drained soil is on uplands. It formed in loess and old waterlaid sediment. Average slope is 3 percent. Elevation is 500 to 900 feet. The average annual precipitation is 9 to 10 inches, and the average annual temperature is 51 to 54 degrees F. The frost-free period is 140 to 180 days at 32 degrees and 180 to 215 days at 28 degrees.

Typically, the surface layer is very dark grayish brown silt loam and silty clay loam about 10 inches thick. The subsoil is dark brown, brown, and pale brown silty clay loam and silty clay about 26 inches thick. The substratum is pale brown silty clay loam about 12 inches thick. It is underlain by partially decomposed diatomite.

Included with this soil in mapping are 10 percent Olex and Roloff soils and 5 percent Taunton, Sagehill, and Blalock soils.

Permeability of the Krebs soil is slow. Effective rooting depth is 20 to 40 inches. Available water capacity is 5.5 to 10 inches. Water supplying capacity is 6 to 8 inches. Runoff is slow, and the hazard of water erosion is slight.

Areas of this soil are used for range and wildlife habitat. Where irrigation water is available, this soil is moderately suited to irrigated crops. Because of slow permeability in this soil, application of irrigation water needs to be carefully regulated to prevent runoff.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for community uses because of slow permeability, depth to rock, low strength, and high shrink-swell potential. Design modifications are needed if this soil is used for sanitary facilities, dwellings, small buildings, and roads and streets. This soil is limited for recreational uses because of the dusty surface.

This soil is in capability subclass VIe.

14D—Krebs silt loam, 5 to 20 percent slopes. This deep, well drained soil is on uplands. It formed in loess and old waterlaid sediment. Average slope is 12 percent. Elevation is 500 to 900 feet. The average annual precipitation is 9 to 10 inches, and the average annual temperature is 51 to 54 degrees F. The frost-free period is 140 to 180 days at 32 degrees and 180 to 215 days at 28 degrees.

Typically, the surface layer is very dark grayish brown silt loam and silty clay loam about 10 inches thick. The subsoil is dark brown, brown, and pale brown silty clay loam and silty clay about 26 inches thick. The substratum is pale brown silty clay loam about 12 inches thick. It is underlain by partially decomposed diatomite.

Included with this soil in mapping are 10 percent Olex and Roloff soils and 5 percent Taunton, Sagehill, and Blalock soils.

Permeability of the Krebs soil is slow. Effective rooting depth is 20 to 40 inches. Available water capacity is 5.5 to 10 inches. Water supplying capacity is 6 to 8 inches. Runoff is slow to medium, and the hazard of erosion is slight to moderate.

Areas of this soil are used for range and wildlife habitat.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, the bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

substratum is brown silt loam about 18 inches thick. It is underlain by fractured basalt.

Permeability of the Morrow soil is moderately slow. Effective rooting depth is 20 to 40 inches. Available water capacity is 4 to 8.5 inches. Water supplying capacity is 5 to 9 inches. Runoff is slow to medium, and the hazard of erosion is slight to moderate.

Areas of this complex are used for grazing by livestock and for wildlife habitat.

The main need in managing these soils is the maintenance of plant cover to help control water erosion.

The native plant community on the Bakeoven soil is mainly Sandberg bluegrass and varying amounts of stiff sagebrush. A few low-growing perennial forbs commonly occur in minor amounts. The native plant community on the Morrow soil is mainly bluebunch wheatgrass. Idaho fescue, Sandberg bluegrass, and a variety of perennial forbs are prominent. Shrubs are minor in the stand.

When range deteriorates on this complex, bluebunch wheatgrass decreases and Sandberg bluegrass and low-value forbs increase. If deterioration is severe, bunchgrass on the Morrow soil and stiff sagebrush on the Bakeoven soil are nearly eliminated. On severely deteriorated range, annual weeds and a few shrubs occupy the deeper Morrow soil, and a rock pavement is formed on the interspersed Bakeoven soil. Because of stoniness and very shallow depth of the Bakeoven soil, seedbed preparation and seeding of poor condition range generally are not practical on this complex.

Most areas of this complex provide food and limited cover for mule deer, small animals, game birds, and songbirds.

The Bakeoven soil is severely limited for community and recreational uses because of depth to bedrock and stoniness. Extensive design modifications are necessary but in most cases are not practicable for the development of dwellings, small buildings, and sanitary facilities. The Morrow soil is limited for community uses because of depth to bedrock, moderately slow permeability, small size of soil areas, and slope. Design modifications are needed for the development of dwellings, small buildings, and sanitary facilities.

This complex is in capability subclass VII.

4C—Blalock loam, 2 to 12 percent slopes. This shallow, well drained soil is on uplands. It formed in loess. Average slope is 7 percent. Elevation is 500 to 900 feet. The average annual precipitation is 9 to 11 inches, and the average annual temperature is 52 to 54 degrees F. The frost-free period is 160 to 190 days at 32 degrees and 180 to 215 days at 28 degrees.

Typically, the surface layer is very dark grayish brown and dark brown loam about 7 inches thick. The subsoil is brown loam and gravelly loam about 11 inches thick over a light brownish gray, very gravelly, indurated hardpan about 4 inches thick. The substratum is calcareous,

brown gravelly loam about 19 inches thick. It is underlain by partially decomposed shale.

Included with this soil in mapping are 10 percent Krebs and Olex soils and 5 percent Willis, Roloff, and Sagehill soils.

Permeability of the Blalock soil is moderate. Effective rooting depth is 10 to 20 inches. Available water capacity is 1.5 to 3.5 inches. Water supplying capacity is 5 to 6.5 inches. Runoff is slow, and the hazard of erosion is slight.

Areas of this soil are used for range and wildlife habitat.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. On severely deteriorated range, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

This soil is limited for most community uses because of depth to the cemented pan and slope. Design modifications are needed if this soil is used for sanitary facilities, dwellings, and small buildings. This soil is limited for most recreational uses because of depth to the pan.

This is in capability subclass VIe.

5B—Condon and Valby silt loams, 1 to 7 percent slopes. These moderately deep, well drained soils are on uplands. These soils formed in loess mixed with some ash and are underlain by basalt. Elevation is 1,600 to 3,100 feet. The average annual precipitation is 11 to 14 inches, and the average annual temperature is 47 to 51 degrees F. The frost-free period is 100 to 150 days at 32 degrees and 150 to 200 days at 28 degrees.

The Condon and Valby soils are not in a definite pattern. Either or both soils can occupy a mapped area.

Included with these soils in mapping are 10 percent Rhea soils and 10 percent Bakeoven and Licksillet soils.

Typically, the surface layer of the Condon soil is very dark brown silt loam about 7 inches thick. The upper part of the subsoil is very dark grayish brown silt loam about 7 inches thick, and the lower part of the subsoil is dark brown silt loam about 17 inches thick. It is underlain by fractured basalt.

Permeability of the Condon soil is moderate. Available water capacity is 4 to 8.5 inches. Water supplying capacity is 7 to 9 inches. Effective rooting depth is 20 to 40 inches. Runoff is slow, and the hazard of erosion is slight.

wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil has no serious limitations for community developments. Dustiness is a limitation for most recreation uses.

This soil is in capability subclass IIIc dryland and class I irrigated.

32B—Ritzville silt loam, 2 to 7 percent slopes. This deep, well drained soil is on uplands. It formed in loess. Elevation is 900 to 2,500 feet. Average slope is 4 percent. The average annual precipitation is 9 to 12 inches, and the average annual temperature is 48 to 51 degrees F. The frost-free period is 130 to 180 days at 32 degrees and 150 to 200 days at 28 degrees.

Typically, the surface layer is dark brown silt loam about 12 inches thick. The subsoil is dark brown silt

loam about 19 inches thick. The substratum is brown silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 20 percent Mikalo, Warden, and Willis soils, 5 percent Olex soils, and 1 percent volcanic ash deposits.

Permeability of the Ritzville soil is moderate. Effective rooting depth is more than 60 inches. Available water capacity is 10 to 12.5 inches. Water supplying capacity is 5 to 9 inches. Runoff is slow, and the hazard of erosion is slight.

Most areas of this soil are dryfarmed in a grain-fallow rotation. Some areas are irrigated. Winter wheat is the main crop, but some hay is grown (fig.5). Some areas are used for range and wildlife habitat.

The main need in managing this soil for crops is the conservation of soil moisture for plant growth. In dry-farmed areas, stubble mulch tillage, minimum tillage, and grassed waterways used in combination with a crop-fallow rotation help maintain soil moisture. In addition, cross-slope tillage in the more nearly level areas and diversions in the steeper areas are desirable, particularly

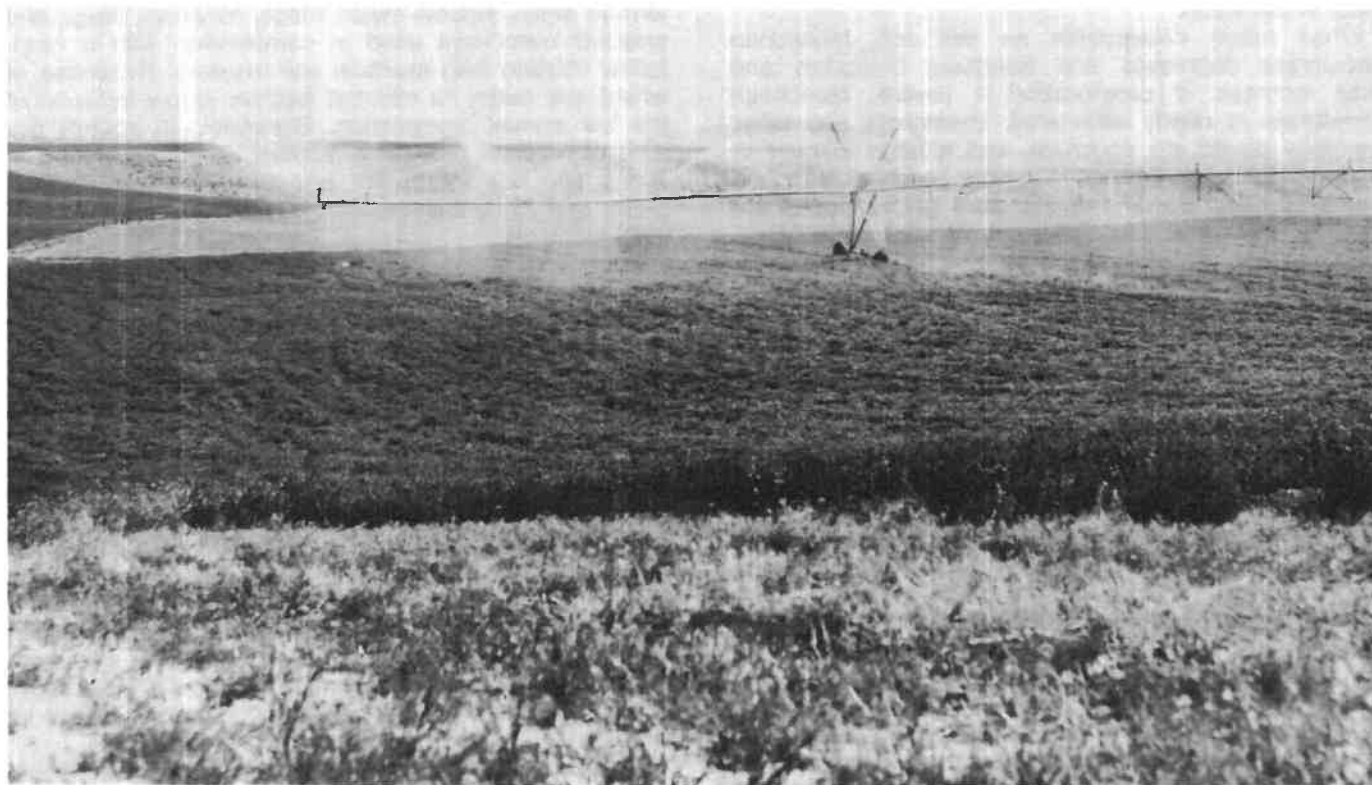


Figure 5.—Alfalfa on Ritzville silt loam, 2 to 7 percent slopes, irrigated by a center-pivot sprinkler system.

where slopes are long. Response of wheat and barley to nitrogen fertilizer is low because of the low annual precipitation. Generally, 25 pounds per acre of nitrogen fertilizer is applied to summer fallow in spring or fall. Pubescent wheatgrass, crested wheatgrass, and streambank wheatgrass are suitable for seeding waterways.

In irrigated areas, proper timing of irrigation is important. Water is applied by sprinklers, and center pivot systems are most commonly used. Light, frequent applications of water are needed. The rates at which irrigation water is applied needs to be monitored so that the infiltration rate of the soil is not exceeded and overirrigation does not result in runoff and erosion. Split applications of fertilizer are desirable because plant nutrients are readily leached from the root zone. A suitable cropping system is 1 to 3 years of wheat followed by 3 to 5 years of alfalfa. However, if wheat is grown consecutively for more than 1 year, controlling weeds and diseases can be a serious concern of management.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for recreational facilities because of the dusty surface. Playgrounds require leveling in places. This soil has no serious limitations for community developments.

This soil is in capability subclass IIIc dryland and subclass IIe irrigated.

32C—Ritzville silt loam, 7 to 12 percent slopes. This deep, well drained soil is on uplands. It formed in loess. Elevation is 900 to 2,500 feet. Average slope is 9 percent. The average annual precipitation is 9 to 12 inches, and the average annual temperature is 48 to 51 degrees F. The frost-free period is 130 to 180 days at 32 degrees and 150 to 200 days at 28 degrees.

Typically, the surface layer is dark brown silt loam about 12 inches thick. The subsoil is dark brown silt loam about 19 inches thick. The substratum is brown silt loam to a depth of 60 inches or more.

Included with this soil in mapping are 25 percent Mikalo, Warden, and Willis soils, and 5 percent Olex, Ba-keoven, and Licksillet soils.

Permeability of the Ritzville soil is moderate. Effective rooting depth is more than 60 inches. Available water capacity is 10 to 12.5 inches. Water supplying capacity is 5 to 9 inches. Runoff is medium, and the hazard of erosion is moderate.

Most areas of this soil are dryfarmed in a grain-fallow rotation. Some areas are irrigated. Winter wheat is the main crop, but some hay is grown. Some areas are used for range and wildlife habitat.

The main needs in managing this soil for crops are the protection of soil from water erosion and the conservation of soil moisture for plant growth. In dryfarmed areas, stubble mulch tillage, minimum tillage, and grassed waterways used in combination with a crop-fallow rotation help maintain soil moisture. In addition, cross-slope tillage, contour tillage, and diversions are generally needed to prevent erosion that results from runoff during high-intensity rainfall and snowmelt. Response of wheat and barley to nitrogen fertilizer is low because of the low annual precipitation. Generally, 25 pounds per acre of nitrogen fertilizer is applied to summer fallow in spring or fall. Pubescent wheatgrass, crested wheatgrass, and streambank wheatgrass are suitable for seeding waterways.

In irrigated areas, proper timing of irrigation is important. Water is applied by sprinklers, and center pivot systems are most commonly used. Light, frequent applications of water are needed. The rates at which irrigation water is applied needs to be monitored so that the infiltration rate of the soil is not exceeded and overirrigation does not result in runoff and erosion. Split applications of fertilizer are desirable because plant nutrients are readily leached from the root zone. A suitable cropping system is 1 to 3 years of wheat followed by 3 to 5 years of alfalfa. However, if wheat is grown consecutively for more than 1 year, controlling weeds and diseases can be a serious concern to management.

The native plant community on this soil is mainly bluebunch wheatgrass and Sandberg bluegrass. A variety of perennial forbs, such as clustered phlox and western yarrow occur throughout the stand. Shrubs are minor in the stand.

When range deteriorates on this soil, bluebunch wheatgrass decreases and Sandberg bluegrass and forbs increase. If deterioration is severe, bluebunch wheatgrass is nearly eliminated, cheatgrass and other low-value plants are dominant, and a large amount of ground is left bare. If range is in poor condition, seedbed preparation and seeding are practical measures. Big bluegrass, crested wheatgrass, and beardless wheatgrass are suitable for dryland seeding.

Most areas of this soil provide food for mule deer, small animals, and game birds.

This soil is limited for community uses because of slope and for recreational uses because of slope and dustiness. Modifications in design are needed for the

This complex is severely limited for community and recreational uses because of depth to bedrock, stones, and slope. The extensive design modifications which are necessary are rarely practical for the development of dwellings, small buildings, sanitary facilities, and recreational facilities.

This complex is in capability subclass VIIc.

58—Xeric Torrifluents, nearly level. These very deep, somewhat excessively drained soils are on bottom lands of streams. They formed in alluvium and windlaid materials. Average slope is 1 percent. Elevation is 300 to 800 feet. The average annual precipitation is about 8 to 9 inches, and the average annual temperature is about 49 to 53 degrees F. The frost-free period is 140 to 180 days at 32 degrees and 180 to 215 days at 28 degrees.

Typically, the surface layer is dark brown fine sandy loam about 6 inches thick. The upper part of the substratum is brown fine sandy loam and loamy fine sand about 35 inches thick. The lower part of the substratum is dark brown loamy fine sand and gravelly loamy sand to a depth of 80 inches or more.

Included with these soils in mapping are 5 percent Ritzville soils and Dune land and 10 percent Sagehill, Quincy, and Kimberly soils.

Permeability of Xeric Torrifluents is rapid. Effective rooting depth is 60 inches or more. Available water capacity and water supplying capacity are variable. Runoff is slow, and the hazard of erosion is slight to high. The hazard of soil blowing is moderate or high. Flooding is rare.

Most areas of these soils are used for range and wildlife habitat. Some hay and winter wheat are grown.

The native plant community on these soils is needleandthread, bluebunch wheatgrass, and Indian ricegrass. Needleandthread is generally dominant, and Sandberg bluegrass is prominent. Perennial forbs, such as Columbia milkvetch and western yarrow are common. Big sagebrush commonly occurs in minor amounts.

When range deteriorates on these soils, forage bunchgrasses decrease and Sandberg bluegrass and low-value forbs increase. If deterioration is severe as a result of fire or other disturbance, cheatgrass commonly dominates the stand. If range is in poor condition, seedbed preparation and seeding to dryland grasses are practical measures. Grasses selected for dryland seeding should have strong seedling vigor and be drought resistant. Crested and Siberian wheatgrasses are suitable for seeding. Grazing by livestock should be limited mainly to winter months.

Areas of these soils provide food and cover for upland game birds, such as ring-necked pheasant and valley quail. Also, mule deer and smaller animals use these areas for food and cover.

The main needs in managing these soils for crops are the conservation of soil moisture for plant growth and the stabilization of streambanks against cutting by water.

In irrigated areas, proper timing and rates of applying water are important. Where water is available, irrigation is by sprinklers. Wheel-line or hand-line systems are most commonly used. A suitable cropping system in irrigated areas is 1 or 2 years of wheat followed by 3 to 5 years of alfalfa. If wheat is grown consecutively for more than 1 year, controlling disease can be a serious concern in management. Because of rapid permeability and the high rate of water consumption in these soils, light, frequent applications of irrigation water are needed. Split applications of fertilizer are desirable because plant nutrients are readily leached from the rooting zone.

In dryfarmed areas, stubble mulch tillage and minimum tillage used with a crop-fallow rotation where wheat is grown minimize erosion and help conserve soil moisture. Streambanks can be stabilized by maintaining streamside vegetation, such as giant wildrye and riparian shrubs. This vegetation provides cover for wildlife and should be considered in wildlife management.

These soils are limited for most community uses because of flooding. They are limited for camp areas because of flooding and small stones. They are favorable for most other recreational uses.

These soils are in capability subclass VIc dryland and capability subclass IIIe irrigated.

Use and management of the soils

The soil survey is a detailed inventory and evaluation of the most basic resource of the survey area—the soil. It is useful in adjusting land use, including urbanization, to the limitations and potentials of natural resources and the environment. Also, it can help avoid soil-related failures in uses of the land.

While a soil survey is in progress, soil scientists, conservationists, engineers, and others keep extensive notes about the nature of the soils and about unique aspects of behavior of the soils. These notes include data on erosion, drought damage to specific crops, yield estimates, flooding, the functioning of septic tank disposal systems, and other factors affecting the productivity, potential, and limitations of the soils under various uses and management. In this way, field experience and measured data on soil properties and performance are used as a basis for predicting soil behavior.

Information in this section is useful in planning use and management of soils for crops and pasture, rangeland, as sites for buildings, highways and other transportation systems, sanitary facilities, and parks and other recreation facilities, and for wildlife habitat. From the data presented, the potential of each soil for specified land uses can be determined, soil limitations to these land uses can be identified, and costly failures in houses and other structures, caused by unfavorable soil properties, can be avoided. A site where soil properties are favorable can

APPENDIX B

GIS Methods and Data Sources Technical Memorandum CSA Planning Ltd.





Technical Memorandum

To: Gilliam County Court
Gilliam County Planning Commission

Date: March 30, 2022

Subject: **Gilliam County Subtitle C Goal Exception GIS Project and Sources**

CSA Planning, Ltd

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Fax 541.779.0114

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CSA conducted geographic analysis in support of the Goal Exception Application on behalf of CWMNW. The results of this analysis were used to inform the analysis in the main body of the Applicant's Volume 3 to which this Tech Memo is an appendix. The resulting analysis is depicted graphically in the Volume 2 Atlas of Maps.

DATA SOURCES AND GEOGRAPHIC INFORMATION SYSTEMS

CSA created a "GIS Project" and compiled the data layers necessary for the analysis. ArcGIS 10 is an industry standard Geographic Information System (GIS) and was chosen as the primary mechanism for compiling data, performing the Alternative Sites Analysis, and creating the Atlas of Maps in Volume 2. GIS is a strong spatial analysis tool that supports rigorous database development and analysis. The Alternative Sites Analysis utilized GIS and land use planning professional best practices in all analytic procedures.

Below is a list of project data sources used by CSA for the analysis. Any layers not named here that were used in the analysis were not intentionally omitted and CSA believes this list captures those most important to the analysis.

1. CSA was provided via Gilliam County the below data:
 - a. Tax Lot polygons shapefile with attributed assessment info, including ownership and property classifications, was used as a fundamental base layer. This layer was modified by CSA to reflect the lot configuration according to two Property Line Adjustments filed by the Applicant with Gilliam County, 2022-PLA-01 and 2022-PLA-02.
 - b. Zoning layer, which was modified slightly to reflect the correct M-G zoning for the Subject Property
 - c. Gilliam County's Streets line file
 - d. Wind Turbine locations
 - e. Gilliam County boundary
 - f. Winter Range Habitat was provided as a PDF, which was then digitized and georeferenced to create a layer
2. CSA created several layers that were key to the analysis. These were used creating the "buffering" tool within ArcGis. Among these layers were the following:
 - a. 1,000-foot property setback layer for Alternatives and Subject Property
 - b. 1-mile locational separation layer for Alternatives and Subject Property
 - c. Proposed 1,000-foot non-landfilling overlay, proposed M-G Zoning, and Exception area for the Subject Property
3. A 2020 aerial image was retrieved from National Agriculture Imagery Program, which formed the primary aerial image used for analysis, along with visual inspections of Google Earth Pro mapping software;
4. The EPA provided the base data that was used to create the map of national hazardous waste landfill facilities on Atlas Page 13

5. The State of Oregon Spatial Data Library¹ provided the bulk of the remainder of the layers. Among them were
 - a. Soils class data, which according to the Spatial Data Library originates from the Natural Resources Conservation Service. The data retrieved from the Data Library was manually compared to the Web Soil Survey Online data and it matched the original 1986 Gilliam County Soil Survey.
 - b. State Highways line file
 - c. Township, Range, and Section
 - d. Rivers and Streams line file
 - e. Railroad line file
 - f. City Limits
 - g. UGB Limits
 - h. Utility Transmission Lines
 - i. Geology, geologic units, and Faults
 - j. Flood hazard areas
 - k. Other county boundaries
6. Atlas Page 14 contains two maps. The first is a map of aggregate resources in Gilliam County. This was provided directly to CSA by Gilliam County Staff.

The second is an Oregon Precipitation Map. This was retrieved from the website of PRISM Climate Group. PRISM has this data, and more, available for the public at <https://prism.oregonstate.edu>

CSA Planning, Ltd.



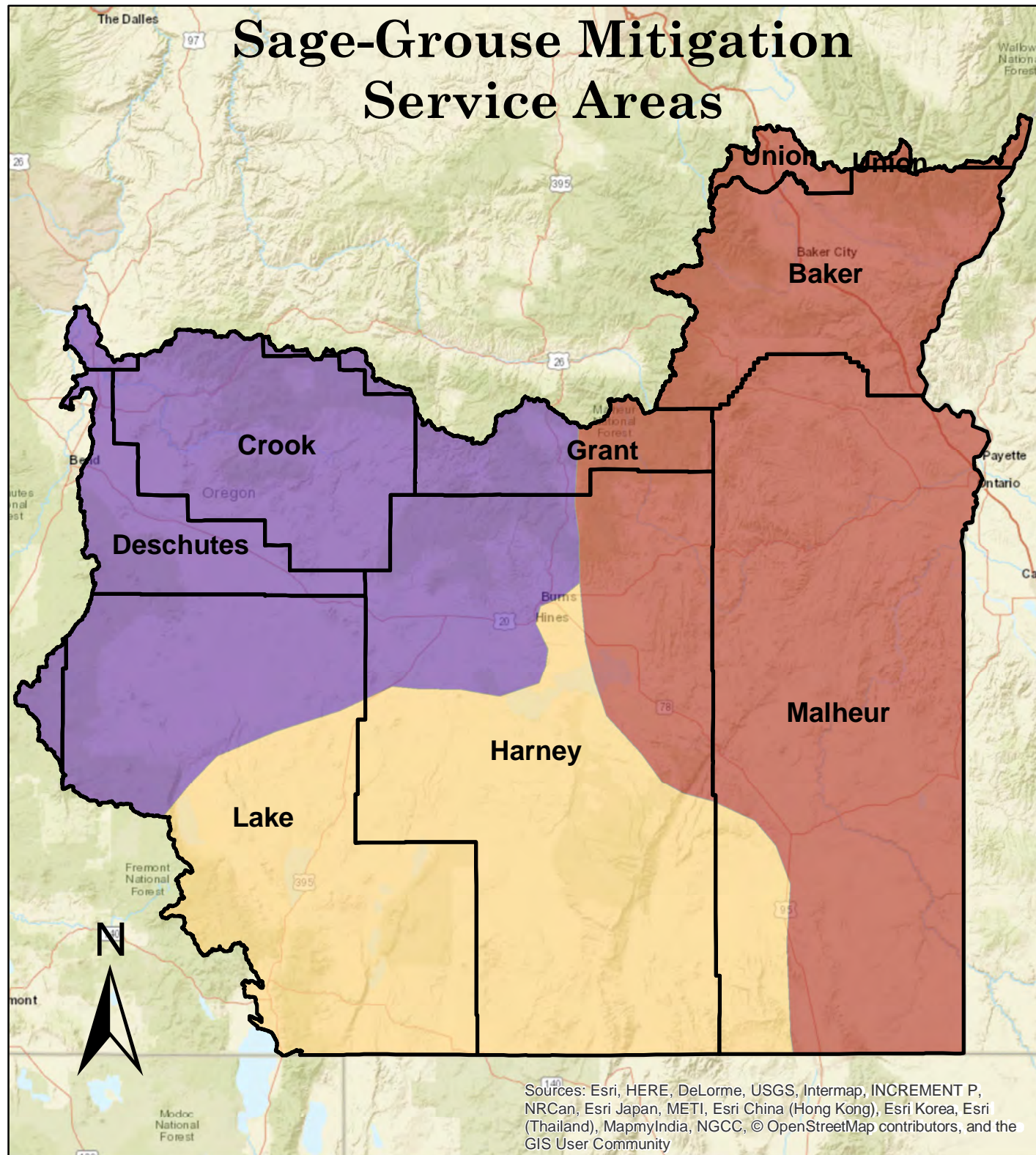
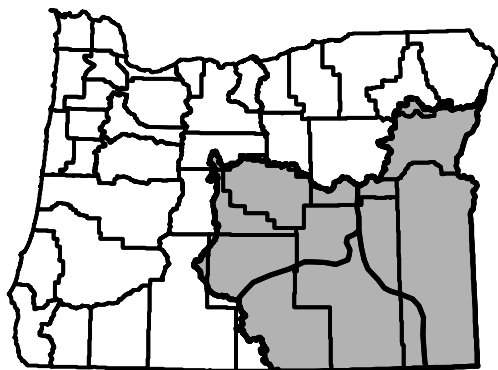
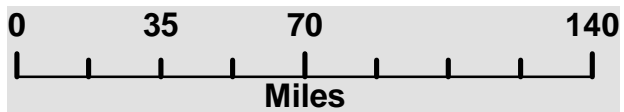
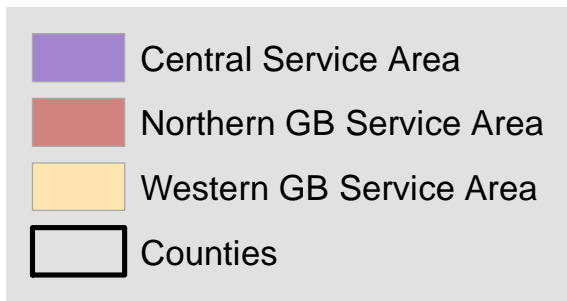
Nathan Emerson
Associate

¹ Found at <https://spatialdata.oregonexplorer.info/geoportal/>

APPENDIX C

Sage Grouse Territory Maps From ODFW





APPENDIX D

GIS Alternatives Data Tables



GIS Alternatives Data Tables

Alternative Name	Maplot	SITUS ADDRESS	OWNER	Zone_Name	Label	Acres in Alternative
Alternative A	02N21E0000-01400	71667 HWY 19 ARLINGTON, OR 97812	SUMNER ARTHUR MARK & SUMNER BECKY MEA	INTERMODAL INDUSTRIAL	II	0.81
Alternative A	02N21E0000-01104	71824 HWY 19 ARLINGTON, OR 97812	GILLIAM COUNTY (INDUSTRIAL PARK)	INTERMODAL INDUSTRIAL	II	103.43
Alternative A	02N21E0000-01703	UNDETERMINED SITUS ADDRESS	RIETMANN JERRY L & LISA G	INTERMODAL INDUSTRIAL	II	194.34
Alternative A	02N21E0000-01706			INTERMODAL INDUSTRIAL	II	12.49
Alternative B	03N21E0000-00701	UNKNOWN DISTRICT ADDRESS	PORT OF ARLINGTON	AIRPORT DEVELOPMENT	AD	10.00
Alternative B	03N21E0000-00800	UNDETERMINED SITUS ADDRESS	STATE OF OREGON (AERO DIVISION)	LAND INTENSIVE INDUSTRIAL	M2	4.38
Alternative B	03N21E0000-00702	UNKNOWN DISTRICT ADDRESS	INSITU	AIRPORT DEVELOPMENT	AD	3.00
Alternative B	03N21E0000-00508	UNKNOWN DISTRICT ADDRESS	PORT OF ARLINGTON	LAND INTENSIVE INDUSTRIAL	M2	30.00
Alternative B	03N21E0000-00501	UNDETERMINED SITUS ADDRESS	CITY OF ARLINGTON	INDUSTRIAL / LAND INTENSIVE INDUSTRIAL	M1/M2	400.37
Alternative C	03N21E0000-00201	UNKNOWN DISTRICT ADDRESS	OREGON DEPT OF TRANSPORTATION	LIMITED INDUSTRIAL	LI	16.84
Alternative C	04N22E0000-00100	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	0.14
Alternative C	04N22E0000-00100	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	113.26
Alternative C	04N22E0000-00101	UNDETERMINED SITUS ADDRESS	PORT OF ARLINGTON	LIMITED INDUSTRIAL	LI	13.21
Alternative C	04N22E0000-00104	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	21.42
Alternative C	04N22E0000-00100	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	0.80
Alternative C	03N22E0000-00400	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	4.48
Alternative C	03N22E0000-00400	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	1.23
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	1.50
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	133.09
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	8.93
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	3.52
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	0.11
Alternative C	03N22E0000-00600	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	7.58
Alternative C	03N21E0000-00100	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	266.84
Alternative C	03N21E0000-00103	UNDETERMINED SITUS ADDRESS	OREGON PARKS AND RECREATION DEPT	LIMITED INDUSTRIAL	LI	218.64
Alternative C	04N22E0000-00102	UNDETERMINED SITUS ADDRESS	PORT OF ARLINGTON	LIMITED INDUSTRIAL	LI	20.68
Alternative C	03N22E0000-00400	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	66.68
Alternative C	04N22E0000-00103	UNDETERMINED SITUS ADDRESS	OREGON DEPARTMENT OF TRANSPORTATION	LIMITED INDUSTRIAL	LI	102.17
Alternative C	04N22E0000-00105	UNDETERMINED SITUS ADDRESS	PORT OF ARLINGTON	LIMITED INDUSTRIAL	LI	8.02
Alternative D	04N22E0000-00100	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	51.61
Alternative D	04N22E0000-00302	UNDETERMINED SITUS ADDRESS	TURNER JENNIFER & TURNER RICKY	LIMITED INDUSTRIAL	LI	48.53
Alternative D	04N22E0000-00302	UNDETERMINED SITUS ADDRESS	TURNER JENNIFER & TURNER RICKY	LIMITED INDUSTRIAL	LI	30.47
Alternative D	04N22E0000-00303	UNDETERMINED SITUS ADDRESS	TURNER JENNIFER & TURNER RICKY	LIMITED INDUSTRIAL	LI	2.80
Alternative D	04N22E0000-00301	UNDETERMINED SITUS ADDRESS	STATE HIGHWAY COMMISSION	LIMITED INDUSTRIAL	LI	9.44
Alternative D	04N22E0000-00400	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	30.50
Alternative D	03N22E0000-00201	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	16.72
Alternative D	04N22E0000-00500	UNDETERMINED SITUS ADDRESS	THREEMILE CANYON FARMS LLC	LIMITED INDUSTRIAL	LI	4.97
Alternative D	03N22E0000-03610	UNDETERMINED SITUS ADDRESS	THREEMILE CANYON FARMS LLC	LIMITED INDUSTRIAL	LI	18.94
Alternative D	03N22E0000-00201	UNDETERMINED SITUS ADDRESS	USA	LIMITED INDUSTRIAL	LI	56.05
Alternative D	04N22E0000-00304	UNKNOWN DISTRICT ADDRESS	TURNER JENNIFER & TURNER RICKY	LIMITED INDUSTRIAL	LI	232.52
Alternative D	04N22E0000-00300	UNDETERMINED SITUS ADDRESS	RENEWABLE WIND ENERGY LLC	LIMITED INDUSTRIAL	LI	268.57
Alternative D	04N22E0000-00305	UNKNOWN DISTRICT ADDRESS	RENEWABLE WIND ENERGY LLC	LIMITED INDUSTRIAL	LI	165.04
Alternative D	03N22E0000-00202	UNKNOWN DISTRICT ADDRESS	THREEMILE CANYON FARMS LLC	LIMITED INDUSTRIAL	LI	701.45
Alternative D	03N22E0000-00200	76768 HWY 74 IONE, OR 97843	TURNER JENNIFER & TURNER RICKY	LIMITED INDUSTRIAL	LI	303.25

Notes:
 Acres may vary from Volume 3 as roads, waterways (such as portions of the Columbia River), and rails are not calculated as part of the area
 Duplicate Maplot numbers occur in the table. Each row represents a portion of the maplot that are no longer physically contiguous

Alternative E	04S21E0000-00400	UNDETERMINED SITUS ADDRESS	INTEGRO INC	GENERAL INDUSTRIAL	M-G	113.96
Alternative E	04S21E0000-04904	UNDETERMINED SITUS ADDRESS	INTEGRO INC	GENERAL INDUSTRIAL	M-G	1.12
Alternative E	04S21E0000-04903	UNDETERMINED SITUS ADDRESS	INTEGRO INC	GENERAL INDUSTRIAL	M-G	5.79
Alternative E	04S21E03DC-00200	200 E COTTONWOOD RD CONDON, OR 97823	PERRY SKIP (ESTATE)	GENERAL INDUSTRIAL	M-G	5.71
Alternative E	04S21E0000-00400	UNDETERMINED SITUS ADDRESS	INTEGRO INC	GENERAL INDUSTRIAL	M-G	62.39
Alternative E	04S21E03DC-00100	UNDETERMINED SITUS ADDRESS	JOHNSON ROGER E & KATHLEEN S	GENERAL INDUSTRIAL	M-G	0.86
Alternative F	04S20E11BC-01800	14905 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.14
Alternative F	04S20E11BC-01000	14908 MT VIEW DR UNDETERMINED CITY, OR	SPS WORLDWIDE ENTERPRISE INC	GENERAL INDUSTRIAL	M-G	0.19
Alternative F	04S20E1000-00300	UNDETERMINED SITUS ADDRESS	DURFEY DELENE	GENERAL INDUSTRIAL	M-G	7.55
Alternative F	04S20E11BC-02500	14853 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.14
Alternative F	04S20E11BC-00300	14852 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.14
Alternative F	04S20E11BC-02200	14869 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.19
Alternative F	04S20E11BC-01900	14901 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.16
Alternative F	04S20E11BC-00900	14894 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.19
Alternative F	04S20E11BC-02000	14887 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.15
Alternative F	04S20E11BC-00200	14842 MT VIEW DR UNDETERMINED CITY, OR	GRAMSON KEVIN & BARNETT JULIE	GENERAL INDUSTRIAL	M-G	0.13
Alternative F	04S20E11BC-01700	14919 MT VIEW DR CONDON, OR 97823	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.15
Alternative F	04S20E11BC-01100	14910 MT VIEW DR CONDON, OR 97823	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.21
Alternative F	04S20E11BC-02700	14839 MT VIEW DR CONDON, OR 97823	GODFREY RICHARD A & CROY GODFREY VALERIE	GENERAL INDUSTRIAL	M-G	0.17
Alternative F	04S20E11BC-00400	14854 MT VIEW DR UNDETERMINED CITY, OR	GRAMSON KEVIN & BARNETT JULIE	GENERAL INDUSTRIAL	M-G	0.15
Alternative F	04S20E11BC-02300	14865 MT VIEW DR UNDETERMINED CITY, OR	BARNETT JULIE A	GENERAL INDUSTRIAL	M-G	0.16
Alternative F	04S20E11BC-02400	14855 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.15
Alternative F	04S20E11BC-02600	14841 MT VIEW DR UNDETERMINED CITY, OR	WILLIAMSON DONALD ET AL	GENERAL INDUSTRIAL	M-G	0.15
Alternative F	04S20E11BC-01200	14926 MT VIEW DR UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	0.22
Alternative F	04S20E11BC-01500	14931 MT VIEW DR CONDON, OR 97823	BARNETT JOHN R	GENERAL INDUSTRIAL	M-G	0.30
Alternative F	04S20E1000-00400	15155 RICHMOND LN UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	11.86
Alternative F	04S20E11BC-00800	14892 MT VIEW DR CONDON, OR 97823	COOPER MAGGIE	GENERAL INDUSTRIAL	M-G	0.27
Alternative F	04S20E11BC-01600	14927 MT VIEW DR CONDON, OR 97823	FOWKE GERALD L	GENERAL INDUSTRIAL	M-G	0.20
Alternative F	04S20E11BC-00600	14878 MT VIEW DR CONDON, OR 97823	BENNETT CHANSE J & FOX FARRELL D	GENERAL INDUSTRIAL	M-G	0.18
Alternative F	04S20E11BC-00100	14840 MT VIEW DR UNDETERMINED CITY, OR	BARNETT	GENERAL INDUSTRIAL	M-G	0.16
Alternative F	04S20E1000-00400	15155 RICHMOND LN UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	4.76
Alternative F	04S20E11BC-00500	14862 MT VIEW DR UNDETERMINED CITY, OR	SMITHERMAN EMILY L	GENERAL INDUSTRIAL	M-G	0.19
Alternative F	04S20E11BC-02100	14883 MT VIEW DR CONDON, OR 97823	ANDERSON GRACE & ZALAZNIK JOHN	GENERAL INDUSTRIAL	M-G	0.13
Alternative F	04S20E11BC-01300	14930 MT VIEW DR CONDON, OR 97823	COWDREY LYNN A JR & TONI	GENERAL INDUSTRIAL	M-G	0.31
Alternative F	04S20E11BC-01400	14932 MT VIEW DR UNDETERMINED CITY, OR	FIELD RICHARD D	GENERAL INDUSTRIAL	M-G	0.22
Alternative F	04S20E1000-00401	UNKNOWN DISTRICT ADDRESS	MACCONNELL RODNEY A	GENERAL INDUSTRIAL	M-G	0.08
Alternative F	04S20E11BC-00700	14880 MT VIEW DR UNDETERMINED CITY, OR	STROM RONALD A & DENISE M	GENERAL INDUSTRIAL	M-G	0.25
Alternative F	04S20E1000-00400	15155 RICHMOND LN UNDETERMINED CITY, OR	RADAR HOLDING LLC	GENERAL INDUSTRIAL	M-G	25.51
Alternative G	03N20E0000-00100	UNDETERMINED SITUS ADDRESS	USA	GENERAL INDUSTRIAL	M-G	3.05
Alternative G	02N19E0000-00100	UNDETERMINED SITUS ADDRESS	USA	GENERAL INDUSTRIAL	M-G	29.62
Alternative H	03N21E2800-00201	UNDETERMINED SITUS ADDRESS	HAMMELMAN BEN A & KATIE L	LIMITED INDUSTRIAL	LI	65.89
Alternative H	03N21E3400-00122	UNKNOWN DISTRICT ADDRESS	MCKINNEY WILLIAM C ESTATE	LIMITED INDUSTRIAL	LI	8.13
Alternative H	03N21E3400-00116	18216 HULDEN LN ARLINGTON, OR 97812	GRUBAUGH JOHN J & MARTY D	LIMITED INDUSTRIAL	LI	36.92
Alternative H	03N21E27CC-00400	UNDETERMINED SITUS ADDRESS	HATTENHAUER ENERGY LLC	LIMITED INDUSTRIAL	LI	0.98
Alternative H	03N21E27CC-00700	UNDETERMINED SITUS ADDRESS	VALDEZ JULIANN	LIMITED INDUSTRIAL	LI	0.61
Alternative H	03N21E27CC-00200	1600 HWY 19 ARLINGTON, OR 97812	HAUSINGER LEONARD	LIMITED INDUSTRIAL	LI	1.66
Alternative H	03N21E27CC-00600	UNDETERMINED SITUS ADDRESS	FIGTREE COMMERCIAL LLC	LIMITED INDUSTRIAL	LI	0.81

Alternative H	03N21E0000-00507	73943 RHEA LN ARLINGTON, OR 97812	GRONQUIST KELLY M & SHANNA L	LIMITED INDUSTRIAL	LI	5.72
Alternative H	03N21E0000-00900	74601 HWY 19 ARLINGTON, OR 97812	ITS PROPERTY LLC	LIMITED INDUSTRIAL	LI	6.25
Alternative H	03N21E2800-00100	UNDETERMINED SITUS ADDRESS	CITY OF ARLINGTON	LIMITED INDUSTRIAL	LI	40.39
Alternative H	03N21E2800-00800	UNDETERMINED SITUS ADDRESS	STATE HIGHWAY COMMISSION	LIMITED INDUSTRIAL	LI	2.52
Alternative H	03N21E3400-00302	18217 HULDEN LN ARLINGTON, OR 97812	BROWN AUSTIN D & KAYLA D	LIMITED INDUSTRIAL	LI	8.32
Alternative H	03N21E3400-00115	18192 HULDEN LN ARLINGTON, OR 97812	TUCKER BENJAMAN L & MELODY K	LIMITED INDUSTRIAL	LI	4.05
Alternative H	03N21E3400-00108	UNDETERMINED SITUS ADDRESS	DEVIN OIL COMPANY INC	LIMITED INDUSTRIAL	LI	5.86
Alternative H	03N21E3400-00400	74567 HWY 19 ARLINGTON, OR 97812	DEVIN OIL COMPANY INC	LIMITED INDUSTRIAL	LI	0.69
Alternative H	03N21E27CC-00500	UNDETERMINED SITUS ADDRESS	FIGTREE COMMERCIAL LLC	LIMITED INDUSTRIAL	LI	0.59
Alternative H	03N21E27CC-00300	UNDETERMINED SITUS ADDRESS	DEVIN OIL COMPANY INC	LIMITED INDUSTRIAL	LI	0.39
Alternative H	03N21E2800-00801	UNDETERMINED SITUS ADDRESS	ANDERSON JERRY E & JOANN M	LIMITED INDUSTRIAL	LI	0.87
Alternative H	03N21E2800-00202	UNDETERMINED SITUS ADDRESS	ANDERSON JERRY E & JOANN M	LIMITED INDUSTRIAL	LI	0.44
Alternative H	03N21E27CC-00900	UNDETERMINED SITUS ADDRESS	MUNDY TYSON	LIMITED INDUSTRIAL	LI	0.41
Alternative H	03N21E27CC-00800	UNDETERMINED SITUS ADDRESS	KREBS JR	LIMITED INDUSTRIAL	LI	1.03
Alternative H	03N21E3400-00111	18174 HULDEN LN ARLINGTON, OR 97812	DAVIDSON DAVID W & LISA E	LIMITED INDUSTRIAL	LI	4.09
Alternative H	03N21E3400-00107	18122 HULDEN LN ARLINGTON, OR 97812	BECKTOLD ISAAC R	LIMITED INDUSTRIAL	LI	4.12
Alternative H	03N21E3400-00118	18200 HULDEN LN ARLINGTON, OR 97812	TIMMERMAN RUSSELL L & ANGELA L	LIMITED INDUSTRIAL	LI	12.13
Alternative H	03N21E27CC-01001	UNKNOWN DISTRICT ADDRESS	MUNDY TYSON	LIMITED INDUSTRIAL	LI	0.08
Alternative H	03N21E28DB-00100	UNDETERMINED SITUS ADDRESS	PIONEER ASPHALT INC	LIMITED INDUSTRIAL	LI	0.25
Alternative H	03N21E27CC-01100	74000 HWY 19 ARLINGTON, OR 97812	ANDERSON JERRY E & JOANN M	LIMITED INDUSTRIAL	LI	1.18
Alternative H	03N21E27CC-00100	UNDETERMINED SITUS ADDRESS	KREBS JR	LIMITED INDUSTRIAL	LI	3.13
Alternative H	03N21E3400-00117	73928 RATTLESNAKE RD ARLINGTON, OR 97812	GILLIAM COUNTY	LIMITED INDUSTRIAL	LI	13.37
Alternative H	03N21E27CC-01000	UNDETERMINED SITUS ADDRESS	STATE OF OREGON HIGHWAY	LIMITED INDUSTRIAL	LI	7.68
Alternative H	03N21E0000-00501	UNDETERMINED SITUS ADDRESS	CITY OF ARLINGTON	LIMITED INDUSTRIAL	LI	182.28

APPENDIX E

CSA Planning Ltd. Resumes



JOHN “JAY” H. HARLAND, III

President, CSA Planning, Ltd.

As President of CSA Planning, Jay’s work involves project management for a wide variety of land use planning, transportation planning, and facility planning projects.

Recent major projects for which he served as the project manager for comprehensive plan map amendments, master plans, and fiscal analysis include the following:



Education:

University of Montana
Missoula, Montana
Master of Arts in Geography
Rural, Town and Regional
Planning Option

University of Montana
Missoula, Montana
Bachelor of Arts in Philosophy

Areas of Specialization:

- Statistical analysis including non-linear regression and survey methods
- Economic and Financial Analyses to evaluate land developments and public improvements and master plan implementation
- All facets development and entitlements including design concepts, entitlement strategy, development, and implementation.
- Public hearing presentations, review and coordination of transportation impact studies, and overall project management for major entitlements and planning projects
- Proficient with ArcGIS 10, Word, Excel, and SPSS

- Medford Land Development Code amendments to create new standards and provisions for dedication of greenways and construction of multi-use paths in greenways areas (Medford Parks & Rec Department client).
- Chilsonrise Neighborhood Plan; an urbanization plan for Medford UGB for planning area MD-3c.
- Staff support for Lakeview TSP update.
- Draft language and coordination with Planning Staff on creation of Medford Code sections to create Developer Tracts and Developer Acreage provisions (private clients).
- Phoenix-Talent School District Master Plan that adopted a new Long-Range Facilities Master Plan. Fiscal analysis to project facility needs, operational cost models, and address issues. Voter approved bond.
- City of Medford Comprehensive Plan Economic Element and Housing Element.
- City of Central Point Economic Element.
- Central Point Urban Growth Boundary amendment for Combined Logistics Group (large multi-modal and logistics company).
- Rogue Valley Transportation District Boundary Study and follow-on development of a new transit planning and ridership forecasting model in collaboration with the Center for Urban Transportation Research at the University of South Florida.
- Entitlements for the Master Plan for Dry Creek Landfill with aggregate resource entitlements.

Community Leadership

- Vice Chair of the Jackson County Economic Development Advisory Committee. The committee recommends economic development policy and strategy to the Board of Commissioners. The committee reviews and makes recommendations on economic development initiatives requesting support from Jackson County.
- Past President, Rogue Valley Foundation Board (member 2007-2013).
- Past-Chair, Chamber of Medford-Jackson County Board of Directors (Board Member 2013-2020, Chair 2018).



NATHAN EMERSON

Associate, CSA Planning, Ltd.

Nathan Emerson joined CSA Planning as an Associate in 2018. He worked as a Planner for the City of Ashland before CSA. Nathan also offers analytical skills honed by years of experience as an Energy Analyst working for energy efficiency consultancies. Nathan grew up in the Rogue Valley and graduated from Phoenix High School before earning a graduate degree in Urban and Regional Planning.



Education:

Linfield College
McMinnville, Oregon
Bachelor of Political Science

Portland State University
Portland, Oregon
Master of Urban and Regional
Planning

Areas of Specialization:

- Data Analysis
- Project Research and Development
- Land Use Findings and Conclusions
- Proficient with ArcGIS 10, Word, Excel, jamovi, and Tableau

Key Project Experience:

- Created a District Formation Plan and Economic Feasibility Analysis for a proposed White City Parks & Recreation District
- Created maps and farm inventory for Farm Impacts Analysis for Willamette Water Supply Program PLM 4.3 and 5.3
- Worked on the Findings of Fact, Conclusions of Law, and Atlas of Maps for an Amendment to the Dry Creek Landfill that updated the Site Development Ordinance limits on operating hours for the Landfill and Composting operations
- Provided Alternatives Analysis and Rural Impacts analysis for Goal Exceptions for development of infrastructure in Agricultural and Forest Lands



Technical Memorandum

To: Michelle Colby, Gilliam County Planning Director
Date: July 11, 2022
Subject: CWMNW Lot Legality Supplemental Findings

CSA Planning, Ltd
4497 Brownridge, Suite 101
Medford, OR 97504
Telephone 541.779.0569
Fax 541.779.0114
Seth@CSAplanning.com

Cable Huston LLP has collaborated with CSA on the pending consolidated land use application for Goal Exception, Zone Change and Conditional Use Permit to support the expansion of the Chemical Waste Management of the Northwest (CWMNW) facility outside Arlington, Oregon. As part of Gilliam County's review of the application, CSA received an email from Planning Director Colby regarding Lot Legality. In the initial submittal in March 2022, Lot Legality was the only major application component that the Applicant recognized would require supplemental findings prior to final decision. This was largely unavoidable because a significant portion of the application area was affected by property line adjustments (PLAs) that were pending with Gilliam County at the time.

The purpose of this technical memorandum is to provide supplemental Lot Legality findings to the record. Please include this memo and the associated attachments into the record for this matter.

Lot Legality in Township 2 North Range 21 East

When the consolidated Goal Exception/Zone Change/CUP application was submitted at the end of March, the two recently approved PLA applications (Planning File No. 2022-PLA-01 and Planning File No. 2022-PLA-02) were still under County review. Volume 1, Section 4.2.3 of the consolidated application noted that the legality of the parcels that comprise the proposed facility expansion area to the east of the existing Subtitle C site (i.e., in Sections 19, 30, and 31 of Township 2 North, Range 21 East) were addressed in the PLA applications. The findings explained that the County's approval of the consolidated application could rely on those PLAs by reference as evidence of the Lot Legality.

Following the Goal Exception/Zone Change/CUP submittal, the PLAs for parcels affected by the application have obtained final land use decision approvals. Planning File No. 2022-PLA-01 was approved on April 8, 2022, and Planning File No. 2022-PLA-02 was approved on May 3, 2022. Any appeal deadlines have passed, and those decisions are now final. These approvals recognized the relevant parcels as separate legal parcels. The approvals included conditions for recordation of new deeds and finalization of the new property lines in accordance with the PLA approvals.

Implementation of these PLAs is currently in process by the Applicant's Surveyor and is expected to be completed in the coming months. Once these PLAs are finalized and recorded, the property boundaries will coincide with the regulatory boundaries for the pending Goal Exception/Zone Change/CUP.

Lot Legality in Township 2 North Range 20 East

The legality of the other parcels, including the existing Subtitle C facility, also required supplemental findings. The supplemental lot legality findings for these parcels are spelled out below and shown on the attached exhibits.

Tax Lot 2301: The majority of the existing Subtitle C landfill facilities are located within Tax Lot 2301 in Township 2 North, Range 20 East, Sections 25 and 36.¹ Tax Lot 2301 contains

¹ Within Tax Lot 2301 there are several smaller tax lots surrounding various improvements, disposal cells, etc.; however, these tax lots exist for assessment and DEQ purposes related to the



two separate parcels that stem from federal land patents and were subsequently created in their current configuration prior to the adoption of zoning regulations in Gilliam County.

Section 25 was originally a single parcel created by GLO Patent No. 17 on June 9, 1906. Section 36 was also originally a single parcel created by a patent granted to the State of Oregon on February 14, 1859. Neither patent was cancelled by the federal government. See, Attachment 1.

On January 4, 1972, Big Sky Ranch, Inc. conveyed the south ½ of the northeast ¼, and the southeast ¼ of Section 25, and the north ½ of the northeast ¼ of Section 36 in Township 2 North, Range 20 East to Chem-Nuclear Services, Inc. through Bargain and Sale Deed Vol. 52, Pg. 18. See, Attachment 2. This conveyance had the effect of dividing the above referenced Patent No. 17 into two parcels, with one parcel being part of current day Tax Lot 2301, and the other being the residual of Patent No. 17, which is present day Tax Lots 2313 and 2317. This 1972 conveyance also divided the 1859 patent that was granted to the State of Oregon for Section 36 into two parcels, with one parcel being the north ½ of the northeast ¼ which is part of Tax Lot 2301, and the other parcel being the remainder of Section 36. See, Attachment 3.

Tax Lots 2313, 2317, and 2703: The property to the west, north, and southwest of the existing Subtitle C facility is identified on the Assessor's plat for Township 2 North, Range 20 East, as being Tax Lots 2313, 2317, and 2307, respectively. As described above, the land comprising present day Tax Lots 2313 and 2317 was created as a single residual parcel of Patent No. 17 as a result of the 1972 conveyance from Big Sky Ranch to Chem-Nuclear, and similarly, Tax Lot 2703 remained a portion of the residual of the patent parcel that was granted to the State of Oregon for Section 36.

On July 10, 1981, Big Sky Ranch, Inc., conveyed the land that is current day Tax Lots 2313 and 2703 to Chem-Security Systems, Inc., through Warranty Deed M-61-481. See, Attachment 4. This conveyance had the effect of partitioning the residual of Patent No. 17 into two parcels which are identified as current day Tax Lots 2313 and 2317, and it also partitioned the residual parcel of the State of Oregon patent for Section 36. See, Attachment 5.

By the time of this 1981 conveyance, the County had established procedures for land partitions; however, there is no evidence that a partition was approved by the County, and two of the resulting parcels (Tax Lots 2317 and 2703) were below the minimum EFU zone parcel size of 160 acres. Accordingly, we conclude, and the County can find, that Tax Lots 2313, 2317, and 2703 require remedial action to render them a separate legal parcel for development purposes.

Remedial Action Options: There are multiple remedial action alternatives that are feasible:

- Consolidate Tax Lots 2313, 2317 and 2307 with either of the two pre-existing parcels within Tax Lot 2301. This would have the effect of expanding a separate lawful parcel for development purposes to encompass the parcels that were divided without partition approval. The resulting lot would also meet all current zoning requirements for a new lot because it would be larger than 160 acres and would have considerable frontage on Cedar Springs Lane which is a County Road.
- Validate Tax Lots 2313, 2317 and 2307 as one separate legal parcel pursuant to ORS 92.176, because if considered as a single parcel, it could have complied with applicable standards for partition at the time.
- Obtain partition approval that consolidates the existing parcels into a single parcel and establishes a new date of creation for the parcel under current regulations whereby the new parcel can be found to satisfy applicable minimum lot sizes and frontage requirements.

landfill. The tax lot designations are for taxation purposes only and are not separate legal parcels for development purposes.



CONDITIONS OF APPROVAL CONCERNING LOT LEGALITY

Based on the analysis above, Applicant proposes the following conditions of approval to be applied to the consolidated application for Goal Exception/Zone Change/CUP concerning Lot Legality, and Applicant would accept the same as conditions of approval:

- Prior to initiation of Subtitle C Landfill uses in Township 2 North Section 21 East, the Applicant will satisfy all conditions of approval for the PLAs in planning files 2022-PLA-01 and 2022-PLA-02. These PLAs shall be finalized and recorded in accordance with the PLAs approved therein. [Please note that this condition may be unnecessary at the time of the County's final decision on the Goal Exception/Zone Change/CUP application, as those conditions may be satisfied by that time.]

- Prior to initiation of any new Subtitle C Landfill uses in Township 2 North Section 20 East but that are outside the following described area: [the southeast quarter of Section 25 and the south half of the northeast quarter of Section 25, and the north half of the northeast quarter of Section 36], the Applicant shall have approved and then execute one of the following remedial actions for Tax Lots 2313, 2317 and 2307:
 - Consolidate Tax Lots 2313, 2317 and 2307 with either of the two pre-existing parcels within Tax Lot 2301.
 - Validate Tax Lots 2313, 2317 and 2307 as one separate legal parcel pursuant to ORS 92.176.
 - Obtain partition approval that consolidates the existing parcels into a single parcel and establishes a new date of creation for the parcel under current regulations.

Applicant contends the above conditions of approval will ensure land development that occurs as a result of the requested Goal Exception/Zone Change/CUP approval will occur on separate lawful parcels in accordance with Gilliam County planning requirements.

CSA Planning, Ltd.

Seth Adams
Associate


Attachments

1. Land Patent Details
2. 1972 Bargain & Sale Deed Vol.52 Pg.18
3. 1972 Parcels Map
4. 1981 Warranty Deed M-61-481
5. 1981 Conveyance Map
6. Proposed Consolidated Tax Lots Map

Land Patent Details

Accession Nr: ORTDA 068952 Document Type: Serial Patent State: Oregon Issue Date: 6/9/1906 Cancelled: No

Names On Document

 NORTHERN PACIFIC RAILWAY CO
Military Rank: ---

Miscellaneous Information

Land Office:	The Dalles
US Reservations:	No
Mineral Reservations:	No
Tribe:	---
Militia:	---
State In Favor Of:	---
Authority:	July 2, 1864: Grant-RR Northern Pacific (13 Stat. 365)

Document Numbers

Document Nr:	17
Misc. Doc. Nr:	---
BLM Serial Nr:	ORTDAA 068952
Indian Allot. Nr:	---

Survey Information

Total Acres:	36256.67
Survey Date:	---
Geographic Name:	---
Metes/Bounds:	No

Land Descriptions


State	Meridian	Twp - Rng	Aliquots	Section	Survey #	County
OR	Willamette	001N - 019E	NE $\frac{1}{4}$ SE $\frac{1}{4}$	1		Gilliam
OR	Willamette	001N - 019E	W $\frac{1}{2}$ SW $\frac{1}{4}$	3		Sherman
OR	Willamette	001N - 019E	SE $\frac{1}{4}$ SW $\frac{1}{4}$	3		Sherman
OR	Willamette	001N - 019E	SW $\frac{1}{4}$ SE $\frac{1}{4}$	3		Sherman
OR	Willamette	001N - 019E	S $\frac{1}{2}$ NE $\frac{1}{4}$	5		Sherman
OR	Willamette	001N - 019E	SE $\frac{1}{4}$ NW $\frac{1}{4}$	7		Sherman
OR	Willamette	001N - 019E	SE $\frac{1}{4}$ SE $\frac{1}{4}$	7		Sherman
OR	Willamette	001N - 019E	N $\frac{1}{2}$	9		Sherman
OR	Willamette	001N - 019E	SE $\frac{1}{4}$	9		Sherman
OR	Willamette	001N - 019E	NE $\frac{1}{4}$	11		Gilliam
OR	Willamette	001N - 019E	N $\frac{1}{2}$ SE $\frac{1}{4}$	11		Gilliam
OR	Willamette	001N - 019E	W $\frac{1}{2}$ SW $\frac{1}{4}$	11		Sherman
OR	Willamette	001N - 019E	SW $\frac{1}{4}$ NW $\frac{1}{4}$	11		Sherman
OR	Willamette	001N - 019E	S $\frac{1}{2}$ N $\frac{1}{2}$	13		Gilliam
OR	Willamette	001N - 019E	S $\frac{1}{2}$	15		Sherman
OR	Willamette	001N - 019E	NE $\frac{1}{4}$	15		Sherman
OR	Willamette	001N - 019E	S $\frac{1}{2}$ NW $\frac{1}{4}$	15		Sherman
OR	Willamette	001N - 019E	S $\frac{1}{2}$ NE $\frac{1}{4}$	17		Sherman
OR	Willamette	001N - 019E	SE $\frac{1}{4}$ NW $\frac{1}{4}$	17		Sherman
OR	Willamette	001N - 019E	N $\frac{1}{2}$	21		Sherman
OR	Willamette	001N - 019E	NE $\frac{1}{4}$ NE $\frac{1}{4}$	23		Gilliam
OR	Willamette	001N - 019E	W $\frac{1}{2}$ NW $\frac{1}{4}$	23		Sherman
OR	Willamette	001N - 019E	SW $\frac{1}{4}$ SE $\frac{1}{4}$	23		Sherman
OR	Willamette	001N - 019E	NE $\frac{1}{4}$ NE $\frac{1}{4}$	25		Gilliam
OR	Willamette	001N - 019E	W $\frac{1}{2}$ NW $\frac{1}{4}$	25		Sherman
OR	Willamette	001N - 020E	S $\frac{1}{2}$	1		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ N $\frac{1}{2}$	1		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$	3		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$	5		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ N $\frac{1}{2}$	5		Gilliam
OR	Willamette	001N - 020E	E $\frac{1}{2}$	7		Gilliam
OR	Willamette	001N - 020E	E $\frac{1}{2}$ W $\frac{1}{2}$	7		Gilliam
OR	Willamette	001N - 020E		9		Gilliam
OR	Willamette	001N - 020E	NW $\frac{1}{4}$	11		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ S $\frac{1}{2}$	11		Gilliam
OR	Willamette	001N - 020E	NW $\frac{1}{4}$ SW $\frac{1}{4}$	11		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ NE $\frac{1}{4}$	13		Gilliam
OR	Willamette	001N - 020E	W $\frac{1}{2}$ NW $\frac{1}{4}$	13		Gilliam
OR	Willamette	001N - 020E	NW $\frac{1}{4}$ SW $\frac{1}{4}$	13		Gilliam
OR	Willamette	001N - 020E	W $\frac{1}{2}$ SE $\frac{1}{4}$	15		Gilliam
OR	Willamette	001N - 020E	SE $\frac{1}{4}$ SE $\frac{1}{4}$	15		Gilliam
OR	Willamette	001N - 020E	SE $\frac{1}{4}$	17		Gilliam
OR	Willamette	001N - 020E	W $\frac{1}{2}$ SW $\frac{1}{4}$	17		Gilliam
OR	Willamette	001N - 020E	SW $\frac{1}{4}$ NW $\frac{1}{4}$	17		Gilliam
OR	Willamette	001N - 020E	SW $\frac{1}{4}$ SE $\frac{1}{4}$	19		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$	27		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ NW $\frac{1}{4}$	27		Gilliam
OR	Willamette	001N - 020E		29		Gilliam
OR	Willamette	001N - 020E	NE $\frac{1}{4}$ NE $\frac{1}{4}$	31		Gilliam
OR	Willamette	001N - 020E	SW $\frac{1}{4}$ NE $\frac{1}{4}$	31		Gilliam
OR	Willamette	001N - 020E	N $\frac{1}{2}$ NW $\frac{1}{4}$	35		Gilliam
OR	Willamette	001N - 020E	S $\frac{1}{2}$ SE $\frac{1}{4}$	35		Gilliam

OR	Willamette	001S - 026E	SE¼SE¼	1	Morrow
OR	Willamette	001S - 026E	E½SE¼	5	Morrow
OR	Willamette	001S - 026E	W½NE¼	11	Morrow
OR	Willamette	001S - 026E	N½NW¼	11	Morrow
OR	Willamette	001S - 026E	SW¼NW¼	11	Morrow
OR	Willamette	001S - 026E	SW¼SW¼	11	Morrow
OR	Willamette	001S - 026E	SE¼SE¼	15	Morrow
OR	Willamette	002N - 019E	S½NE¼	1	Gilliam
OR	Willamette	002N - 019E	N½SE¼	1	Gilliam
OR	Willamette	002N - 019E	SE¼SE¼	1	Gilliam
OR	Willamette	002N - 019E	S½NE¼	3	Gilliam
OR	Willamette	002N - 019E	SE¼NW¼	3	Gilliam
OR	Willamette	002N - 019E	SE¼SW¼	3	Gilliam
OR	Willamette	002N - 019E	S½N½	5	Gilliam
OR	Willamette	002N - 019E	N½SW¼	5	Gilliam
OR	Willamette	002N - 019E	SW¼SW¼	5	Gilliam
OR	Willamette	002N - 019E	SW¼	21	Gilliam
OR	Willamette	002N - 019E	S½SE¼	25	Gilliam
OR	Willamette	002N - 019E	SW¼SW¼	25	Gilliam
OR	Willamette	002N - 019E	W½	27	Gilliam
OR	Willamette	002N - 019E	N½NE¼	27	Gilliam
OR	Willamette	002N - 019E	NE¼	29	Gilliam
OR	Willamette	002N - 019E	N½NW¼	29	Gilliam
OR	Willamette	002N - 019E	NW¼SE¼	29	Gilliam
OR	Willamette	002N - 019E	W½SW¼	29	Sherman
OR	Willamette	002N - 019E	E½SE¼	33	Gilliam
OR	Willamette	002N - 019E	NE¼NE¼	33	Gilliam
OR	Willamette	002N - 019E	W½W½	33	Sherman
OR	Willamette	002N - 019E	NE¼NW¼	33	Sherman
OR	Willamette	002N - 019E	SE¼SW¼	33	Sherman
OR	Willamette	002N - 019E	SE¼	35	Gilliam
OR	Willamette	002N - 019E	S½SW¼	35	Gilliam
OR	Willamette	002N - 019E	SE¼NE¼	35	Gilliam
OR	Willamette	002N - 019E	NE¼SW¼	35	Gilliam
OR	Willamette	002N - 020E	NE¼	7	Gilliam
OR	Willamette	002N - 020E	N½SE¼	7	Gilliam
OR	Willamette	002N - 020E	N½SW¼	9	Gilliam
OR	Willamette	002N - 020E	SW¼SW¼	9	Gilliam
OR	Willamette	002N - 020E	NW¼SE¼	9	Gilliam
OR	Willamette	002N - 020E	SE¼SE¼	9	Gilliam
OR	Willamette	002N - 020E	S½SE¼	13	Gilliam
OR	Willamette	002N - 020E	SW¼	17	Gilliam
OR	Willamette	002N - 020E	W½SE¼	17	Gilliam
OR	Willamette	002N - 020E	NW¼NE¼	17	Gilliam
OR	Willamette	002N - 020E	SE¼SE¼	17	Gilliam
OR	Willamette	002N - 020E	E½	19	Gilliam
OR	Willamette	002N - 020E	E½W½	19	Gilliam
OR	Willamette	002N - 020E	SW¼	25	Gilliam
OR	Willamette	002N - 020E	SW¼	27	Gilliam
OR	Willamette	002N - 020E	S½N½	27	Gilliam
OR	Willamette	002N - 020E	S½SE¼	27	Gilliam
OR	Willamette	002N - 020E	NE¼SE¼	27	Gilliam
OR	Willamette	002N - 020E		29	Gilliam
OR	Willamette	002N - 020E	E½	31	Gilliam
OR	Willamette	002N - 020E	E½W½	31	Gilliam
OR	Willamette	002N - 020E		33	Gilliam
OR	Willamette	002N - 020E	SE¼	35	Gilliam
OR	Willamette	002N - 020E	N½N½	35	Gilliam
OR	Willamette	002N - 021E	SW¼SW¼	17	Gilliam
OR	Willamette	002N - 021E	W½E½	19	Gilliam
OR	Willamette	002N - 021E	E½W½	19	Gilliam
OR	Willamette	002N - 021E	S½NW¼	21	Gilliam
OR	Willamette	002N - 021E	S½SW¼	23	Gilliam
OR	Willamette	002N - 021E	S½	25	Gilliam
OR	Willamette	002N - 021E	S½N½	25	Gilliam
OR	Willamette	002N - 021E	S½SE¼	27	Gilliam
OR	Willamette	002N - 021E	SE¼SW¼	27	Gilliam
OR	Willamette	002N - 021E	NW¼	29	Gilliam
OR	Willamette	002N - 021E	SE¼	29	Gilliam
OR	Willamette	002N - 021E	E½SW¼	29	Gilliam
OR	Willamette	002N - 021E	SE¼	31	Gilliam
OR	Willamette	002N - 021E	N½NE¼	31	Gilliam
OR	Willamette	002N - 021E	E½SW¼	31	Gilliam
OR	Willamette	002N - 021E	NE¼NW¼	31	Gilliam
OR	Willamette	002N - 021E	S½S½	33	Gilliam

Land Patent Details

Accession Nr: [ORORAA 000050](#) Document Type: [Serial Patent](#) State: [Oregon](#) Issue Date: [2/14/1859](#) Cancelled: [No](#)

Names On Document

 OREGON STATE
Military Rank: ---

Miscellaneous Information

Land Office:	Assigned For Automation
US Reservations:	No
Mineral Reservations:	No
Tribe:	---
Militia:	---
State In Favor Of:	---
Authority:	February 14, 1859: Oregon-Act of Admission (11 Stat. 383)

Document Numbers

Document Nr:	2141859
Misc. Doc. Nr:	---
BLM Serial Nr:	ORORAA 000050
Indian Allot. Nr:	---

Survey Information

Total Acres:	2643268.59
Survey Date:	---
Geographic Name:	---
Metes/Bounds:	No

Land Descriptions

State	Meridian	Twp - Rng	Aliquots	Section	Survey #	County
OR	Willamette	001N - 001E		16		Multnomah
OR	Willamette	001N - 001W	N½	16		Multnomah
OR	Willamette	001N - 001W	E½SE¼	16		Multnomah
OR	Willamette	001N - 001W		36		Multnomah
OR	Willamette	001N - 002E	NE¼NW¼	16E		Multnomah
OR	Willamette	001N - 002E		36		Multnomah
OR	Willamette	001N - 002W		36		Washington
OR	Willamette	001N - 003W	W½SW¼	16		Washington
OR	Willamette	001N - 004E	S½	36		Multnomah
OR	Willamette	001N - 004E	S½N½	36		Multnomah
OR	Willamette	001N - 004E	NE¼NE¼	36		Multnomah
OR	Willamette	001N - 004E	NW¼NW¼	36		Multnomah
OR	Willamette	001N - 004W	W½NE¼	16		Washington
OR	Willamette	001N - 004W	E½NW¼	16		Washington
OR	Willamette	001N - 004W	N½SE¼	16		Washington
OR	Willamette	001N - 004W	SE¼NE¼	16		Washington
OR	Willamette	001N - 004W	NE¼SW¼	16		Washington
OR	Willamette	001N - 004W	SE¼SE¼	16		Washington
OR	Willamette	001N - 005E		36		Multnomah
OR	Willamette	001N - 005W		16		Washington
OR	Willamette	001N - 005W		36		Washington
OR	Willamette	001N - 006E	W½	16		Multnomah
OR	Willamette	001N - 006E	SE¼	16		Multnomah
OR	Willamette	001N - 006E	SW¼NE¼	16		Multnomah
OR	Willamette	001N - 006E		36		Multnomah
OR	Willamette	001N - 006W		16		Tillamook
OR	Willamette	001N - 006W		36		Washington
OR	Willamette	001N - 007W		16		Tillamook
OR	Willamette	001N - 007W	W½	36		Tillamook
OR	Willamette	001N - 007W	W½E½	36		Tillamook
OR	Willamette	001N - 008W		16		Tillamook
OR	Willamette	001N - 008W		36		Tillamook
OR	Willamette	001N - 009E		16		Hood River
OR	Willamette	001N - 009E		36		Hood River
OR	Willamette	001N - 009W		16		Tillamook
OR	Willamette	001N - 009W	W½	36		Tillamook
OR	Willamette	001N - 009W	W½E½	36		Tillamook
OR	Willamette	001N - 010E		16		Hood River
OR	Willamette	001N - 010E		36		Hood River
OR	Willamette	001N - 010W		16		Tillamook
OR	Willamette	001N - 010W	N½	36		Tillamook
OR	Willamette	001N - 010W	SE¼	36		Tillamook
OR	Willamette	001N - 010W	E½SW¼	36		Tillamook
OR	Willamette	001N - 011E		16		Hood River
OR	Willamette	001N - 011E		36		Wasco
OR	Willamette	001N - 012E		16		Wasco
OR	Willamette	001N - 012E		36		Wasco
OR	Willamette	001N - 013E		16		Wasco
OR	Willamette	001N - 013E	S½	36		Wasco
OR	Willamette	001N - 013E	NE¼	36		Wasco
OR	Willamette	001N - 013E	E½NW¼	36		Wasco
OR	Willamette	001N - 014E		16		Wasco

OR	Willamette	002N - 009W		16	Tillamook
OR	Willamette	002N - 009W		36	Tillamook
OR	Willamette	002N - 010E		16	Hood River
OR	Willamette	002N - 010E		36	Hood River
OR	Willamette	002N - 010W	S½	16	Tillamook
OR	Willamette	002N - 010W	NE¼	16	Tillamook
OR	Willamette	002N - 010W	S½NW¼	16	Tillamook
OR	Willamette	002N - 010W	NE¼NW¼	16	Tillamook
OR	Willamette	002N - 010W		36	Tillamook
OR	Willamette	002N - 011E		16	Hood River
OR	Willamette	002N - 011E		36	Wasco
OR	Willamette	002N - 012E		16	Wasco
OR	Willamette	002N - 012E		36	Wasco
OR	Willamette	002N - 014E		36	Wasco
OR	Willamette	002N - 015E	N½N½	16	Lane
OR	Willamette	002N - 015E		36	Sherman
OR	Willamette	002N - 016E	W½	16	Sherman
OR	Willamette	002N - 016E	SW¼SE¼	16	Sherman
OR	Willamette	002N - 016E	E½NE¼	16	Sherman
OR	Willamette	002N - 016E		36	Sherman
OR	Willamette	002N - 017E		16	Sherman
OR	Willamette	002N - 017E		36	Sherman
OR	Willamette	002N - 018E		16	Sherman
OR	Willamette	002N - 018E		36	Sherman
OR	Willamette	002N - 019E		16	Gilliam
OR	Willamette	002N - 019E		36	Gilliam
OR	Willamette	002N - 020E		16	Gilliam
OR	Willamette	002N - 020E		36	Gilliam
OR	Willamette	002N - 021E		16	Gilliam
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OR	Willamette	002N - 036E	NE¼NE¼	16	Umatilla
OR	Willamette	002N - 036E	NW¼SW¼	16	Umatilla
OR	Willamette	002N - 036E	NW¼SE¼	16	Umatilla
OR	Willamette	002N - 036E		36	Umatilla
OR	Willamette	002N - 038E		16	Union
OR	Willamette	002N - 038E		36	Union
OR	Willamette	002N - 039E		16	Union
OR	Willamette	002N - 039E	NW¼	36	Union
OR	Willamette	002N - 039E	W½NE¼	36	Union
OR	Willamette	002N - 039E	W½SW¼	36	Union
OR	Willamette	002N - 040E		16	Union
OR	Willamette	002N - 040E	S½NW¼	36	Union
OR	Willamette	002N - 041E		16	Wallowa
OR	Willamette	002N - 041E		36	Wallowa
OR	Willamette	002N - 042E		16	Wallowa
OR	Willamette	002N - 042E		36	Wallowa
OR	Willamette	002N - 043E		16	Wallowa
OR	Willamette	002N - 043E		36	Wallowa
OR	Willamette	002N - 044E		16	Wallowa
OR	Willamette	002N - 044E	S½	36	Wallowa
OR	Willamette	002N - 044E	NW¼	36	Wallowa
OR	Willamette	002N - 045E		16	Wallowa
OR	Willamette	002N - 045E	E½E½	36	Wallowa
OR	Willamette	002N - 045E	W½SW¼	36	Wallowa
OR	Willamette	002N - 045E	NW¼NE¼	36	Wallowa

VOLUME 52 PAGE 18

BARGAIN AND SALE DEED

KNOW ALL MEN BY THESE PRESENTS that BIG SKY RANCH, INC., a corporation duly organized and existing under the laws of the state of Oregon, hereinafter called Grantor, for the consideration hereinafter stated, does hereby grant, bargain, sell and convey unto CHEM-NUCLEAR SERVICES, INC., a Washington corporation, hereinafter called Grantee, and Grantee's successors and assigns, that certain real property, with the tenements, hereditaments and appurtenances thereunto belonging or appertaining, situated in the County of Gilliam and State of Oregon, described as follows, to wit:

Section 25: S 1/2 of NE 1/4; SE 1/4
36: N 1/2 of NE 1/4
Township 2 North, Range 20 East, W.M.

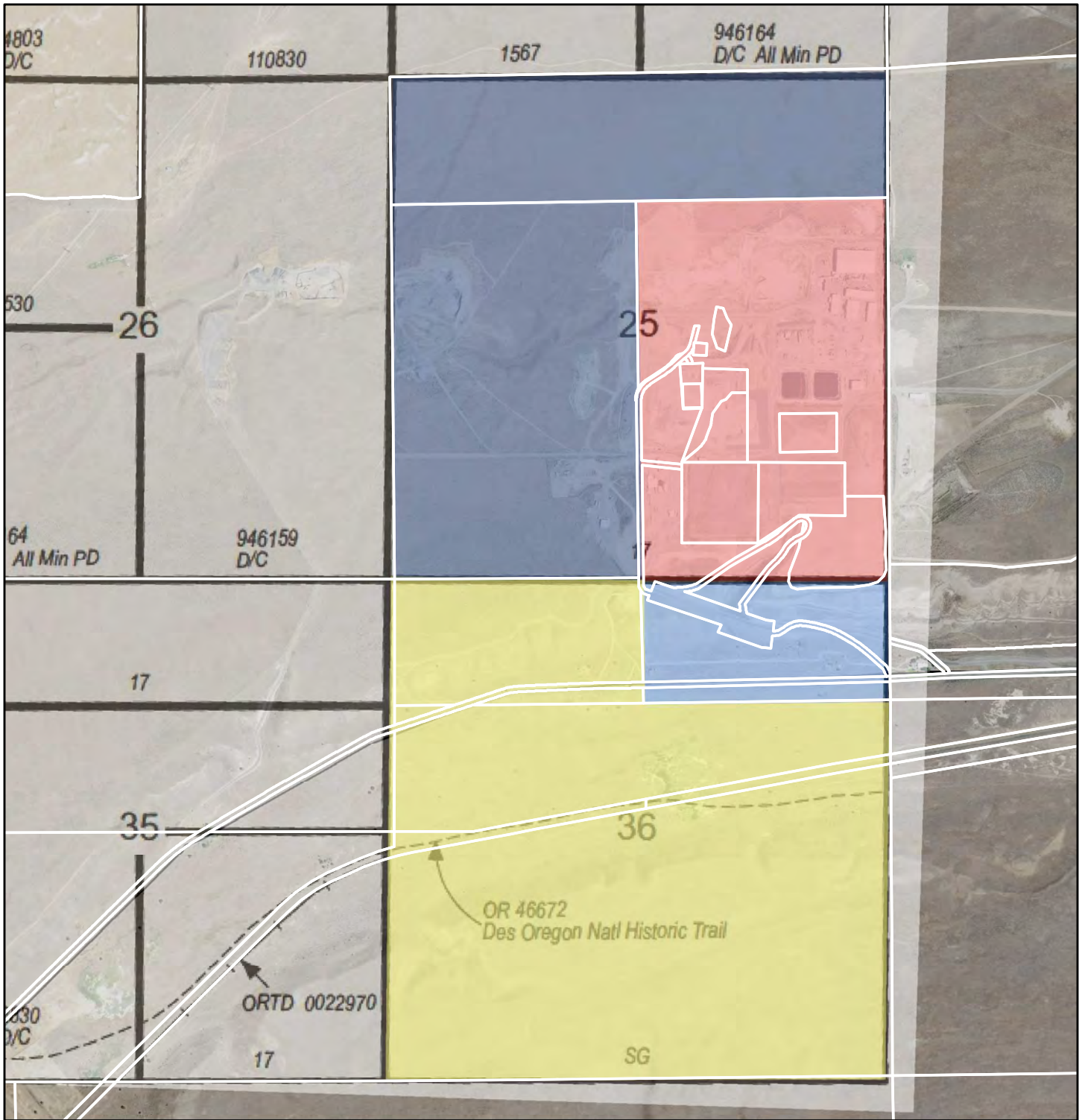
TO HAVE AND TO HOLD the same unto said Grantee and Grantee's successors and assigns, forever.






The true and actual consideration paid for this transfer, stated in terms of dollars, is \$58,000.


IN WITNESS WHEREOF Grantor has caused this instrument to be executed by its duly authorized officer, as of this 14th day of January, 1972.

BIG SKY RANCH, INC.

By *Raymond J. ...*
President




-  Taxlots
-  Patent 17 Parcel 2 (1972)
-  OR State Grant Patent Parcel 2 (1972)
-  Patent 17 Parcel 1 (1972)
-  OR State Grant Patent Parcel 1 (1972)

CWMNW Lands in R20E Sections 25 & 36 

CWM of the Northwest, Inc.
Lot Legality

1,500 750 0 1,500
Feet



Property lines are approximate and are not intended or implied to be legally precise.

Aug. 27, 1981

M 61 481

WARRANTY DEED
(Statutory Form)

GRANTOR: BIG SKY RANGE, INC., an Oregon corporation

CONVEYS AND WARRANTS TO

GRANTEE: CHEM-SECURITY SYSTEMS, INC., a Washington corporation

The following described real property free of encumbrances except as specifically set forth herein situated in County of Gilliam, State of Oregon:

- Township 2 North, Range 20 East, W. M.:
- Section 25: Southwest 1/4, and South 1/2 of the Northwest 1/4
- Section 36: North 1/2 of the Northwest 1/4

EXCEPT TO:

- Taxes for fiscal year 1981-82, a lien not yet payable.
- The rights of the public in and to any portion of the described lands lying within the limits of public roads.
- Easement for transmission line or system, including terms and provisions thereof, recorded October 28, 1963, Gilliam County Deed Book 44, Page 309, to Columbia Basin Electric Cooperative, Inc. (The interest of Columbia Basin Electric Cooperative, Inc. was assigned to Pacific Power and Light Company, June 29, 1973, Deed Book 53, Page 2.)
- Mineral reservation and mining easement, contained in Deed recorded August 31, 1939, Gilliam County Deed Book 31, Page 271, to Northern Pacific Railway Company.

The true and actual consideration for this transfer is \$ 400,000.00

If grantor is a corporation, this has been signed by authority of the Board of Directors, with the seal of said corporation.

DATED: July 10, 1981

GRANTOR: BIG SKY RANGE, INC.

BY: John G. Emery President
 BY: Roland Simantel Secretary

Until a change is requested, all tax statements shall be sent to the following address:
Chem-Security Systems, Inc., P. O. Box 1066, Bellingue, Washington 98009

STATE OF OREGON, County of Clackamas
 Date: July 10, 1981
 Personally appeared the above named
John G. Emery
Roland Simantel
 and acknowledged the foregoing instrument to be
 their voluntary act and deed, before me:
Hazel I. Walker
 Notary Public for Oregon
 My commission expires 4-13-85

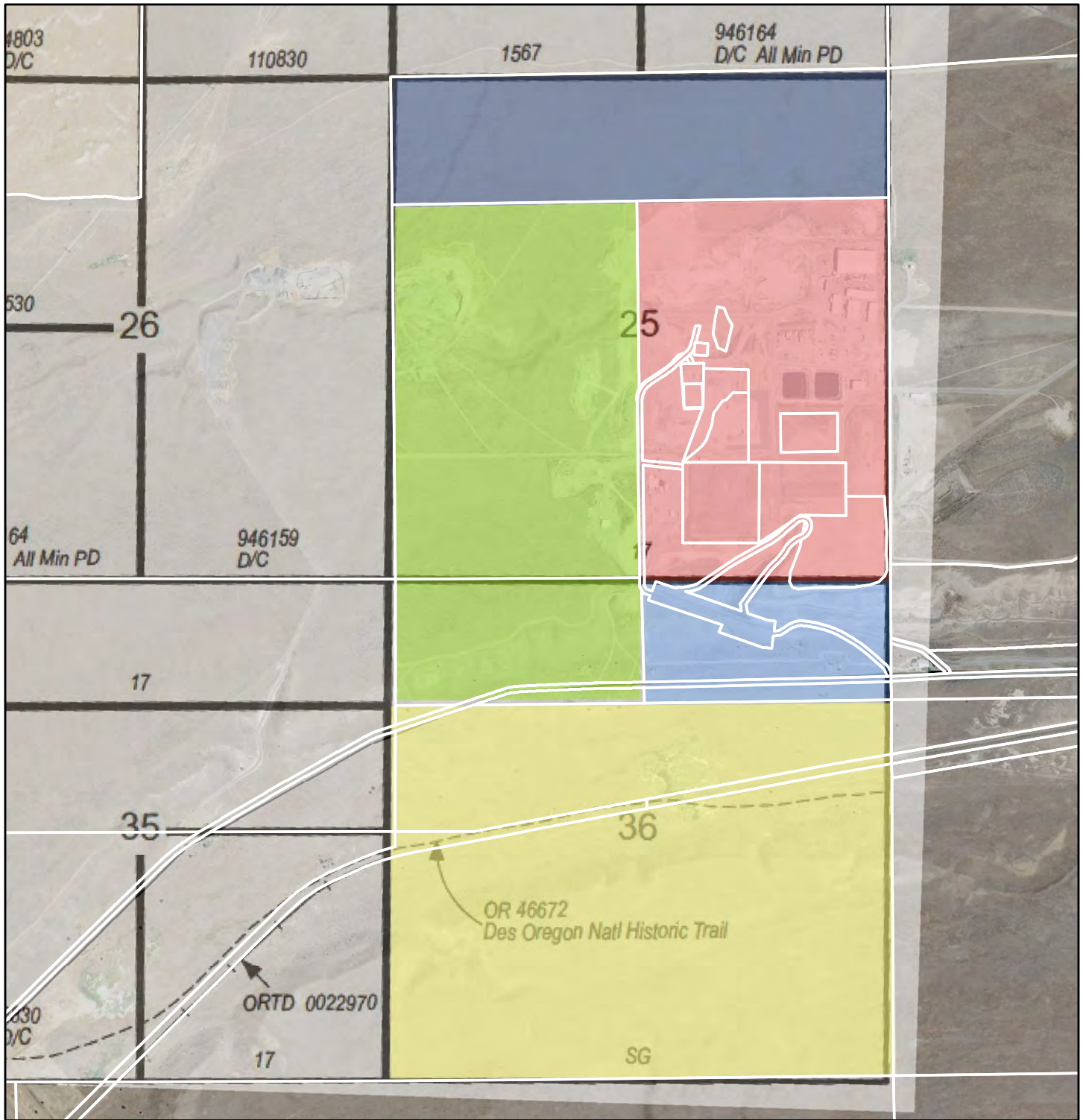
State of Oregon, County of Clackamas
 Date: July 10, 1981
 Personally appeared John G. Emery & Roland Simantel who being
 sworn, stated that he is the President & Secretary, respectively,
 of the above named corporation and that the seal affixed herein is his seal and that this instrument was
 voluntarily signed and sworn to behalf of the corporation by authority of its Board of
 Directors before me.
Hazel I. Walker
 Notary Public for Oregon
 My commission expires 4-13-85

WARRANTY DEED
 TO
 AFTER RECORDING RETURN TO
 Chem-Security Systems, Inc.
 P. O. Box 1066
 Bellingue, WASH 98009

STATE OF OREGON } INDEXED
 County of Gilliam }
 I hereby certify that the within
 instrument was received for record
 on July 17, 1981 at 2:12 P. M.
 and recorded No. M-61-481

Recorded this 17th day of July 1981
 at _____
 County of Gilliam


 Deputy

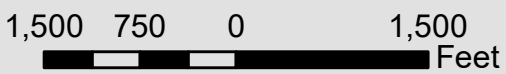



- Taxlots
- 1981 Conveyance (TLs 2313/2703)
- 1972 Parcel 1 (TL 2301)
- 1972 Parcel 2 (TL 2301)
- Patent 17 Residual (TL 2317)
- OR State Grant Patent Residual

CWMNW Lands in R20E Sections 25 & 36

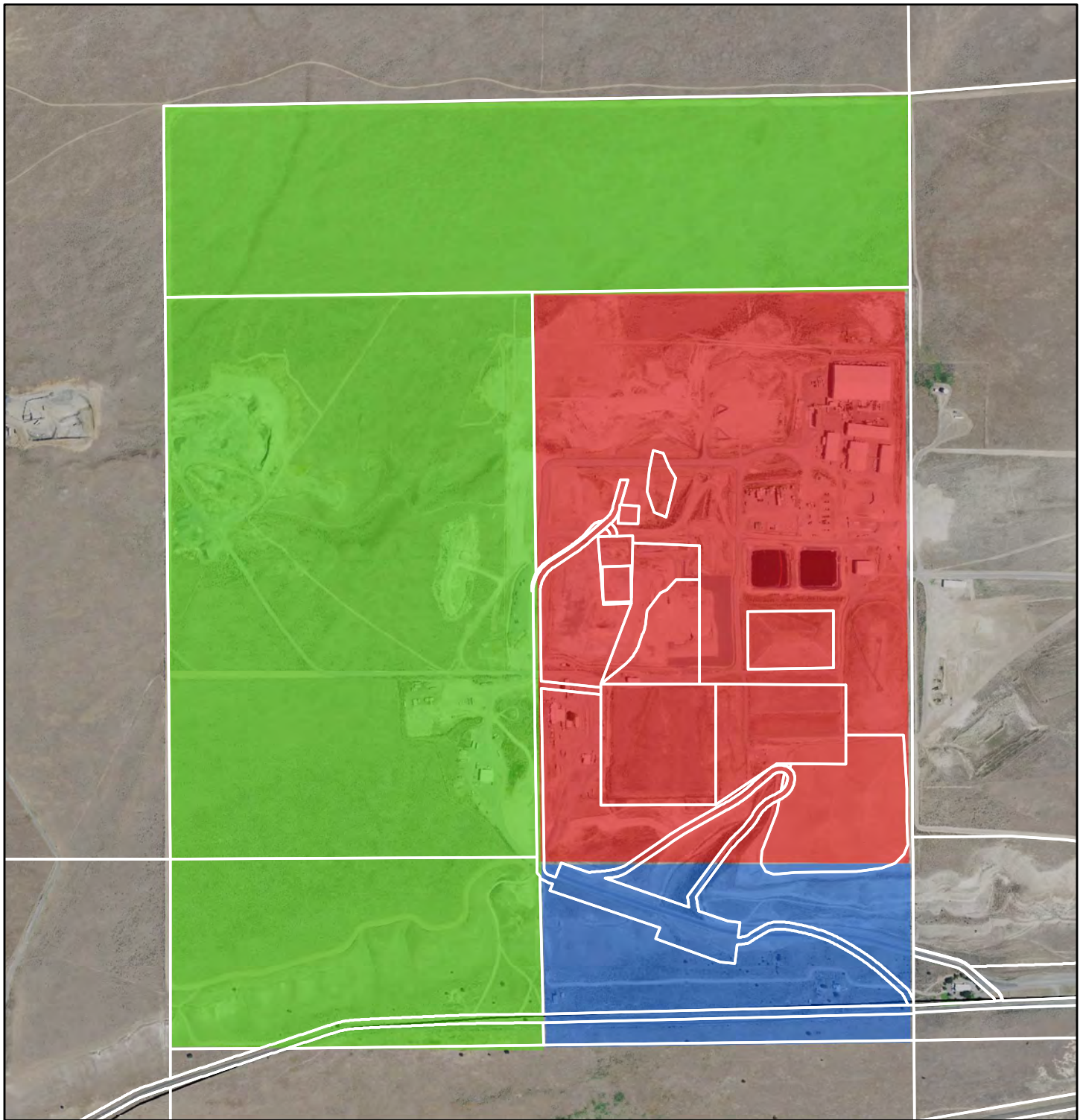
CWM of the Northwest, Inc.
Lot Legality











Property lines are approximate and are not intended or implied to be legally precise.




 Taxlots

 Consolidated TL 2313/2317/2703

 1972 Parcel 1 (TL 2301)


 1972 Parcel 2 (TL 2301)



CWMNW Lands in R20E Sections 25 & 36

CWM of the Northwest, Inc.
Lot Legality

1,000 500 0 1,000
Feet



Property lines are approximate and are not intended or implied to be legally precise.



TOMMY A. BROOKS

tbrooks@cablehuston.com
cablehuston.com

July 19, 2022

VIA EMAIL (michelle.colby@co.gilliam.or.us)

Michelle Colby
Planning Director
Gilliam County Planning Department
221 S. Oregon St, Rm 102
PO Box 427
Condon, OR 97823
michelle.colby@co.gilliam.or.us

RE: Chemical Waste Management of Oregon – Supplemental Information

Dear Ms. Colby:

On behalf of Chemical Waste Management of the Northwest (“CWMNW”), we are submitting this letter as a supplemental submittal to assist the County and other participants in the review of CWMNW’s application seeking a Goal 3 Exception and Conditional Use Permit (“Application”).

1 – Lot Legality. In the Application, CWMNW noted that additional information would be forthcoming regarding the legal status of each of the parcels comprising the Subject Property. This letter will confirm that on July 11, 2022, CWMNW, through its planning consult CSA Planning, provided a supplemental memorandum addressing lot legality issues. Please ensure that memorandum is in the record.

2 – Site Development. The specific development of the Subject Property will occur over a long period of time and depend on the quantity and nature of specific waste received for disposal. As the Application notes, the identified land use need reflects likely or potential regulatory changes and episodic events that change waste stream flows both in the near term and the long term. CWMNW, through the Oregon Department of Environmental Quality’s (“DEQ”) permitting process, will determine to what extent individual disposal cells will need to be created, filled, or closed, including any ancillary operations that need to be added or modified to accommodate specific waste streams.

July 19, 2022

Page 2

Because the specific waste and operational parameters may evolve over time, the Application identifies areas for various operational aspects of the overall site. Waste disposal will occur only in specific locations and, for example, will not take place within the identified 1000-foot buffer area. Atlas Page 5 of Application Volume 2 depicts the areas where various categories of activities will occur. Those areas are identified by their maximum footprint, rather than by any particular site layout, so that the impacts of those activities can be analyzed regardless of the specific layout DEQ ultimately approves. In order to ensure that the Goal Exception and Conditional Use Permit (“CUP”) are based only on potential categories of activities the County analyzes, the Applicant recommends a condition of approval that would expressly require the Applicant to seek modification of the CUP if the Applicant desires to add or change a use that requires a DEQ permit modification, or otherwise desires to develop part of the Subject Property in a manner that is not consistent with the use areas identified on Atlas Page 5. Such future reviews will ensure the County can assess whether the CUP modification is consistent with the purposes of the Goal Exception.

Additionally, if a LUCS is required by DEQ for uses that are within the locations approved in the CUP (Atlas Page 5 of Application Volume 2), Applicant will accept a condition of approval requiring the Applicant to provide County Planning with information that describes the new use at least 15-days prior to submitting a LUCS request to the County relating to the DEQ permit for the new use.

3 – Onsite Quarry. The accessory aggregate quarry use on the Subject Property exists to serve the on-site operations of the primary transfer, storage, and disposal facility (“TSDF”) use on the site. The existing quarry is located along the western boundary of the CWMNW facility and is approximately 15 acres in size. The existing quarry is located on a portion of the site that is zoned M-G. Aggregate uses are permitted uses within the M-G zone and the on-site aggregate use functions as an accessory use to the primary TSDF use. The pending CUP application depicts an expanded quarry area that will be needed to meet the needs of the landfill going forward.

The primary TSDF use requires significant quantities of aggregate for daily operations. For example, aggregate is used to construct haul roads and equipment areas and to construct landfill cells. The accessory aggregate quarry use involves typical aggregate activities such as excavation and removal of overburden, excavation of the aggregate resource, crushing (if/when necessary), screening and stockpiling.

4 – Landfill Buffer Area. The Applicant’s understanding is that the 1,000-foot buffer prohibits landfill disposal of hazardous waste within a 1,000-feet of an external property boundary not owned by the Applicant (or an affiliated entity) under both the County’s Comprehensive Plan findings and the ODEQ permit. DEQ has siting rules for new Subtitle C landfills. Among those rules is a setback requirement that creates a 1,000-foot buffer between waste disposal areas and property boundaries. *See* OAR 340-120-0010(2)(e)(B). Although this rule is not directly applicable to the proposal in the Application (because they apply only to new facilities rather than expansions of existing facilities), the requirement applies to CWMNW’s existing transfer, storage, and disposal facility (“TSDF”) by virtue of its current DEQ permit.

July 19, 2022

Page 3

Included as Appendix B in Volume 1 of the Application is a copy of Permit No. ORS 089-452-353. On page II-12 of that permit (p.85 of the PDF version of Application Volume 1) is Condition II.T.4., which expressly requires the 1,000-foot buffer. CWMNW has proposed to DEQ that it modify that permit to accommodate the expansion, but the modification makes no change to the 1,000-foot buffer requirement. Further, CWMNW has coordinated with DEQ to develop a site plan acceptable to DEQ, and DEQ's permitting process has no mechanism for allowing an existing TSDF to develop disposal cells within the 1,000-foot buffer area.

The County has also incorporated this buffer requirement into its own Comprehensive Plan provisions. The Applicant addressed the County's local requirements and, beginning on page 37 of Application Volume 1, the Applicant addressed Article 7 – Conditional Uses in the Gilliam County Zoning Ordinance (“Code”). Within that article of the Code is Section 7.010(A)(1)(a), which requires the conditional use to “be in compliance with the applicable Comprehensive Plan designation and policies.” In response to that criterion, the Applicant noted that Comprehensive Plan Goal 2: Land Use Planning contains findings relevant to the buffer area. Specifically, those findings state that the buffer area the state requires for Subtitle C facilities “is adequate to provide the protection necessary to protect adjoining land areas and uses,” and “that no additional ‘buffer area’ provisions are necessary.” The Applicant is not aware of any Comprehensive Plan or Code provisions that would allow a smaller buffer area. Additionally, Gilliam County only permits hazardous waste landfills in one zone, the M-G zone, and it is a Conditional Use in the M-G zone. The M-G zone contains specific CUP criteria for hazardous waste facilities that require DEQ permit issuance and compliance with applicable DEQ permit conditions. These provisions are addressed in the proposed findings on pages 36 and 37 of Application Volume 1. Because the 1000-foot buffer is an existing DEQ permit requirement and not one that the Applicant believes DEQ would consider altering, the 1000-foot buffer functions as a CUP development standard.

Based on CWMNW's coordination with DEQ and the County's incorporation of DEQ's buffer requirements into its Comprehensive Plan findings, the Applicant proposed the buffer area as part of the Goal 3 Exception area. While waste disposal is prohibited in the 1,000-foot buffer, it will also no longer be made available for the farm and non-farm uses allowed in the Exclusive Farm Use zone and is solely a component of the TSDF as proposed with planned uses depicted on Atlas Page 5 (Application Volume 2). To that end, the Applicant proposed findings in its application that acknowledge the 1,000-foot buffer regulatory requirements and the change in use of the buffer area.

With respect to uses that do not involve permanent landfilling, the Applicant's understanding is that the other TSDF and accessory uses can be located within the 1,000-foot buffer area. The Applicant's understanding is based upon the following considerations:

- Accessory uses like the aggregate quarry are located within the 1,000-foot buffer
- TSDF uses like the office and haul road are located less than 1,000-feet from Cedar Springs Road Right-of-Way

July 19, 2022

Page 4

- DEQ has reviewed the site plan for the pending DEQ permit and some of the new TSDF components, such as new evaporations ponds, were sited within the buffer in coordination with DEQ staff

The M-G zone is Gilliam County's heaviest industrial zoning designation. The TSDF uses that are not permanent landfilling are similar to other conditional uses within the M-G zone with respect to use intensity. For example, uses such as bulk fuel storage (including petroleum, methane, propane, gasoline and diesel), automotive wrecking yards, chemical manufacturing facilities, slaughterhouses and tallow plants are all uses that would be expected to have use intensities and environmental permit requirements similar to the TSDF facilities that do not involve permanent landfilling of waste. These other conditional uses would ordinarily be subject the standard setbacks for the M-G zone.

With respect to the project maps that show the "break" in the 1000-foot buffer along the southern boundary of the existing facility, Applicant believes this is a matter of interpretation and mapping. That portion of the site has been in existence for a considerable time. It was difficult to discern from the permit records if the 1,000-foot buffer requirement was a regulatory requirement when the main haul road access was constructed and when initial construction of the TSDF took place. The Applicant was unable to locate specific maps associated with the permitting history to understand how the 1,000-foot buffer was intended to apply on this portion of the site.

Applicant has no objection to revising the project maps to show this area as an area subject to the 1,000-foot buffer requirement, provided however, the County would need to concur with Applicant's understanding described above that the 1,000-foot buffer does not apply to TSDF uses that are not permanent landfilling. The County's concurrence in this regard is essential- else the landfill would be surrounded by buffer and have no way to access the facility or utilize the existing office building.

5 – DEQ Application. As we have noted in the Application and in this supplemental letter, the specific site plan for this facility must be reviewed and approved by DEQ. On April 29, 2022, CWMNW submitted a Part B renewal application to DEQ requesting updates to its current permit which include treatment, disposal, and storage within the expansion that is requested in the Application. The site plan in the DEQ permit application submittal was developed in coordination with DEQ. DEQ is currently reviewing that application.

6 – Flood Hazard Area. During its review of the draft findings, County Staff asked about the ¼ mile separation requirements from the 100-year floodplain. Staff's careful examination of the record caused us to re-examine the mapping in this regard. Attached to this letter is a map that shows, in fact, that there is a small area where the ¼ mile separation extends beyond the mapped buffer area. The affected area is ~80-feet in width and ~1 acre. Applicant concurs with Staff that this issue must be resolved prior to final adoption. Applicant agrees to accept a Planning Commission recommendation condition requiring the maps be revised for the hearings in front of the County Court to increase the buffer in this area to maintain the ¼ mile separation.

July 19, 2022

Page 5

7 – Goal Exception Documentation. OAR 660-004-0000(2) states that “[t]he documentation for an exception must be set forth in a local government’s comprehensive plan.” If approved, the Goal 3 Exception requested by the Applicant would be reflected in the County’s Comprehensive Plan Map (“Plan Map”), and the Subject Property would appear with the M-G designation going forward rather than the current EFU designation. However, because the M-G zone allows uses other than the specific rural industrial use the Applicant proposes, the M-G designation on the Plan Map may not be a precise indicator that a Goal Exception exists for the Subject Property. That is, because the County does not have a limited use overlay or other map designation that would serve to limit uses on the Subject Property to just those included in the Application, the County may wish to provide additional documentation in the Comprehensive Plan to note the existence of the exception. The Applicant proposes that the County accomplish this through the Ordinance adopting the Goal Exception.

The Ordinance itself will set forth the County’s conclusion that the standards for an exception have been met. As part of the Ordinance, the Applicant proposes that the County Court expressly acknowledge that the approval of the Goal Exception should be noted in the text of the Comprehensive Plan, and that it include language directing County planning staff to make that change. The specific language added to the Comprehensive Plan can be a simple sentence in the Goal 2 section of the Comprehensive Plan noting the adopting Ordinance number and date the County’s approval of the exception, and stating that the reasons for the exception are set forth in the Ordinance. The Applicant can work with County Planning Staff to develop specific language after the Planning Commission makes its recommendation and as part of the record that would go before the County Court.

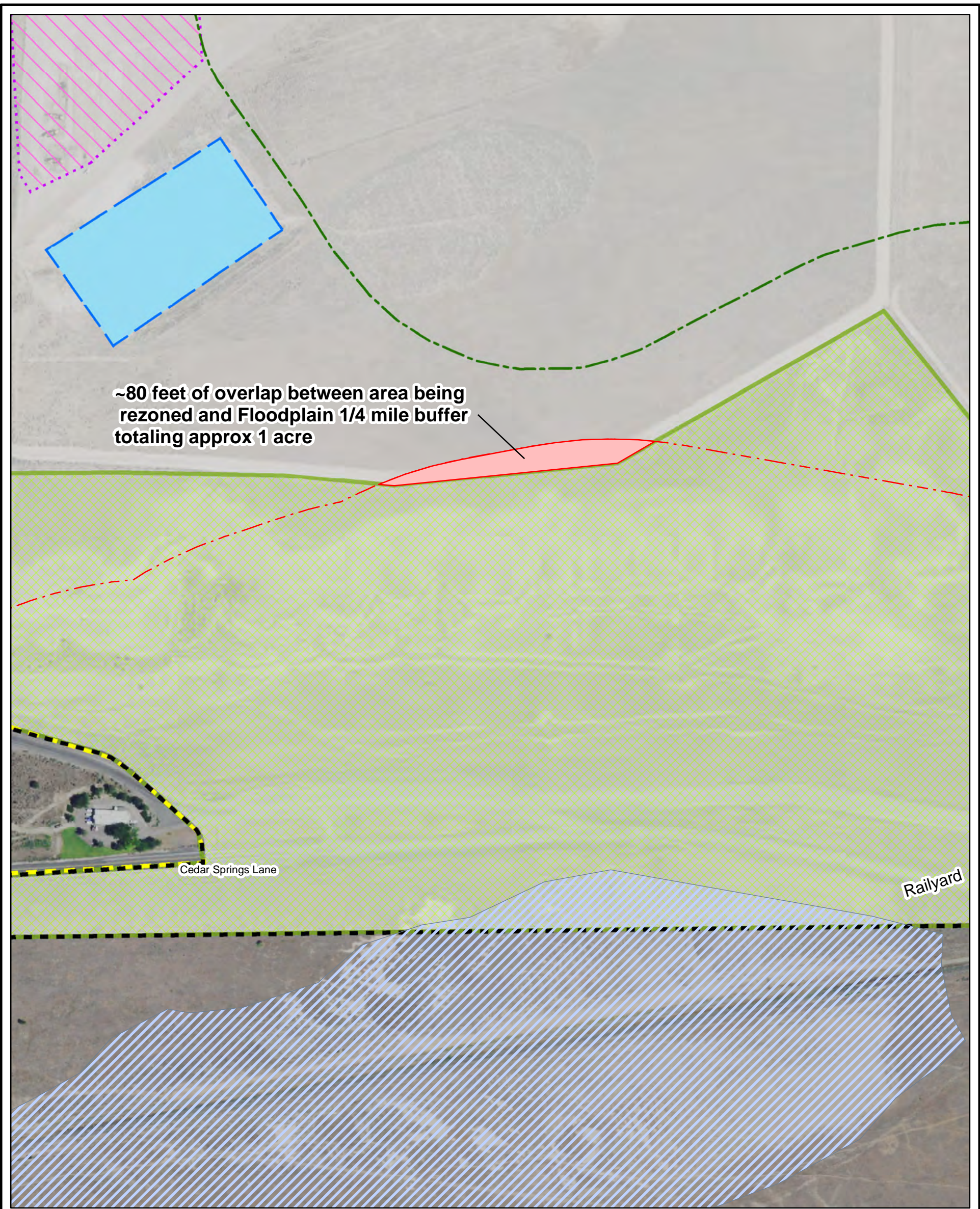
We look forward to addressing the Planning Commission on July 26th and answering any questions the Commissioners or Staff have at that time.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tommy A. Brooks', is written over a light blue rectangular background.

Tommy A. Brooks

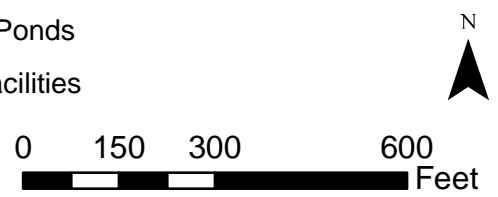
Enclosures



GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Floodplain Issue Pointed Out by Staff

- | | | |
|---------------------------------|-------------------------------|--------------------------|
| Area of Overlap | Existing Facility Area | Existing Facilities |
| 1/4 Mile Buffer from Floodplain | Area of Proposed M-G Zoning | Stormwater Ponds |
| FEMA 100 Year Floodplain | Goal Exception Area | New Landfill L15 |
| | 1000' Buffer (No Landfilling) | New Evaporation Ponds |
| | Existing Landfills | New Treatment Facilities |





TOMMY A. BROOKS

tbrooks@cablehuston.com
cablehuston.com

August 30, 2022

Michelle Colby
Planning Director
Gilliam County Planning Department
221 S. Oregon St, Rm 102
PO Box 427
Condon, OR 97823
michelle.colby@co.gilliam.or.us

RE: Chemical Waste Management of Oregon – Pre-Hearing Submittal

Dear Ms. Colby:

On behalf of Chemical Waste Management of the Northwest (“CWMNW”), we are submitting this letter in advance of the County Court’s hearing relating to CWMNW’s application seeking a Goal 3 Exception and Conditional Use Permit (“Application”). The hearing is scheduled for September 21, 2022.

Approved Uses and Accessory Uses on Site Plan

During the Planning Commission’s consideration of the Application, we identified a need to refine Atlas Page 5 presented in volume 2 of the Application. That page depicts the Goal Exception area and the various primary and accessory uses CWMNW has proposed. The Staff Report to the Planning Commission correctly noted that the 1,000-foot buffer required by the Oregon Department of Environmental Quality (“DEQ”), which is incorporated into the County’s Comprehensive Plan (the “Buffer”), requires a separation between property boundaries and active waste management areas and facilities. As originally depicted, Atlas Page 5 showed some facilities that likely constitute “waste management areas” within the buffer. We noted to the Planning Commission that CWMNW had continued to work with DEQ to determine what activities are or are not allowed in the Buffer area and we committed to submitting information to the County Court that would clarify that issue.

Attached as Exhibit A is a replacement Atlas Page 5 that comports with DEQ’s regulations and the intent of the Buffer as presented in the Application. This page should replace

the original version included in the Application. The updated page reflects the following uses and accessory uses and their relationship to the Buffer:

Broad Use Category	Specific Use Category	Permissibility
Subtitle C Uses	Outside 1,000 ft Buffer Area	All Subtitle C uses approved by ODEQ
	Inside 1,000 ft Buffer Area	All Subtitle C uses not prohibited by ODEQ within Buffer Area
Accessory Uses (not subject to ODEQ permitting)	Quarry	As shown on Plan subject to depicted 100' setback for areas not currently part of the on-site quarry
	Facility	As shown on Plan subject to depicted 200' setback
	Other Uses (Such as roads, other transportation facilities, offices, equipment maintenance, equipment storage parking, etc.)	Subject to standards of M-G Zone

Using the above table in conjunction with the updated Atlas Page 5, we believe it will be easier to understand the uses allowed by the Goal Exception and where those uses are limited by the Buffer. In the future, CWMNW would seek to modify the conditional use permit if it proposed any development that was different than what is depicted on Atlas Page 5 and described in the table. As noted below, we recommend this table be included in the Conditions of Approval.

Revised Conditions of Approval

During the Planning Commission’s consideration of the Application, we noted that CWMNW largely accepts the conditions of approval presented in the Staff report, but that we would like to suggest revisions to the language. Attached as Exhibit B to this letter is a redline version of the conditions of approval. The changes we suggest are described below.

Condition #3.

Condition #3 relates to conditions of approval imposed in prior County decisions. CWMNW has suggested some additional language to clarify there is a possibility that the County could modify those prior conditions in some manner as part of a separate proceeding. If that were to ever occur, it is important to ensure that the modified condition, rather than the original condition, is binding on the Goal Exception decision.

Condition #3 also includes a reference to a condition relating to the use of the existing Rail Facility. CWMNW is recommending the removal of that condition. First, the condition is apparently one that was imposed as part of a separate decision on property that is not part of the CWMNW property. Thus, while it may affect CWMNW’s use of the rail facility, it does not need to be included in this decision, which relates to a different property. Second, it is not clear what this condition means. The condition refers to “ORS Chapter 530”, which is a statute relating to forest lands. It may be an outdated reference to ODOT rail administrative rules that

have since been repealed. However, without a clear understanding of what the condition actually does, there does not seem to be a reason to include it in this decision.

Condition #6

Condition #6 relates to the Buffer area. As we noted to the Planning Commission, the purpose of the buffer is to ensure a separation between the property boundary and any active waste management area and facilities that DEQ prohibits being within 1,000 feet of the property boundary. The revised version of Condition #6 adds language to make that purpose more express. This condition can be read in conjunction with the table above and the additional language CWMNW proposed for Condition #14, addressed below. Taken together, CWMNW would not construct any DEQ-prohibited active waste management areas or facilities within the Buffer, but could construct other ancillary uses or facilities within the Buffer as long as they are not prohibited by DEQ (and comply with other setbacks this decision requires).

The proposed Condition #6 also includes language suggested by Staff that deletes the phrase “property boundaries for the” before the phrase “tract of properties.” CWMNW supports that revision and agrees it makes the condition clearer.

Condition #12

CWMNW noticed a small typo in the original version of Condition #12 and has made that correction in the new proposed version.

Condition #13

Condition #13 relates to the ancillary quarry use on the subject property. The Planning Commission recommended approval with a condition of approval that requires the quarry use to have a 100-foot setback from the property boundaries. While CWMNW does not oppose that setback, portions of the existing quarry are already within that setback. CWMNW has therefore proposed language that would apply the new setback to any new areas of the property that are used for the ancillary quarry use.

Condition #14

Condition #14 describes when the Applicant would need to re-apply for a conditional use permit. CWMNW has proposed edits that will make it easier to determine when a new conditional use permit will be required. Because the Buffer limits the location of some uses, such permitting depends on the type of use and its location compared to the Buffer. The table described above is intended to list the uses and accessory uses that are contemplated by this approval, and is therefore helpful to determining what additional permitting may be needed in the future. CWMNW recommends including that table in this condition.

Condition #15

Condition #15 relates to the duration of the conditional use permit. The Planning Commission agreed that the time limit should be extended to three years and should be tied to obtaining a DEQ permit rather than to acquiring a building permit. This is because much, if not all, of the improvements will not require a building permit. To that end, Staff suggested language for this condition that would have the permit expire within three years unless a building permit is issued or, if no building permit is required, “substantial construction” has occurred. Because the timeline for development will occur over a long period of time, CWMNW recommends language that is more in line with what the Planning Commission discussed and that does not depend on the level of construction that has occurred. “Substantial construction” is problematic in part because it does not make clear what quantum of construction must have occurred to satisfy this condition. CWMNW’s proposed condition will allow the permit to vest once it has obtained DEQ approval to use the expansion area. CWMNW is currently in that process with DEQ, and the proposed condition would require CWMNW to complete that process within three years.

Goal Exception Documentation

The Planning Commission’s recommendation included Staff’s request that the Goal Exception be documented in the text of the Comprehensive Plan. CWMNW has expressed support for that approach, and the proposed text is set forth in the Staff Report that served as the basis for the Planning Commission’s decision.

On further review, it appears that the proposed text edits require some additional editing. Specifically, the version proposed by Staff would delete language at the end of paragraph 4 that should remain. The deletions currently result in a sentence that is cut off and reads as follows:

4. The County has reviewed all factors relating to the need for a buffer area around the Chemical Waste Management of the Northwest hazardous waste disposal site and has determined that the current buffer area required by OAR 340-120-0010(2)(e)(B)

CWMNW recommends restoring some of the stricken language so that it reads as follows:

4. The County has reviewed all factors relating to the need for a buffer area around the Chemical Waste Management of the Northwest hazardous waste disposal site and has determined that the current buffer area required by OAR 340-120-0010(2)(e)(B) is adequate to provide the protection necessary to protect adjoining land areas and uses. Relative thereto it is the findings of the County that no additional “buffer area” provisions are necessary.

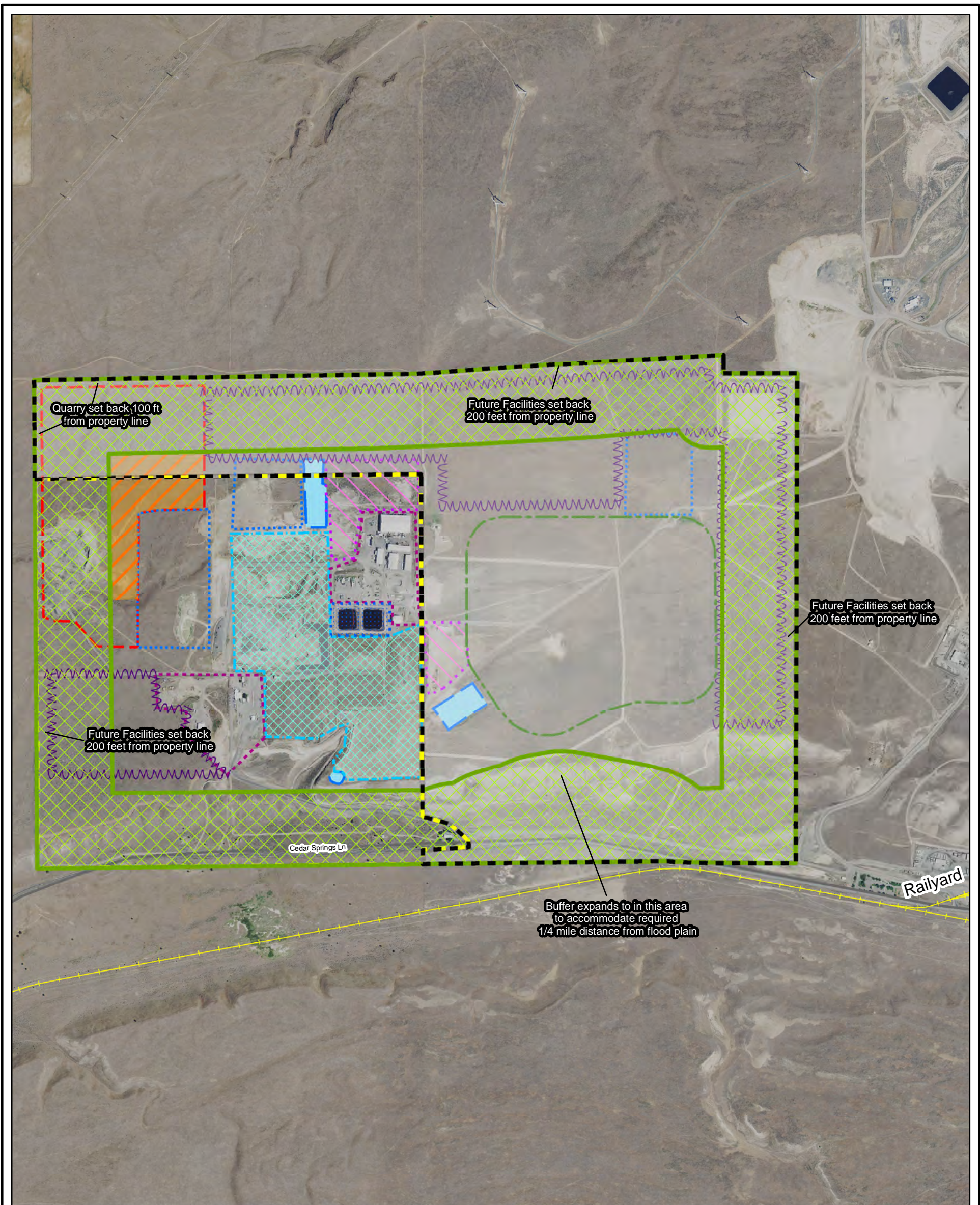
The restored language (shown in underline) is currently in the text of the Comprehensive Plan and remains applicable to the current decision.

We look forward appearing before the County Court on September 21st. Prior that time, CWMNW, through CSA Planning, will also submit a memo to update the proposed findings that will capture the information provided in this letter. If there is any additional information we can provide before then, please let us know.

Sincerely,

A handwritten signature in blue ink, appearing to read 'T. Brooks', is centered on the page. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

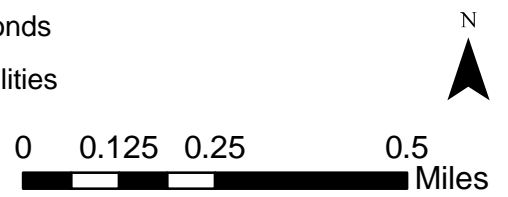
Tommy A. Brooks



GILLIAM COUNTY SUBTITLE C GOAL EXCEPTION

Proposed Goal Exception

- | | | |
|------------------------------------|----------------------------|--------------------------------------|
| Existing Facility Area | Existing Landfills | New Landfill L15 |
| Area of Proposed M-G Zoning | Existing Facilities | Future Landfill after rock depleted* |
| Goal Exception Area | Stormwater Ponds | Future Treatment Facilities* |
| 1,000' Buffer (Inside Buffer Area) | Existing Quarry | New Evaporation Ponds |
| | Existing Evaporation Ponds | New Treatment Facilities |



*Not part of current DEQ Permit

Exhibit B
(Proposed Revisions to Conditions of Approval)

1. BASIS OF APPROVAL: Approval is based on the materials and information submitted by the Applicant. Any material deviation from the proposal outlined in the materials and information submitted as part of this application will require a modification of approval, or in some instances, the filing of a new application.
2. LOT LEGALITY. Prior to any alteration or additions to the hazardous waste facility, the Applicant must remediate all unlawfully created units of land comprising the facility including, without limitation, the following:
 - a. Satisfy all conditions of approval under Planning File Nos. 2022-PLA-01 and 2022-PLA02.
 - b. The Applicant must obtain approval and then execute one or more of the following remedial actions for Tax Lots 2313, 2317 and 2307:
 - i. Consolidate Tax Lots 2313, 2317 and 2307 with one or more existing lawfully created units of land the comprise part of the hazardous waste facility.
 - ii. Validate Tax Lots 2313, 2317 and 2307 as one or more legal units of land pursuant to ORS 92.176 to the extent permitted under ORS 92.176.
 - c. The Applicant must obtain approval and then consolidate Tax Lots 1202 with an existing lawfully created unit of land that comprises part of the hazardous waste facility
3. PRIOR CONDITIONS: The following conditions from prior land use approvals concerning the hazardous waste facility, unless otherwise modified by the County in a separate proceeding, remain in effect:
 - a. Emergency spill response be provided in accordance with all State and Federal Regulations. The County shall be notified immediately of any spill or accident occurring in Gilliam County.
 - ~~b. Expansion of the existing Rail Facility does not exceed the allowed 30% authorized in Chapter 530 of the ORS.~~
 - ~~e.b.~~ Permittee will continue to comply with the Cedar Springs Roadway Improvement and Maintenance agreement with Gilliam County and will agree to meet with the County Court at any time transportation impacts exceed those allowed for in the current agreement.
 - ~~d.c.~~ All containers used for Hazardous Waste deliveries shall be fitted with tarps or otherwise tightly covered. The tarps or coverings must fully cover the waste and shall be of a quality to minimize leakage, odors and blowing debris.
 - ~~e.d.~~ Permittee will continue to comply with all contracts and agreements with Gilliam County.

~~f.e.~~ The permittee shall notify the County Planner and Planning Commission of any transfer of this permit. This permit may be transferred without County approval to any entity controlled by the permittee or a parent entity of the permittee.

4. LIMITATION ON EXCEPTION AREA: The Subject Property, the subject of the Exception to Goal 3, may only be used as a hazardous waste facility and the uses accessory to a hazardous waste facility.
5. APPLICABLE LAWS AND PERMITS: The Applicant must operate the hazardous waste facility, including all expansions thereof, in compliance with all applicable federal, state and local law, regulations, permits, and approvals including, but not limited to, obtaining and complying with all applicable Oregon Department of Environmental Quality (DEQ) permits and approvals and any required modifications thereof. Copies of all approved DEQ permits and any other applicable state/federal permits, including any modifications thereof, shall be submitted to the Planning Department to be added to the file of record.
6. BUFFERS: The Applicant shall maintain at least 1,000 feet of separation between property boundaries and any active waste management areas and facilities DEQ prohibits within that distance~~and property boundaries~~, which shall be measured from the outer perimeter of the ~~property boundaries for the~~ tract of properties comprising the hazardous waste facility. The required buffer shall be shown on all site plans submitted to the County.
7. FLOOD HAZARD AREA SETBACK. No portion of the hazardous waste facility may be located within one quarter mile of any flood hazard area.
8. STORMWATER: The Applicant must contain all stormwater and run off generated by the hazard waste facility on the tract of properties comprising the facility.
9. HOST FEE AND CEDAR SPRINGS ROAD AGREEMENT. At all times the permittee must have an agreement with Gilliam County that provides for host fees and maintenance and improvement of Cedar Springs Lane in accordance with GCZLDO 4.060(B)(9)(b).
10. SEWAGE. All sewage and/or solid waste disposal facilities serving the hazardous waste facility shall be constructed and operated in compliance with applicable local, State and Federal regulations including, but not limited to, obtaining all applicable permits and approvals.
11. AIR AND NOISE POLLUTION. The Applicant will obtain all applicable air and noise pollution standards, and any required modifications thereof, and will operate the hazardous waste facility in compliance with such permits.

12. USE OF EXISTING SOLID WASTE RAIL UNLOADING FACILITY. The hazardous waste facility, as expanded, may utilize the existing solid waste rail unloading facility subject to compliance, at all times, with the requirements of GCZLDO 7.020(R).

13. QUARRY: Materials from the quarry may only be used for on-site uses. No new surface disturbances for mining activity may occur within 100 feet of the outer boundary of the tract of properties comprising the hazardous waste facility. Applicant will obtain all applicable state permits, if any, for the operation of the quarry.

14. APPROVED USE LOCATIONS AND REAPPLICATION: The Applicant will need to re-apply for a Conditional Use Permit if the hazardous waste facility use generates additional impacts on public facilities beyond that which was projected at the time of this approval to the extent such additional impacts are not mitigated by existing agreements with the County. The Applicant will need to re-apply for a Conditional Use Permit ~~or~~ if additional accessory uses not contemplated by ~~prior this~~ approvals are proposed. The following table describes the uses and accessory uses that are contemplated by this approval:

<u>Broad Use Category</u>	<u>Specific Use Category</u>	<u>Permissibility</u>
<u>Subtitle C Uses</u>	<u>Outside 1,000 ft Buffer Area</u>	<u>All Subtitle C uses approved by ODEQ</u>
	<u>Inside 1,000 ft Buffer Area</u>	<u>All Subtitle C uses not prohibited by ODEQ within Buffer Area</u>
<u>Accessory Uses (not subject to ODEQ permitting)</u>	<u>Quarry</u>	<u>As shown on Plan subject to depicted 100' setback for areas not currently part of the on-site quarry</u>
	<u>Facility</u>	<u>As shown on Plan subject to depicted 200' setback</u>
	<u>Other Uses (Such as roads, other transportation facilities, offices, equipment maintenance, equipment storage parking, etc.)</u>	<u>Subject to standards of M-G Zone</u>

~~14.15.~~ PERMIT TIMELINE: This Conditional Use Permit for the expanded hazardous waste facility on the Subject Property will expire unless a building permit for a new structure or building on the Subject Property is issued within ~~two~~ three years from the date the Conditional Use Permit approval becomes final or, if no building permit is required, substantial construction has occurred on the improvements depicted in the conceptual site plan unless DEQ has authorized use of the expansion area through renewal of Applicant's Part B permit for the existing facility.

~~15.16.~~ FACILITY SITE PLAN: At all times, a current site plan for the hazardous waste facility must be on file with the County Planning Department. It is the responsibility of the Applicant to ensure the site plan then on file with the County Planning Department is the most current site plan.

~~16.~~17. SITE INSPECTION: Upon reasonable notice, County designated representative(s) shall have the right to inspect the site for conformance with conditions.

~~17.~~18. ADDITIONAL DEVELOPMENT OR USE: This Conditional Use Approval does not allow for further development on the tract of properties comprising the hazardous waste facility. If any additional development, construction or change in use is anticipated other than what is authorized, the applicable permits and approvals must be obtained from the Planning Department or applicable state and/or federal agencies prior to any further development.



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Memorandum

To: Michelle Colby, Gilliam County

Cc: Tommy Brooks, Cable Huston
Jay Harland, CSA Planning

Date: September 12, 2022

Subject: Volume 1: Findings of Fact and Conclusions of Law Addendum to File Nos. L2022-L02, T-2022-01, Z-2022-01, CUP-2022-02, and G-2022-01

INTRODUCTION

During the hearing for the above referenced Files before the Gilliam County Planning Commission on July 26th, 2022, a need was identified to refine Atlas Page 5 presented in Volume 2 of the Application. Staff reported correctly to the Planning Commission that the 1,000 foot buffer required by the Oregon Department of Environmental Quality (“ODEQ”) requires a separation between property boundaries and active waste management areas and facilities. After further clarification from ODEQ regarding what constitutes an active waste management area, refinements have been made to the allowed uses inside of (or, stated differently, uses located physically within the footprint of) the 1,000 foot buffer of the hazardous waste treatment, storage and disposal facility (“TSDF”) operated by Chemical Waste Management of the Northwest, Inc.

Applicant’s attorney, Tommy Brooks, submitted a letter to County Staff on August 30, 2022, that outlines the refinements. As discussed in said letter and attached thereto, a refined Atlas Page 5 presented in Volume 2 of the Application has been submitted, along with a use table that reflects uses, accessory uses, and their relationship to the buffer.

In order to reflect these refinements, this document provides supplemental findings and conclusions of law that should replace those proposed in Applicant’s previously submitted Volume 1: Findings of Fact and Conclusions of Law. We hereby request this memo be included in the record of the above land use applications.

UPDATED FINDINGS OF FACT AND CONCLUSIONS OF LAW:

FINDINGS OF FACT

Findings of Fact *Subsection 4.3.4. Subtitle C TSDF Demand Characteristics* of Applicant’s Volume 1 addressed the land use need for the subject application. Herein below are findings for this subsection that have been updated to reflect the refinements discussed above:

The Applicant has provided a letter describing the *land use need* for hazardous waste disposal. *See, Appendix F*. This letter explains the factors expected to contribute to the *land use need* to assure adequate land is planned to respond to *environmental needs* for hazardous waste disposal. These factors include:

- Episodic events, like fires or tsunamis, that can increase demands for hazardous waste disposal facilities as part of the disaster clean-up process.
- Recurring waste streams.
- Regulatory reclassification of wastes that elevate waste categories to require management by a Subtitle C TSDF. For example, it is expected that PFAS wastes will be reclassified and require future PFAS contaminated sites to be cleaned up with disposal into a Subtitle C facility. PFAS is a broad term for Per- and polyfluoroalkyl substances that are made up of a very large class of man-made chemicals that include PFOA, PFOS and GenX chemicals.
- Need for additional bulk liquids evaporation ponds.

- Utilization of on-site aggregate resources to meet the aggregate demands of Subtitle C Facility construction and maintenance.
- Useful life of the facility.

The Applicant's letter identifies the need for an additional ~576 acres of land area outside the 1000-foot buffer that would be regulatorily for ODEQ designated Waste Management Areas which results in an exception area of ~949 acres. This is the *land use need* for this Goal Exception application.

CONCLUSIONS OF LAW

Herein below are updated Conclusions of Law addressing each respective subsection that have been updated to reflect the refinements discussed herein above. As with the Findings of Fact, these Conclusions of Law below should be considered as replacements for those submitted initially with the Application.

5.2 Oregon Administrative Rules Criteria

660-004-0020

Goal 2, Part II(c), Exception Requirements

[Intervening Conclusion of Laws, which have not been updated, have been omitted]

- (2) The four standards in Goal 2 Part II(c) required to be addressed when taking an exception to a goal are described in subsections (a) through (d) of this section, including general requirements applicable to each of the factors:
- (a) "Reasons justify why the state policy embodied in the applicable goals should not apply." The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations, including the amount of land for the use being planned and why the use requires a location on resource land;

Conclusions of Law: The Gilliam County Court herewith incorporates and adopts the conclusions of law setting out the reasons justifying the proposed Rural Industrial Development pursuant to OAR 660-004-0022(3) below, and concludes here, justification for the exception is sufficient by virtue of the reasons set forth to address that rule alone.

Notwithstanding the foregoing conclusion, the County Court concludes the proposed Rural Industrial Development is unique and is a use for which there are additional reasons that justify why the policies embodied by Statewide Planning Goal 3 (and Goal 4 to the extent it might be applicable) should not apply to the properties for the requested exception and these reasons include the following:

1. Statewide Planning Goal 6 directs local governments to prepare land use plans that maintain and improve the land, water, and air quality of the State of Oregon. Areas of the state, like the Portland Harbor and many brownfields throughout the State, require clean-up from past contamination for land uses contemplated by local comprehensive plans to be implemented. The Subject Properties are well located and already contain existing facilities to support the proper disposal of contaminated waste that requires disposal in a Subtitle C TSDF. This Gilliam County action will support the development and redevelopment of contaminated areas elsewhere in the state and advance Goal 6 statewide.
2. Statewide Planning Goal 7 directs local governments to prepare land use plans to protect people and property from natural hazards. Disasters have and will occur in the future. When disasters occur, the clean-up and restoration becomes the priority and some disasters can result in the unintentional formation of hazardous wastes. The subject Goal Exception will assure land use planning is in place in advance of ODEQ and EPA permitting that would be required to dispose of such wastes in response to a disaster event.

3. Statewide Planning Goals 9, 10, and 14, in combination, direct local governments to prepare local land use plans that will ensure lands will be planned to and available to accommodate most of the residential and employment land development needs of the state within urban areas. Urban land use plans throughout the state identify certain areas for urban development that are constrained by contamination issues. Planning sufficient land in an appropriate setting for proper hazardous waste disposal will support cleanup of contaminated lands inside UGBs that are planned for redevelopment areas and this will advance the objectives for urban development in these areas embodied in Statewide Planning Goals 9, 10, and 14.

With respect to the amount of land in the requested Goal Exception, Gilliam County herewith incorporates and adopts the findings in above Sections 4.3.4 and 4.7. Based upon these analyses, Gilliam County concludes that the proposed Subtitle C TSDf expansion needs to include ~576 acres of additional land for ODEQ designated Waste Management Areas plus additional room required for the 1000-foot buffer. Gilliam County concludes the proposed Goal Exception area depicted on Atlas Page 5 depicts the 1,000-foot buffer for ODEQ designated Waste Management Areas and would result in 459 acres of additional area planned to allow ODEQ designated Waste Management Areas in addition to the 117 acres of existing M-G area west of the existing TSDf areas, for a total of ~576 acres that would be available for future Subtitle C ODEQ designated Waste Management Areas that are not currently developed. Gilliam County concludes the requested amount of land is consistent with the identified *land use need* and is appropriate in all ways for the size and scale necessary to continue facility operations and ensure land use plans are in place that will allow the types of environmental protections and permitting deemed appropriate by ODEQ and the EPA for hazardous waste disposal.

[Intervening Conclusion of Laws, which have not been updated, have been omitted]

- (d) "The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts." The exception shall describe how the proposed use will be rendered compatible with adjacent land uses. The exception shall demonstrate that the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. "Compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.

Conclusions of Law: Gilliam County concludes that the 1000-foot property line setback from ODEQ designated Waste Management Areas will assure compatibility with the surrounding uses and that the same is supported by language in the Comprehensive Plan. Gilliam County also herewith incorporates and adopts the conclusions of law in Section 4 of *Volume 3 Alternatives Analysis and Compatibility Analysis*, and concludes based thereupon, that the nature of the uses in the area do not involve intensive resource activities and that nothing about the proposed Goal Exception is expected to give rise to compatibility issues on surrounding resource lands.

GOAL 2: LAND USE PLANNING

FINDINGS:

2. The County has conducted a review of the following inventories.
 - H) Hazardous Waste Disposal Sites Inventory: Said inventory lists one site within Gilliam County, said site is identified as CWMNW near Arlington. Specific findings concerning the existing CWMNW site are extensive and explain that environmental quality monitoring activities are conducted around the site. Current regulations and monitoring systems applicable to the subject and similar sites are considered adequate; any modifications or changes in use will be addressed through the ODEQ/EQC permitting process and land use compatibility review.
4. The County has reviewed all factors relating to the need for a buffer area around the Chemical Waste Management, NW hazardous waste disposal site and has determined that the current buffer area required by the applicable ORS combined with the application of Exclusive Farm Use (EFU) Zoning in compliance with that applicable ORS is adequate to provide the protection



necessary to protect adjoining land areas and uses. Relative thereto it is the findings of the County that no additional "buffer area" provisions are necessary.

Conclusions of Law (Continued): Gilliam County specifically concludes that the comprehensive plan contains findings that the 1,000-foot buffer area required by ODEQ separates the ODEQ designated Waste Management Areas to ensure compatibility with surrounding land uses. With respect to facilities that do not involve ODEQ designated Waste Management Areas, Gilliam County concludes that ODEQ permitting of those facilities within the 1,000 foot buffer is sufficient to ensure the construction and operation of those facilities will be compatible with surrounding low intensity rangeland uses. With respect to the Quarry and Facility Accessory Uses, Gilliam County concludes that the setbacks depicted on the Site Plan found at Atlas Page 5 are sufficient to ensure the construction and operation of those facilities will be compatible with surrounding low intensity rangeland uses. For other Accessory Uses not depicted, the standards of the M-G zone are sufficient to ensure the construction and operation of those facilities will be compatible with surrounding low intensity rangeland uses. Gilliam County further concludes that the site plan design, specific use locations and similar development components for Subtitle C uses will be reviewed by ODEQ, subject to Land Use Compatibility Statements review by County Planning when specific ODEQ permit changes are requested.

SECTION 7.020 – STANDARDS GOVERNING CONDITIONAL USES

In addition to the standards of the zone in which the conditional use is located and the general standards of this ordinance, conditional uses shall meet the following standards:

A. CONDITIONAL USES, GENERALLY

1. **Setback.** Requirements are addressed in each individual zone.

Conclusions of Law: The TSDF will maintain a 1,000-foot setback from exterior property lines for any of the ODEQ designated Waste Management Areas. This buffer far exceeds the standard setback requirements of the M-G zone which are 15 feet for front yards and 10 feet for side and rear yards. Likewise, the Site Plan on Atlas Page 5 designates setbacks for certain Accessory Uses, specifically the Quarry accessory use and Facility accessory uses that are not subject to ODEQ permitting. These setbacks far exceed standard setback requirements of the M-G zone. These are 100' for the Quarry accessory use (excluding areas currently part of the on-site quarry) and 200' feet for the Facility accessory use. With respect to other accessory structures or other accessory uses that are not part of a TSDF proper or do not have a setback depicted on the Site Plan on Atlas Page 5, the minimum setbacks of the M-G zone will be maintained.

CSA looks forward to appearing before the County Court on September 21st. If there is any additional information CSA can provide before then, please let us know.

CSA Planning, Ltd.

Nathan Emerson
Associate