Greenisms Commercial and Residential Environmental Inspection Checklist of Important Information

Introductory Letter and Limitation of Liability:

Hello!

Thank you for purchasing my guide to completing Phase I Environmental Site Assessments.

Please keep in mind that this guide is not intended to be used for any legal purposes, and no liability shall be assumed for the improper use of the information contained herein. The contents of this guide are purely for informational purposes and may be used at the sole discretion and risk of the reader. No responsibility is assumed by Greenisms for the quality, completeness, or content of the products created as a result of this guide.

Greenisms intention in the creation of this guide is to assist prospective landowners, homesteaders, and others with an interest in sustainability. Furthermore, this guide is composed with a general understanding of the requirements for Environmental Due Diligence Phase I ESAs in compliance with ASTM1527-21 standards. These standards are available for download on www.astm.org (American Society for Testing and Materials)

As such, the information contained herein is designed to be a resource for those looking to learn more about Phase I ESAs and their contents as well as property selection and hazardous site assessments. No part of this guide shall be considered comprehensive; however, I have done my best to include all aspects of Phase I ESAs and some of the available resources so that this guide can save the reader money and time when completing their due diligence reports.

The information obtained by completing these steps is the same information required in a Phase I Environmental Site Assessment. Greenisms is happy to review and consult on the information obtained via this assessment for a small fee.

Please email Kevin@Greenisms.com for more information or with questions.

The Basics - What is a Phase I ESA:

Generally, a ***Phase I Environmental Site Assessment*** is part of a suite of real estate due diligence reports that must be completed prior to the completion of a real estate transaction. Usually commercial transactions, but not always.

The completion of these reports ensures that environmental liability is not inherited by an "innocent landowner" as defined by the ***Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)***. A Phase I ESA may be relied upon by a prospective purchaser to qualify for the "innocent landowner defense".

Liability:

Essentially, this means that a prospective purchaser is performing their due diligence to ensure that any potential contamination on the "*subject property*" is assessed, and liability for said contamination is assigned to the proper party, and not inherited by a purchaser after the transaction has been completed.

Typically, the main goal of a Phase I Due Diligence report is to investigate for prior infractions and potential contamination of a property. There are some specific contaminants that are more important than others though.

Cost:

A Phase I ESA (in order to be legaly recognized) requires a physical site assessment be performed, and that documents from local agencies be reviewed in full.

Because this can be an involved process, a FULL Phase I for an average property may cost a few thousand dollars. Usually between $1,500 and $6,000 depending on the accessibility and complexity of the site.

In MOST cases, there is not much to be found, and a Phase I can be completed in less than 10 business days. Some projects require more and some less, but in general, properties that are located in larger cities are easier to complete because of access to information.

Value:

In some cases where contamination has been discovered, the liability that may be avoided by the completion of a Phase I may be on the order of *hundreds of thousands of dollars.*

Some **Contaminants of Concern (COCs)** are very serious and pose great threats to human health when left unchecked. *In the worst of cases, these contaminants can damage entire regions and kill thousands of organisms.*

Other things that may be identified by a Phase I (but are not required by the ASTM standards) could include potential hazards like Asbestos, Lead Based Paints, Mold, Water damage, Termite damage, and more.

A Phase I ESA is both due diligence research that benefits the prospective landowner AND avoidance of environmental liability associated with contamination that may exist on-site. Once this information has been collected once, most of it is accurate for the entire lifetime of a property. Some of the information retains value indefinitely and can be reused for many purposes. The organization of the information is what matters most. Therein the value is found.

American Society for Testing and Materials (ASTM) 1527-21

Typically these reports may be legally relied upon for a term of 180 days prior to the completion of a real estate transaction. However, If the report is greater than 180 days old, but less than 1 year old, a comprehensive update may be sufficient to maintain the legal validity of the report.

After a term of 1 year, the Phase I must be re-completed in order to qualify for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) "innocent landowner" defense. The process of evaluating a property for the presence of contamination is known as "**All Appropriate Inquiries" (AAI)**.

By completing a Phase I ESA prior to the acquisition of a property, the prospective owner avoids potential liability for contamination that may be present on site.

***Note: according to ASTM 1527-13 standards, a Phase I ESA must be completed by an Environmental Professional (EP) as defined by the Federal Code of Regulations (40 CFR § 312.10 – Definitions).**

Results – How to Interpret the Conclusions of a Phase I ESA

When a Phase I is read by a client, the most important pages of the document include the Executive Summary and the Conclusions. These sections are typically broken up into descriptions of the property and the conditions on-site. Typically divided into four categories:

Recognized Environmental Conditions (RECs) – These are the most critical because they represent a current condition that may be potentially hazardous on the property or a nearby property. These conditions may have a direct impact on the usability, habitability, or value of the subject property.

Controlled Recognized Environmental Conditions (CRECs) – a REC that is known prior to the completion of the Phase I ESA by relevant agencies or other parties and may be undergoing remediation at the present time. CRECs are also called out when hazardous substances are known, identified, and allowed to remain on the property in question. Usually CRECs are identified through regulatory records searches or by observing the operations at nearby properties and learning about the history of operations on and off-site.

Historical Recognized Environmental Conditions (HRECs) – Historical in nature, usually referring to a past hazardous condition that has been rectified. Usually this refers to conditions that used to represent a significant problem, but have since been remediated or cleaned up.

Environmental Issues or Environmental Concerns – typically these are related to de minimus (limited hazards that do not pose a significant threat to health and safety) conditions, or, in other words, conditions that may represent a potential future concern or problem if left unattended. Generally these can also include out of scope conditions such as the presence of asbestos or lead based paints. Otherwise, these would be represented by petroleum or other hazardous substances that are present on the project site but have not been released to the environment (i.e. the presence of an underground storage tank, or aboveground storage tank with no record of releases). These conditions are worthy of mention, but do not necessarily constitute a significant hazard at the present time.

Please be aware that **not all RECs will require a Phase II** (geotechnical subsurface soil/groundwater investigation). Many times, a REC will represent conditions on site that may restrict the usefulness of a property until remedied through natural or engineered means (this may be as simple as "leave it alone and make a note of it" or as complicated as "excavate all of the contamination and perform soil vapor extraction,

groundwater remediation, and contaminant disposal under the oversight of regulatory agencies in perpetuate"). In such cases, the EP, site engineer, architect, et al. can determine a best course of action and may bring in experts from other disciplines. In some cases, RECs may be somewhat obvious as a result of former operations on a property that are well documented. Some of these sites become funded by the government for cleanup due to scale or some other concern. Some of the most serious sites to watch for include federally managed properties like **Brownfield sites or Superfund sites** (discussed later).

However, an EP is qualified to find and assess potential RECs that are not obvious and may represent significant subsurface conditions that limit the usefulness of a property. An assessment of these conditions is completed through the collection of data pertaining to a project site.

Other Relevant Reports:

There are other types of due diligence reports may be completed by anyone, although they may not stand up in court if reviewed legally.

Desktop Reviews are typically conducted 100% remotely from the property in question, but not always.

Some of these reports are more involved than others and can contain vastly different information. Each of the reports has a specific focus and can be relied upon for information that may be hard to find otherwise.

Companies that focus on data and information can provide great suites of tools to streamline the production and effort of a Phase I.

Some of the tools like EDRs LightBox, and Radius Reports, include collections of information to make searches easier. Hazard Proximity, Elevation, Soil Type, Fault Lines, Etc. These reports are costly in some cases, and can be confusing to read. Desktop review reports can condense this information into digestible points that help others make better decisions.

Typical Desktop Reviews:

Database Records Reviews, Records Search and Risk Assessments (RSRAs), Historical Records and Database Reviews (HRDRs) and others. Most of these reports are completed by companies that up-sell clients into more complete reports like Phase I reports, Phase II investigations, Property Condition Assessments, and other services that help make the real estate transaction seamless and smooth.

It is always best to rely on a qualified ***Environmental Professional*** as defined by the ASTM standards to complete these works because they possess the required knowledge to properly analyze the findings and research to make an educated conclusion. In some cases, the "Responsible Party" may have a specific project manager assigned to the site.

The definition of an Environmental Professional is provided as Attachment 3. As for desktop reports, they can be completed for the sake of assessing a property to determine if a full Phase I or Phase II is necessary, but will not likely be sufficient to invoke the innocent landowner statute.

Steps to Complete a Phase I Environmental Site Assessment (ESA):

The following list may be completed by anyone with a computer and access to the internet. About 70% of a Phase I ESA can be completed independently and remotely.

By completing this checklist/guide and following these steps, you are essentially completing a Phase I ESA.

However, as noted above, **the Phase I ESA is only valid if completed or signed by an EP, and includes a physical site assessment**.

If these steps are followed by someone other than an EP, the resulting report may be considered a Transaction Screen Assessment and may be sufficient to determine if a full Phase I or Phase II ESA is needed.

Step 1: Identify the Subject Property and All Buildings Located on Site

Step 2: Agree on Scope of Work (SOW) and Timeline

Step 3: Engage Researcher/Environmental Professional to Perform the Phase I ESA

Step 4:

After Scope of Work (SOW) and payment is agreed upon, follow the steps below to obtain and compile all of the relevant information pertaining to a property in order to complete a Phase I ESA.

1.) Send a questionnaire to the most knowledgeable individual regarding the property in order to obtain the "Subject Property" address, Assessor's Parcel Number (APN), and any specific property information they possess.

2.) Obtain addresses and APNs for all surrounding properties

3.) Describe property in detail including the following information:

   a.) Address:
   b.) Nearest Cross Streets:
   c.) Property Use: (i.e. multi-family, commercial, industrial, etc.)
   d.) Land Acreage (Ac):
   e.) Number of Buildings:
   f.) Number of Floors:
   g.) Gross Building Area (SF):
   h.) Net Rentable Area (SF):
   i.) Date of Construction:
   j.) Assessor's Parcel Number (APN):
   k.) Type of Construction: (Wood-framed, steel framed, concrete tilt-up, etc)
   l.) Number of Units:
   m.) Current Tenants: (Obtained from City Directories)
   n.) Site Assessment Performed By: (preferably performed by an Environmental Professional)
   o.) Site Assessment Conducted On: (date)

4.) Research and analyze the history of the property using the following resources and links:

   **Almost all of the information in this step can be obtained by paying a fee to EDR for a radius report. Found here: https://edrnet.com/prods/edr-radius-map-report-geocheck/*

a.) Aerial Photographs: https://www.historicaerials.com/viewer

b.) Topographic Maps: https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps

c.) Soil type and conditions on the property: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

d.) City Directories: (Every 5 years for the whole known history of the property)

e.) Sanborn Maps (if available): (also known as Fire insurance Maps, hand drawn, laserfische, scans, municipal or county databases, prior to 1960's only)

f.) Flood Zone Maps of the property and surrounding area: https://msc.fema.gov/portal/home

g.) Ownership Information: (all title transfers is useful, but not necessarily required. Active Operations on the subject property are more important)

h.) Hazardous sites nearby: (in CA Only: https://geotracker.waterboards.ca.gov/ , https://www.envirostor.dtsc.ca.gov/public/ , https://siteportal.calepa.ca.gov/nsite)

i.) Historical uses of the property: (what businesses or structures have occupied the site in the past?)

j.) Any Above Ground Storage Tanks or Underground Storage Tanks (ASTs or USTs), containers of hazardous materials (like 55-gallon drums), or dry cleaners ever present on site? (this includes hydraulic fluid or transformer fluids called PCBs):

k.) Utility Provider Information (Trash, Water, Sewer, Gas, and Electricity):

l.) Water Quality Information (obtained by Googling "Water Quality Report 'Name of City or County' 'Most Recent month or year'":

5.) File **"Freedom of Information Requests" (FOIAs)** with the following local agencies that have jurisdiction over the property:

a.) Fire Department (any hazards on or adjacent to the property?) (sometimes called the Certified Unified Program Agency - CUPA)

b.) Health Department (any hazards on or adjacent to the property?)

c.) Building/Planning Department (historic building permits to determine age and size)

d.) Assessor's office (to obtain APN, site plans, maps, and ownership info, if not provided by the client)

e.) State Historic Preservation Office (to determine if the property is historical in nature)

6.) Record results of the FOIA requests in the report. Whether information was found or not. Even if the agency doesn't get back to you. Record that you sent a FOIA to them and that you received no records or no reply. Include the date of the request. In some cases, include the FOIA request itself in an appendices.

7.) **Interview** current owner, property occupants, site managers, past owners and occupants, and any other relevant individual who has knowledge of the property **while on-site, and over the phone.**

8.) **Perform a site visit** to determine the current conditions on the property. Take photos of the property and the adjacent properties to be included in the report (looking for hazards, indications of underground storage tanks, spills, or anything that may be a problem for the future owner)

9.) Obtain Material Safety Data Sheets (MSDS) for all potentially hazardous materials on site (if applicable).

10.) Based on age of the property (if built prior to 1978 specifically), to determine the likelihood of asbestos and lead based paints on the site.

11.) Review local regulatory databases for information pertaining to the property and immediately surrounding area. Summarize potential properties or listings of concern in the Phase I report.

12.) Make a determination on the risk associated with the property. If spills, releases, or other events involving hazardous materials have occurred on or adjacent to the property (and have not officially been cleaned up), the conclusion is a *Recognized Environmental Condition (REC),* and a Phase II subsurface investigation is required to determine if the presence of hazardous materials in the soil represent a health concern for the buyer or prospective occupants.

13.) Determine if there are any other potential hazards on the property. Things including Asbestos, Lead based paints, household quantities of cleaning chemicals, Radon Gas (in the soil – found by googling Radon Map of 'name of a city or state') etc. and 'write them off' by saying they pose little to no threat to the overall safety of the individuals utilizing the property (unless of course these materials ARE threatening to public safety). This is called an "environmental issue" and is something the vested individuals should know about.

14.) Reference all sources used for the report.

15.) Include appendices of all photos, aerials, topo maps, site plans, maps, FOIAs, records of hazards, building permits, etc.

16.) Have an Environmental Professional read and sign off on the document to make it legally solid.

17.) Obtain Liability Insurance prior to providing the document to the client.

Attachment 1:

Environmental Site Assessment Questionnaire

**Required as an attachment in a Phase I ESA*

Please complete to the best of your knowledge. For those questions that are not applicable, please respond with an "N/A".

For those questions that are unknown, please respond with "unknown".

PROPERTY INFORMATION:

Property Name:

Property Address:

City:

State:

Zip:

Assessor's Parcel Number:

Property Owner & Contact Information:

Date Property Owner Purchased:

Key Site Manager & Contact Information:

Maintenance Supervisor & Contact Information:

COMPLETED BY

Signature:

Date:

Printed Name:

Relation to Subject Property:

PREVIOUS INVESTIGATIONS

Have any previous environmental investigations been performed at the property, including Phase I ESAs, Phase II Subsurface Investigations, Remediation, Asbestos or Lead-Based Paint surveys?

(If yes, please provide copies)

PROPERTY DESCRIPTION

Property Size:

Number of Building(s):

Number and Type of Unit(s)

Number of ground floor units:]

Size of Building(s):

Date of Construction:

Date of Addition(s) / Renovation(s):

Property Type: *If Pre-1978, are Lead Pamphlets (EPA Protect Your Family from in Your Home Guide) being handed out to tenants?

Historical Use of Property:

SURROUNDING PROPERTY USES (Include Roadways)

Are you aware of any potential environmental concerns associated with surrounding properties? ⤵ YES ⤵ NO

If yes, please describe:

Please Identify the Address and Name (if applicable) of the adjacent properties located to the:

North:

East:

South:

West:

UTILITIES & SERVICES

Please provide the name of the utility or contractor providing the following:

Electric:

Gas:

Potable Water:

Sanitary Sewer:

County:

Bio-hazardous Waste (if applicable):

Elevator Maintenance (if applicable):

Used Grease (if applicable):

Hazardous Waste (if applicable):

Solid Waste (if applicable):

Medical Waste (if applicable):

Other contractor provided service(s):

ON SITE OPERATIONS

Issue:	***Identified? (Y/N)***	***Description/Notes:***
Water-damaged areas		
Suspect / Confirmed Mold-affected areas		
Stored Chemicals		Take Photograph of MSDS and include all relevant information to research if needed 1. 2. 3. 4.
Underground Storage Tanks		(Include Size, Capacity, Location, Status, Condition, Age, and Content of all Tanks) 1. 2. 3. 4.
Aboveground Storage Tanks		
¬ Emergency Generators ¬ Propane Tanks		

¬ Oil Tanks ¬ Gasoline Tanks or Other Automotive Substances (please specify)	
Spills or Releases (greater than 5-gallons)	
Dump Areas / Landfills	
Waste Treatment Systems	
Clarifiers / Separators	
Vents / Odors	
Floor Drains / Sumps	Take Photos of all observed
Stained Soil	Take Photos from multiple angles
Electrical Transformers:	Pad-mounted / Pole-mounted?
Hydraulic Lifts / Elevators:	Identify the Condition of the Equipment and photograph the elevator room, and log sheet # of Elevators?_____
Dry Cleaning Operations	
Oil / Gas / Water / Monitoring Wells	
Water Supply Wells	
Environmental Permits	
Abatement Activities ¬ Asbestos/Lead/Mold ¬ Water/Fire Restoration	Comments:
Mitigation Activities ¬ Radon / Subsurface cleanup ¬ Vapor Intrusion (i.e. Methane)	What EPA Radon Zone is the Property In?

Attachment 2: Freedom of Information Act Request Template

Instructions: *Copy and paste the below letter into an email to each agency from which records are required, and alter the to reflect names of the agencies and contact points.*

Hello,

My name is _____.

I am writing you to request public records for the property located at the address <address>, <city>, <state>, <zip>.

This property may also be identified by the Assessor's Parcel Number <APN>.

I would like to review any and all documentation you may possess with regard to the current and historical uses of the property for the purposes of conducting a Phase I Environmental Site Assessment (Environmental Due Diligence Report). In particular, I am looking for information pertaining to the past and present use and disposition of potentially hazardous materials that may have existed on the property at any time in the past.

Records relating to past and present operations and potential hazards on the property would be very useful to me in completing this project. If the aforementioned records are available via digital means, please email them to the following address at your earliest convenience. Alternatively, please direct me to resources where they may be found.

If digital copies are unavailable, please contact me to arrange a time for an in-person review of the available records. Thank you so much for your time. Please contact me at any time if you have questions or need additional information from me to complete this request.

Sincerely,

<Your Name>

<Your Contact Information>

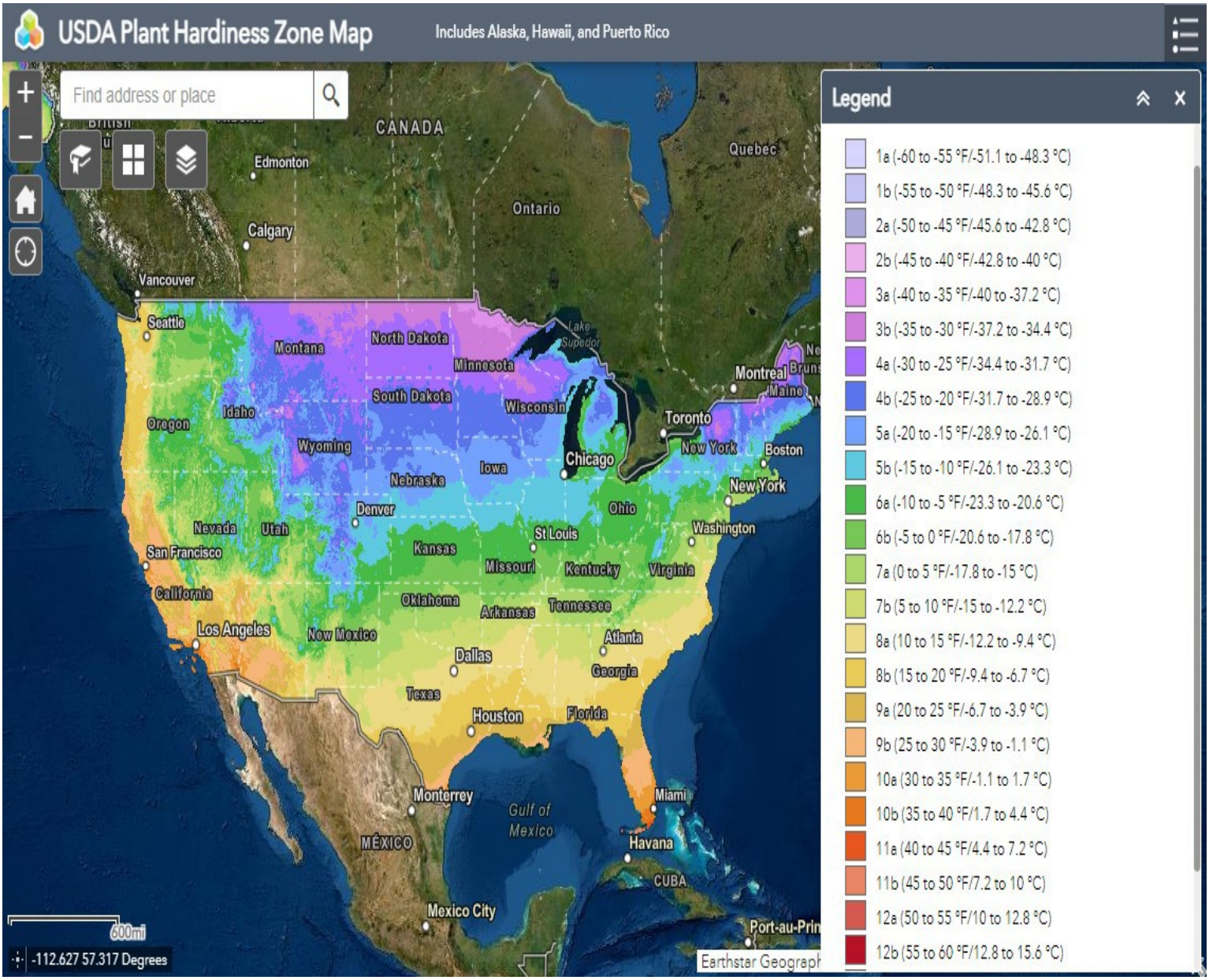
Greenisms Real Estate Strategy Tactics Survey:

Please Fill In the appropriate box for each topic to estimate areas where more information is needed:

Aesthetics (site description)	Local Area Regional Local Climate Description	
Air Quality	Local Area Regional State/Regional Guidelines/Laws Local Climate	
Biological Diversity	USDA Hardiness Zone List of Common native Plants List of Common Invasive Plants List of Endangered Species in the County List of habitat types near the property	
Cultural Resources and Information	Native American Resources? Protected Heritage Sites? Cultural Points of Interest? List of Museums Nearby?	
Demographics	Local Population Demographics Regional Population Dynamic Political Leanings Economic Health of the Region Environmental Justice Communities Nearby?	
Food Availability	Distance to Grocery / Markets Distance to Restaurants	USDA Plant Hardiness Zone Map

Geographical / Geological Informational	Description of Soils and Formations Alquist-Priolo zone? Topographic Maps Flood Zone / Landslide Potential Liquefaction Potential Soil Type and Suitability	
Hazard Assessments	Substances or Environmental ? List of former Reports or Actions? Remediation or Attenuation? Asbestos? Lead Based Paints? Allergies / Exposure?	
Historical Assessments of the Region	Aerial Photographs Sanborn Maps Old Regional Depictions	
Land Use and Zoning Plans	Property Information Zoning Code / Definitions Property Laws and Codes (setbacks, height, disposal of things, etc.)	
Noise Measurements and Information	Traffic / Roads Air Traffic Routes Access and Distance to Cities Industrial or Commercial Areas?	
Public Services Available	Providers Costs Reviews	
Schools	Distance Rating Cost	

	Bus Service / Commute	
Utility Providers	Name Rating Location Customer Service Numbers	



[USDA Plant Hardiness Zone Map]