



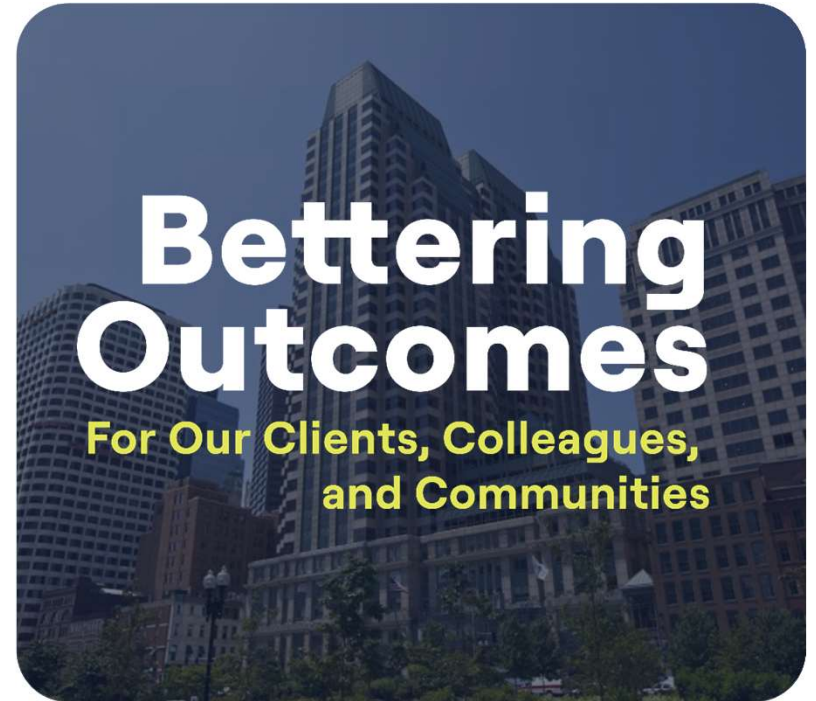
# Integrating Environmental Assessments

with Complimentary Services for  
Comprehensive Risk Analysis

**MARCH 3, 2025**

**JEREMY A. (“JAY”) JACOBSON, M.S.E.T, C.S.M., C.E.M.**  
CONSULTANT – PROJECT MANAGER

THE VERTEX COMPANIES, LLC | CONFIDENTIAL



# PRESENTER INFORMATION



**Jeremy A. "Jay" Jacobson**

M.S.E.T., C.S.M., C.E.M.

Consultant – Project Manager

Office: 602.759.7884

Cell: 303.819.3159

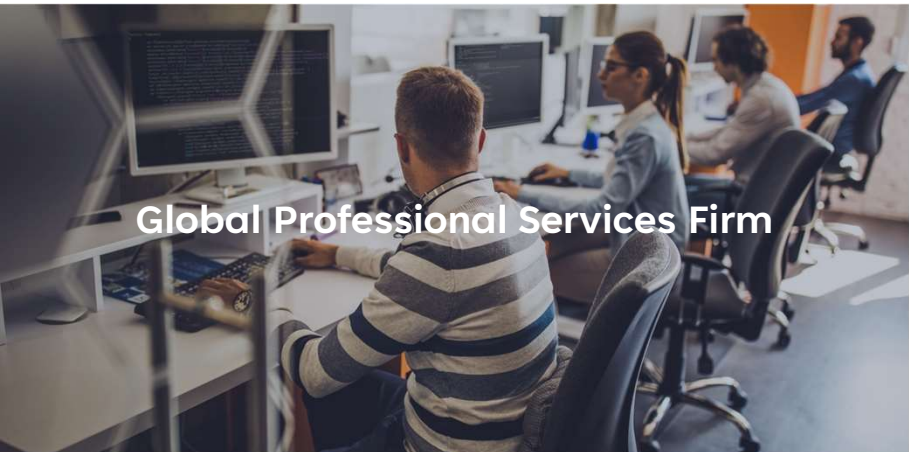
[jjacobson@vertexeng.com](mailto:jjacobson@vertexeng.com)

**VERTEX**

# About VERTEX

2025 Overview

**VERTEX**<sup>®</sup>



**Global Professional Services Firm**



**Founded in 1995**



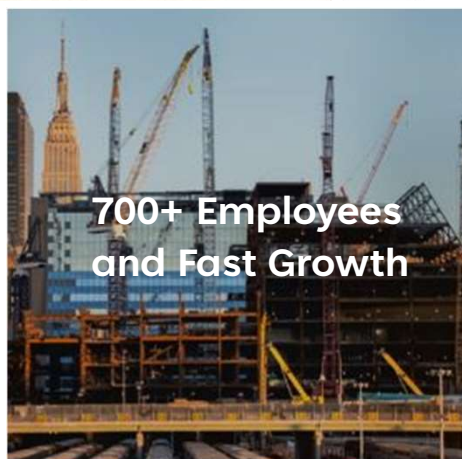
**Lifelong Learning Culture**



**Over 100,000 Projects Completed Globally**



**Serving over 25 Sectors**



**700+ Employees and Fast Growth**



**Entrepreneurial Spirit**

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# Bettering Outcomes

For Our Clients, Colleagues, and Communities

## Our Brand Purpose

VERTEX provides services that lead to just, safe, sustainable and community-enhancing outcomes that have a positive impact on society.

## HOW WE ARE BETTERING OUTCOMES

Our Compliance & Regulatory services generate **safe** and **sustainable** outcomes.

Our Project Advisory services generate **community-enhancing** outcomes.

Our Forensics services generate **just** outcomes.

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# Overview – Controlled Expansion



Acquired Xpera Group, San Diego, CA in 2019



Acquired Neptune Fire Protection Engineering, FL in April 2022



Acquired Fulcrum, AZ in August 2022



Acquired Breakwater Forensics, IL in July 2023



Acquired TriLogix Consulting, NJ in March 2024

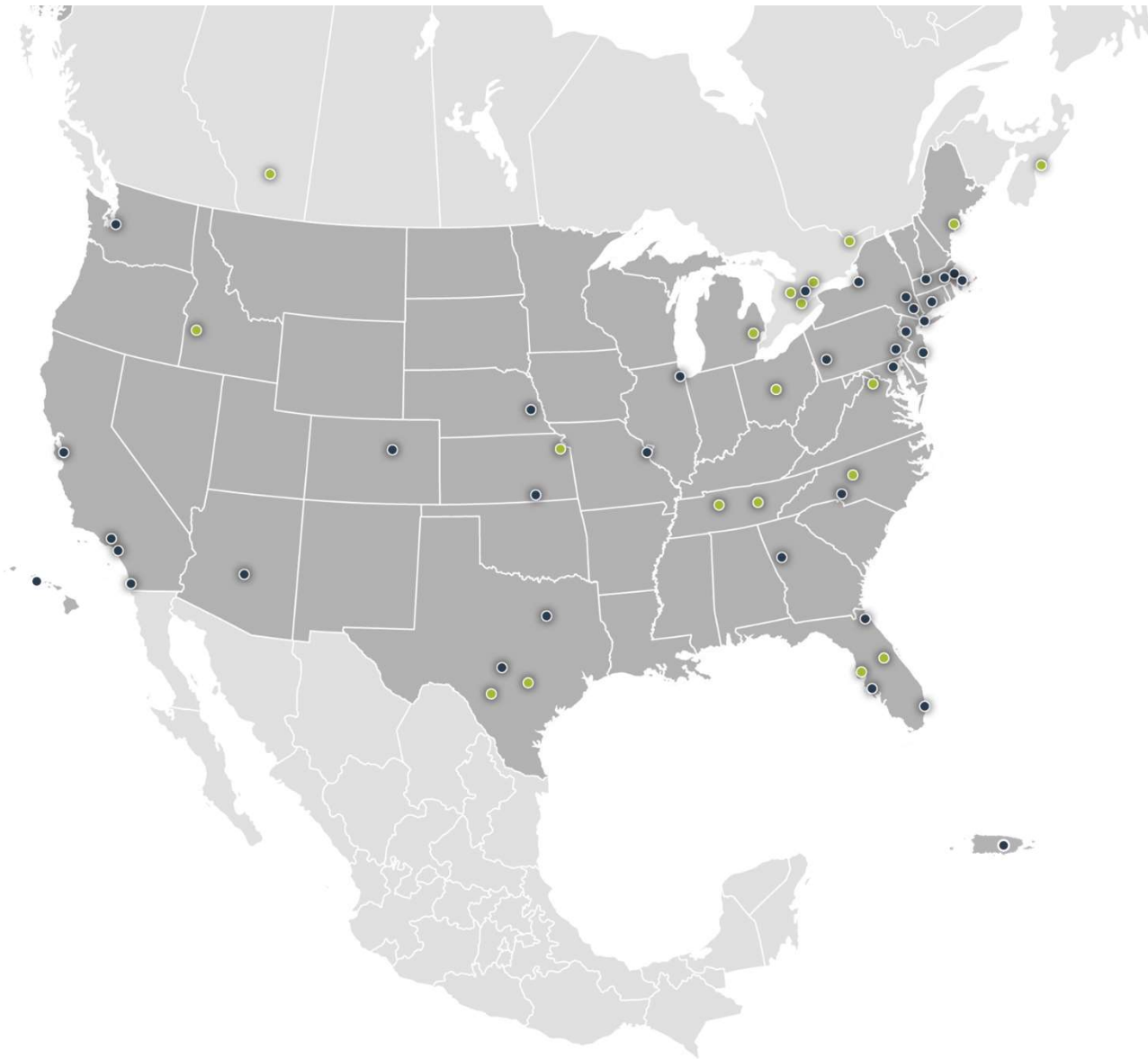


Acquired CBBG Group, EMEA in December 2024



Acquired LitCon Group in December 2024





**UNITED STATES**

- Alabama
- Arizona
- California
- Colorado
- Connecticut
- Florida
- Georgia
- Hawaii
- Illinois
- Kansas
- Maine
- Massachusetts
- Michigan
- Missouri
- New Jersey
- New York
- North Carolina
- Pennsylvania
- Tennessee
- Texas
- Washington
- Washington, D.C.

**CANADA**

- Alberta
- Ontario

**PUERTO RICO**

- San Juan

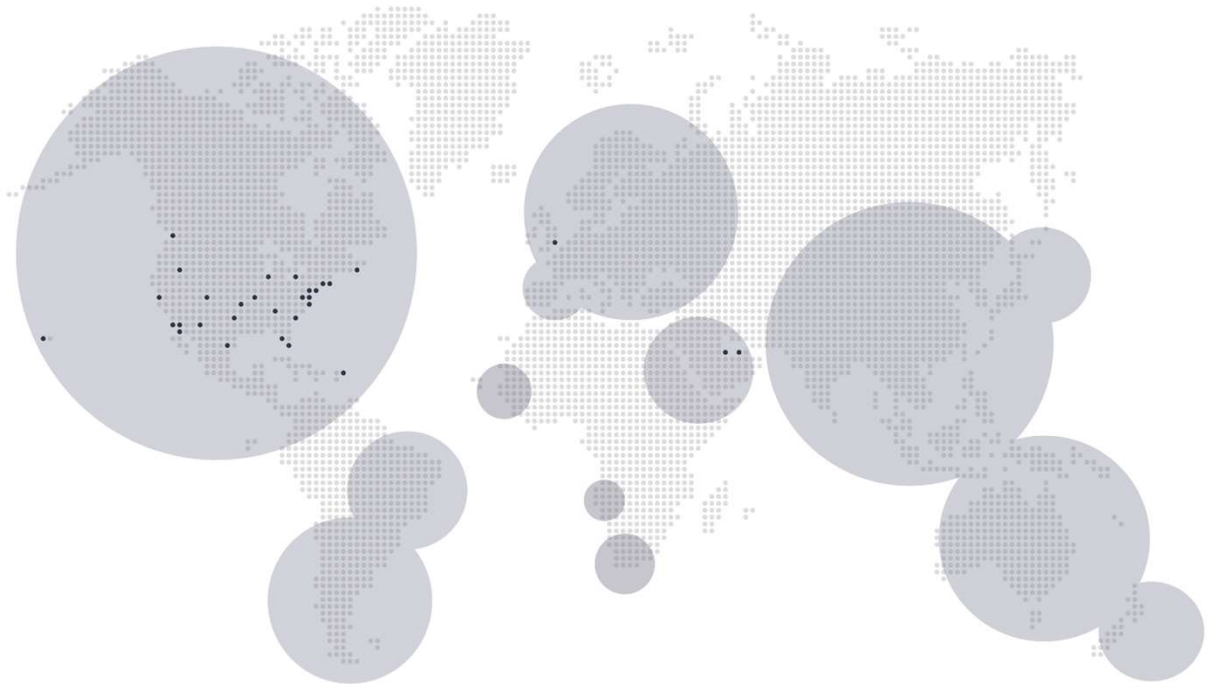
**Map Key**

- Office Locations ●
- Remote Locations ●



# International Offices

- VTX Consulting, Toronto, Canadá
- Europe, Middle East, Africa (EMEA)
  - London
  - Doha
  - Dubái
  - Saudí Arabia



VERTEX has completed projects in over 50 countries, including due diligence, construction expert work, fire protection and life safety systems consulting and design, auditing, insurance consulting, construction management, surety consulting, and more.

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# Bettering Outcomes

For Our Clients, Colleagues, and Communities

VERTEX provides services that lead to just, safe, sustainable and community-enhancing outcomes that have a positive impact on society.



Compliance & Risk  
Services



Project Advisory  
Services



Claims, Disputes,  
Forensics Services



Commercial Damages  
Investigation Services

# Compliance & REGULATORY Services

Understanding and evaluating potential environmental risks and costs is an essential first step in any real estate transaction or project strategy. But the activities involved with due diligence can sometimes be time consuming and complex. Many investors and lenders, developers and owners trust VERTEX to uncover meaningful pitfalls and identify a successful course of action.

## Services:

- **Due Diligence (ESAs, PCAs and SRAs)**
- **Industrial Hygiene & Building Sciences**
- **Environmental, Social, & Governance (ESG)**
- **Remediation Design/Management**
- **Regulatory Environmental Compliance**
- **Controlled Environments**
- **Fire & Life Safety Engineering**
- **Regulatory Closure Programs**
- **Vapor Mitigation Systems**
- **ADA and FHA Assessments**



Whether you are acquiring a business with multi-national manufacturing or financing a global portfolio of hotel properties, VERTEX can expose and evaluate the unknown environmental liabilities that potentially impact returns.

# INDUSTRIAL HYGIENE & BUILDING SCIENCES

VERTEX provides comprehensive IHBS services including hazardous material management and occupational safety and health services. VERTEX provides competitive advantages for your business with respect to identifying and managing hazards in the workplace and in the community.

## Services:

- Third party auditing of H&S Programs
- Experts in responding to OSHA inquiries and citations, OSHA 300/301 Logs
- **Expert Witness in Occupational Health and Safety**
- Hearing Conservation Programs
- **Indoor Air Quality and Chemical Exposures**
- Ventilation (local exhaust and general dilution) Design Evaluations
- **Asbestos, Lead, PCB Remediation**
- **Water Intrusion/Mold Growth**
- Healthcare and Pharmaceutical Compliance
- **Expert Witness Support, Reporting, and Testimony for chemical exposures and occupational bodily illness/injury**



Whether your mission is to ensure a safe and healthy work environment, renovate or demolish existing structures built with hazardous materials, or address concerns of potential exposure to toxins, VERTEX can support your business in identifying, implementing, and achieving your goals in an efficient and cost effective manner.

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# Industrial Hygiene Expertise

- Our CIHs have a combined over 150 years of experience in industry, manufacturing & private sector
- Staff of over 60 Senior and Junior level Industrial Hygienists
- Our diverse backgrounds has provided a lifetime of learning of what our clients H&S needs are and how to help them
- Experts in Workplace Safety Culture Evaluation and Program Development / Risk Management

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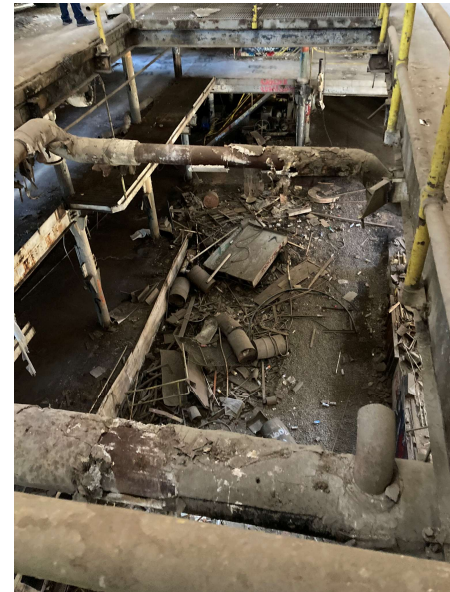
# Remediation Consulting

The VERTEX approach to contaminated site remediation is focused on mitigating risks to human health and the environment. We have an outstanding track record negotiating with regulatory entities to achieve swift closure on compliance issues. With our multi-discipline development team, we are able to pair our negotiation services with closely integrated development strategies that keep plans on schedule and within budget.

## Services:

- **Development Support**
- **Remedial Design**
- **Soil, Groundwater & Soil Vapor Management**
- **Industrial Facility Decommissioning**
- **Third Party Management**
- **Hazardous Material Support**
- **Underground Storage Tank Closure**
- **Regulatory Site Closure**
- **Vapor Mitigation**
- **Brownfield Redevelopment**
- **Environmental Impact Reports**

We work with real estate lenders and investors, owners and developers to perform the myriad of tasks required to evaluate compliance—enabling you to move projects forward quickly and with confidence. Whether you are up against a looming regulatory deadline, weighing the risks of non-compliance against the rewards of a pending loan opportunity, or facing burdensome regulatory delays, VERTEX can help.



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# Remedial Consulting Expertise

- VERTEX has worked on thousands of residential, commercial and industrial tank removals
- Our remedial staff has extensive experience managing the investigation and construction processes in a manner that maximize the control of scientific and regulatory processes.
- We incorporate phased approaches to ensure that investigations remain focused and cost-effective.
- Depending on regulatory and site conditions, our scientists and engineers use a variety of strategies to help minimize unnecessary data collection and sampling.
- We work closely with clients to achieve the most efficient and best possible results at their contaminated sites.
- Given the broad range of our expertise, we bring a unique perspective that goes beyond engineering and environmental issues to incorporate all aspects of owning, developing and operating real estate.

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# Fire Protection Engineering Services

Fire protection engineering plays an increasingly significant role in today's changing industries. VERTEX offers a wide range of specialized services to address the requirements of our clients' fire protection engineering and consulting needs. Our knowledgeable staff of fire protection engineers are experienced in providing fire protection solutions for a variety of client sectors including industrial, oil and gas, commercial, governmental, medical, residential, and many others

## Services:

- **Special Hazard Fire Suppression Systems Design**
  - **Fire Alarm & Detection Systems Design**
  - Performance Based Design
  - **Fire Protection & Life Safety Systems**
- Inspection, Testing & Independent
  - Third Party Review
  - **Emergency Response Plan Review & Development**
  - Liquid Natural Gas
  - **Fire Hazard Analysis**
  - **Fire & Explosion Risk Assessment**
  - **Fire Cause & Origin**

## Work Involving:

Acquisitions, Ground-Up, Restoration, Redevelopment, Operations/Program Management, Fire & Building Code Compliance, PFAS foam retrofits,



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# Project Advisory Services

**Markets Served:** Owners, Developers, Government Sector, Portfolio/Asset Managers, Contractors, Lenders

## **Services:**

- Pre-Construction Services
- Risk Management Services
- Program and Project Management
- Owner's Representation
- Cost Estimating & Scheduling
- Tenant Improvement Contracting
- QA/QC Assessment Services
- Completion Contracting
- Post Construction Capital Needs Assessment
- Balcony Assurance/Inspections

## **Work Involving:**

Ground-Up, Restoration/Renovations, Repairs, Redevelopment and Tenant Improvement





# Claims, Disputes, Forensic Services

**Markets Served:** Owners/Developers, Contractors, Attorneys, Sureties, Agencies, Insurance Carriers, Design Professionals, Third Party Administrators (TPAs)

**Services:**

- Surety Claims Consulting
- Construction Claims Consulting
- Environmental Claims Consulting
- Forensic Engineering
- Forensic Cost Engineering
- Forensic Architecture
- Forensic Accounting
- Forensic IT Services
- Forensic Fire Investigation Services
- Insurance Appraisal Services

**Covering Matters/Cases Involving:**

Construction Defect, Damages, Delay, Design Defect, Fire/Explosion, Productivity, Standard of Care, Contractor Terminations, Property Claims, Builders Risk Claims, SDI Claims

VERTEX is unique because we offer a highly skilled, cross-trained team of technical professionals and forensics experts who have worked construction and environmental matters.



# Commercial Damages & Investigation Services

**Markets Served:** Owners/Developers, Contractors, Attorneys, Sureties, Agencies, Insurance Carriers, Design Professionals, Third Party Administrators (TPAs)

**Services:**

- Commercial Litigation Support
- Construction-Related Delay and Damages Expert Services
- e-Discovery and Legal Analytics
- Financial Analysis
- Forensic Accounting

“The LitCon and Vertex partnership immediately benefits our clients,” stated David Tortorello, CEO of The Vertex Companies. “As a firm with financial advisory and forensic accountants working alongside construction and forensic engineering experts, our expanded team performs expert services for comprehensive commercial damages, fraud and investigations, as well as government contracts.”

# Agenda

- Enhancing ESAs with Additional Due Diligence Services
- Integrated Approach to Property Risk Management
- Case Studies & Practical Applications
- Conclusion & Q&A

# Due Diligence

## First Things First:

Understanding and evaluating potential risks and costs

Uncover meaningful pitfalls and identify a successful course of action.

Whether you are acquiring a business with multi-national manufacturing or financing a global portfolio of hotel properties, VERTEX can expose and evaluate the unknown environmental liabilities that potentially impact returns.



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# Due Diligence

Expose and evaluate the unknown liabilities:

- Phase I Environmental Site Assessment (ESAs)
- Phase II Subsurface Investigations
- Property Condition Assessments (PCAs)
- Environmental Social Governance (ESG)
- Energy Assessment
- American Land Title Association (ALTA) /  
National Society of Professional Surveyors  
(NSPS) Land Title Survey



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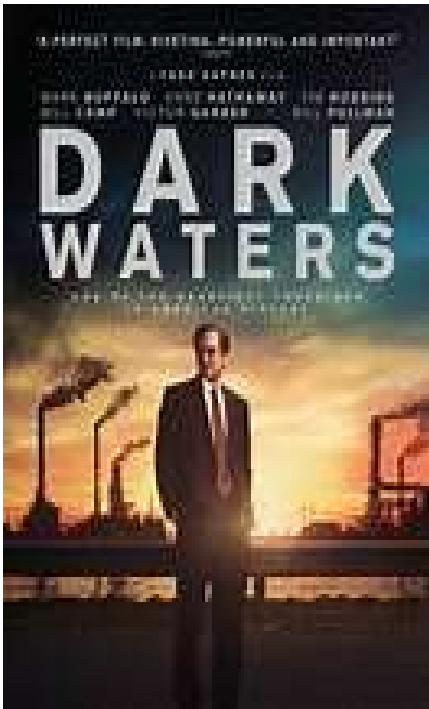
# PHASE I ENVIRONMENTAL SITE ASSESSMENTS

- Performed pursuant to ASTM E1527-21- Intended to identify environmental concerns (i.e., Recognized Environmental Conditions, Historical RECs, Controlled RECs) associated with past and/or current land use activities.
- Review of historical and regulatory sources:
  - historical aerial photographs, maps, real estate atlases, title documents, city street directories, building permits, textual records, historical records, and interviews with the current site
  - includes review of adjacent properties and/or properties within a certain radius of the subject property.
- Required research of title records to identify environmental liens and Activity and Use Limitations (AULs).

# PHASE I ENVIRONMENTAL SITE ASSESSMENTS

- Important clarifications on the shelf life of Phase I reports
  - Based on 5 components 1) interviews, 2) environmental cleanup lien search, 3) governmental records, 4) site reconnaissance, and 4) the EP declaration
  - 180 days from earliest component
- Review of Prior Reports and Data to Assess:
  - Potential For Sources to Impact On- and Off-Site Receptors (i.e., depth to groundwater?)
  - Potential for Impacted Soil to be Accessible
  - Potential for Soil Vapor Exposure (Volatile Compounds)
  - **Emerging Contaminants of Concern... PFAS... The elephant in the room**

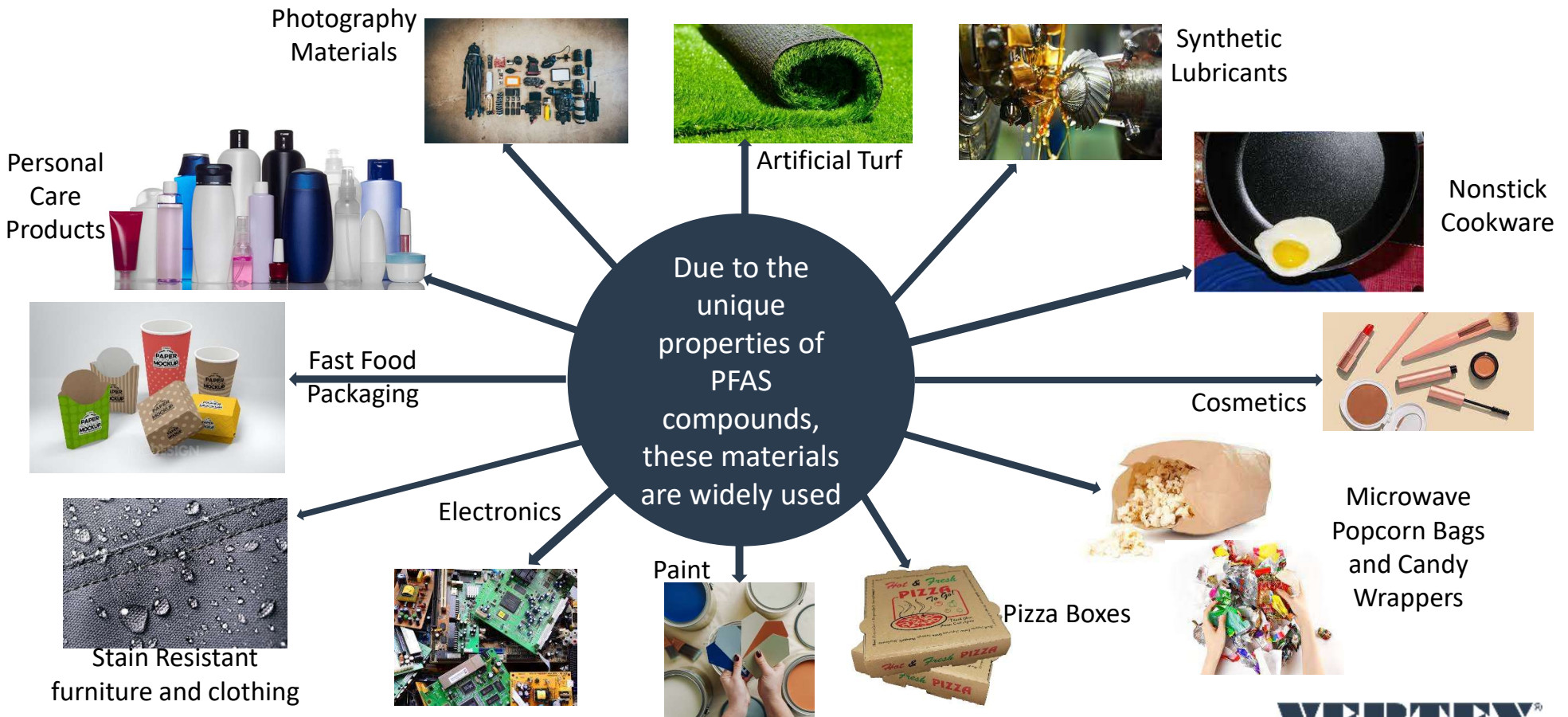
# Emerging Contaminants of Concern- PFAS/PFOS



- New contaminants of concern, such as per- and polyfluoroalkyl substances (PFAS), have been under scrutiny for possible regulation as hazardous substances by the USEPA and some state agencies for the past several years.
  - If NOT regulated as a federal CERCLA hazardous substance, such substances are not required to be included in the scope of an ASTM E1527-21 Phase I ESA.
  - However, the new E1527-21 Standard also indicates that inclusion of such substances can be added to the Phase I ESA as a “Non-Scope Consideration”
- Perfluoroalkyl and polyfluoroalkyl substances, or PFAS, are man-made chemicals found in many products commonly used in the world today.
- These chemicals have been used since the 1940’s and include PFOA, PFOS, GenX, PFBS, and others.
- These chemicals are persistent in the environment and human body, accumulating over time due to their inability to break down.
- PFAS can be released into the air, soil and water.
- Releases to groundwater can migrate long distances away from the source under certain conditions.
- Cleanup criteria (where established) are very low.
- **PFAS Exposure Risks are Primarily an Ingestion and Surface Water Issue**



# Where PFAS May Be Found



# PHASE II LIMITED SUBSURFACE INVESTIGATIONS

- Based on Phase I ESA identification of RECs as well as potential construction concerns.
- Depending on deal structure & potential liability, investigations may be conducted either pre or post closing.
- Confirms or further evaluates the presence of environmental impacts.
- Subsurface investigation may include the collection and laboratory analysis of soil, groundwater, surface water, soil gas, and/or air samples.
- Samples undergo chemical analyses relevant to the type of environmental conditions or land use activities recognized in association with the site.

# Asbestos, Lead & Mold/Water Intrusion Services



- Asbestos, Lead & Mold Management Services include:
  - Building Inspections/Asbestos/ Lead-In-Paint or Mold/Water Assessments
    - Industrial, Healthcare, Institutional, Multi-Family, Commercial
  - Abatement Scopes of Work/Project Designs/Specifications
    - Pre-qualify abatement contractors
    - Hold pre-bid meetings, review bids, assist in contractor selection
  - Project Air Monitoring
    - Pre-abatement baseline monitoring
    - Outside area sampling during abatement for compliance
    - Visual Inspections and Final Clearance Protocols
  - Mold Mitigation Plans
    - Pre-qualify abatement contractors
    - Hold pre-bid meetings, review bids, assist in contractor selection

Asbestos, Lead & Mold Awareness Training

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# The Need for a Comprehensive Due Diligence Approach

Limitations of standalone ESAs

Benefits of a multi-faceted assessment strategy

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# The Need for a Comprehensive Due Diligence Approach

## Why Go Beyond ESAs?

- Identify environmental risks but provide limited insight into other concerns.
- Transactions / Developments involve multiple risk factors, including building system integrity, legal boundaries, and sustainability compliance.

## Key Considerations:

- Hidden repair costs, legal disputes, and energy inefficiencies impact long-term property value.
- A more holistic due diligence approach ensures informed decision-making and risk mitigation.



## Key Benefits:

- ✓ Comprehensive Risk Identification –  
Reduces unforeseen liabilities.
- ✓ Better Investment Decisions –  
Helps make data-driven choices.
- ✓ Regulatory & ESG Alignment –  
Supports compliance with standards.
- ✓ Long-Term Cost Savings –  
Proactive planning for repairs and improvements.

***This integrated approach leads to stronger project outcomes, minimized liabilities, and enhanced property value.***

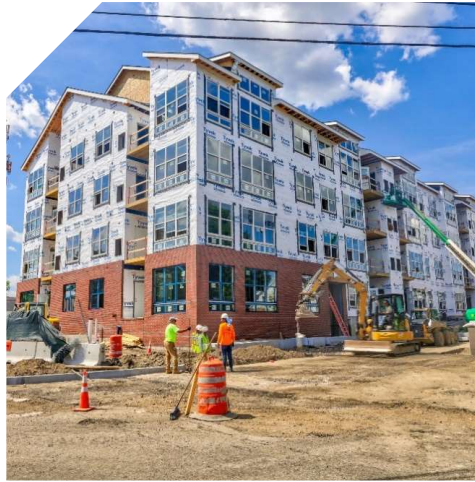


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# Key Complementary Services



Property Condition Assessments (PCAs)



NSPS / ALTA Land Title Surveys



ESG & Energy Audits

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# VERTEX PCA SERVICES

VERTEX utilizes the latest iteration of ASTM's Baseline Property Condition Assessment (PCA) Process (2024) as a basis for our evaluations.

- Ownership of commercial property requires a continually evolving plan with regard to maintenance, repairs, and long-term capital planning.
- PCAs completed under ASTM standards provide estimates of probable costs for changes or repairs that require immediate attention.
- The PCA also provides opinions concerning probable costs to remedy physical deficiencies that need to be made in the near future, usually within the first year or two. Our estimated renovation costs are based on current market rates, enabling stakeholders to project reasonable budget figures when considering property values.
- VERTEX has extensive experience with the evaluation of commercial property, and we understand how real property condition impacts the business of our Clients

## Primary Uses of a PCA





# VERTEX PCA SERVICES

A typical assessment will include a visual review of the following features:

- Site improvements, landscaping, pavements, drainage
- Exterior walls, windows, doors
- Structural components, connections, support materials
- Roof coverings, flashing, drainage, skylights
- Utility service, sewer, water, gas, electric
- HVAC, heating, cooling, ventilation, controls
- Electrical, transformers, switchgear, distribution, lighting
- Plumbing, drainage, wastewater and domestic water
- Fire protection sprinklers, standpipes, alarms
- Elevator, escalators, and lift equipment

## Levels of Effort

- ✓ **Baseline PCA (*visual*)**  
(Single “Generalist” Assessor)  
*Can be a PE, Architect or any qualified professional*
- ✓ **Enhanced Service PCA (*visual*)**  
(Baseline plus Experts,  
Subs, Teams, possible testing)

# VERTEX PCA SERVICES

Enhanced and Optional Services – We understand that no one assessment protocol fits every Client’s needs; therefore, we also offer optional services that can be added to most of our PCA scope of services. Below are just a few examples.

- **ADA Compliance Reviews** – VERTEX professions can conduct various levels of review to evaluate building compliance with Americans with Disabilities Act (ADA) and Fair Housing Act (FHA) requirements. Surveys are tailored to Client needs and range from visual reviews to detailed compliance audits.
- **Energy Audits and Conservation Assessments** – In conjunction with the PCA field visit, VERTEX often performs an enhanced walkthrough of the facility to visually observe materials, systems, and building components for potential energy saving opportunities.
- **Probable Maximum Loss (PML) Studies** – Where appropriate, a Probable Maximum Loss evaluation can also be conducted that provides an estimate of loss due to an earthquake expressed as a percent of the replacement cost of the building.

# VERTEX PCA SERVICES

## THE VERTEX DIFFERENCE

Our team is *really* our team

Over 200 Professional Engineers, Architects and forensic specialists work full time at VERTEX, with specialties in:

Structural	MEP	Fire/Life Safety	Envelope/IR
Roofing	Construction Cost Estimating	Civil	Seismic/PML
ADA	Environmental	ESG/Energy	<b>Elevators (SUB)</b>

# Environmental, Social and Governance (ESG)

**Markets Served:** Investors, Owners, Developers, Government Sector, Portfolio/Asset Managers, Insurance, Healthcare and Industrials

## Services:

- Due Diligence ESG Baseline Evaluation
- ESG Checklists (client specific)
- Level 1 & 2 ASHRAE Energy Audits
- Property Resiliency Assessments
- Net Zero Plans (Decarbonization)
- Energy Star Programs



## Work Involving:

Acquisitions, Redevelopment, Operations/Asset Management

VERTEX provides **practical** data, **reasonable** solutions and **manageable** payback (ROI) programs

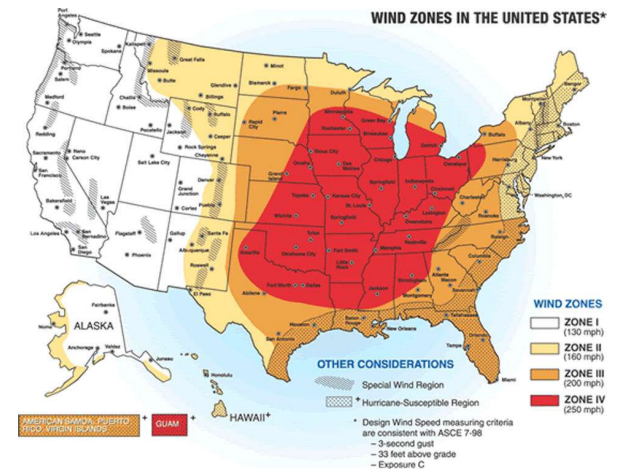
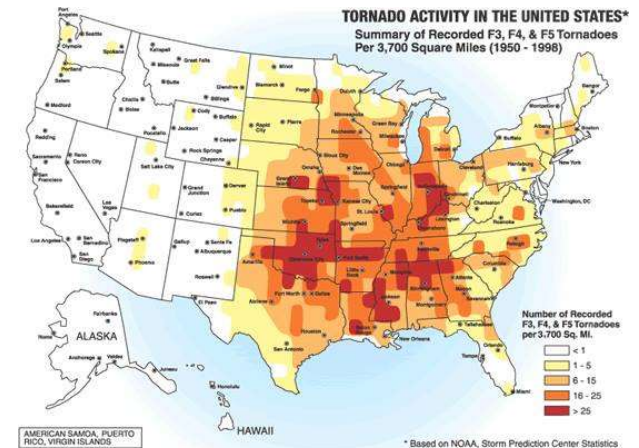
# VERTEX ESG SERVICES

- Historically, commercial real estate assets have been primarily evaluated based on the financial return.
- Although the return on investment (ROI) remains the most important tool for evaluating a physical asset, the concept of ESG has been pushing its way into the asset evaluation process and growing in importance in the last few years.
- Socially-conscious investors use ESG as a framework to screen potential investments. It is increasingly more common for organizations to be evaluated by additional parameters such as social and environmental performance.
- Today both purchasers and lenders are using ESG criteria to screen potential investments, including the underwriting of loans and equity stakes.
- According to a 2020 survey published by Fitch Ratings, 67% of banks are screening their loan portfolios for ESG risks. Companies found with lower ESG standards may be seen as a greater financial risk. The same goes for buildings with low ESG standards.
- As ESG grows more relevant in the global economy, it is important to evaluate its inclusion in the real estate industry.



# VERTEX ESG SERVICES

- **Accessibility Studies** – VERTEX has Certified Accessibility Inspectors and Plan reviewers on staff and provides standalone assessments of compliance for a variety of property types.
- **Energy Benchmarking** – VERTEX can provide an understanding of greenhouse gas emissions from utility usage at a property and benchmark the results as required by State and Local Laws through the use of EPA’s portfolio Manager. We can also help with Energy Star Certification submissions.
- **Energy Audits** – VERTEX professionals are experienced at identifying energy conservation measures and presenting them in ASHRAE Level 1 or 2 compliant reports.
- **Climate Vulnerability** – Not only does your project location matter when it comes to vulnerability, but the property type and strategies to combat potential threats are considered in our CV Assessments .
- **ESG** – We offer a variety of highly customizable checklists and reports to analyze strengths and weaknesses when it comes to the ESG attributes of a property.



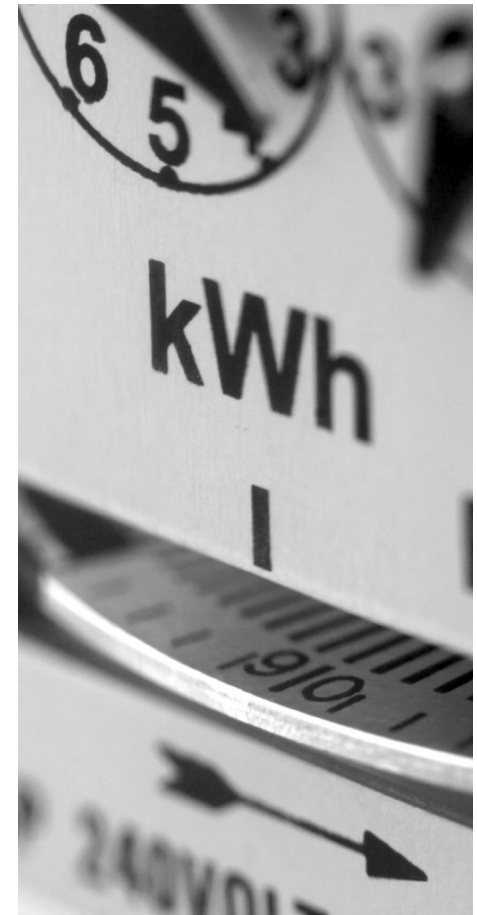
# VERTEX ENERGY SERVICES

## ENERGY BENCHMARKING

How does your building stack up to the competition?

Are you compliant with law?

- Benchmarking for city legislation compliance (local and state laws)
- Benchmarking for Energy Star Score (Informational)
- Benchmarking for ENERGY STAR Certification
  
- We review/organize of usage obtained from ownership (data or printed)
- We look for anomalies in usage (unexpected spikes/dips)
- Review demand costs, usage costs
- Calculation of Energy Use Intensity (EUI)
- Calculation of Energy Cost Index (ECI)
- Comparison to published data for similar building types







# VERTEX ENERGY SERVICES

## CLIMATE VULNERABILITY ASSESSMENT (CVA)

- **Flooding;**
- **Extreme cold;**
- **Extreme heat;**
- **Extreme weather;**
- **Geological conditions; and,**
- **Wildfires.**



Step 1: Explore Potential Hazards – *research location-based climate hazards*

Step 2: Assess Vulnerability/Risks – *based on the characteristics of the subject facility*

Step 3: Evaluate Resilience Strategies – *potential building system retrofits/upgrades*

Step 4: Estimate Costs for Action – *value capital improvement projects*

# VERTEX ENERGY SERVICES

## ENERGY SAVINGS INVESTIGATIONS (ASHRAE AUDITS)

- ASHRAE Level 1 and 2 energy auditing for capital planning
- ASHRAE Level 2 energy auditing for city legislation compliance
- ASHRAE Level 2 Energy auditing for Green Financing Loans

## VERTEX GOALS DURING DUE DILIGENCE PERIODS

Provide *practical* data

Provide *reasonable* solutions

Provide *manageable* payback (ROI)

# VERTEX ENERGY SERVICES

## ESG CHECKLISTS

VERTEX has created custom checklists for multiple-clients with differing ESG goals. Our understanding, flexibility and creativity can derive a plan that works for your properties. Many of our projects have included a scoring system so that owners can compare results property-to-property and see where improvements can be implemented most effectively.

### EXTERIOR

Does the site landscaping use water efficient measures or controls, native or adaptive plantings, water collection or re-use?

Does the site exterior use efficient lighting fixtures, controls or other measures to reduce energy waste and light pollution?

Are Electric Vehicle (EV) Charging Stations provided for building occupants?

### HVAC SYSTEMS

Is there any high efficiency HVAC/Air Conditioning equipment in use at the property (i.e.. rooftop or condensing units with greater than 13 EER/SEER)? - (Metric = Estimated Average EER or SEER Value)

What is the primary fuel type utilized for heating of warehouse areas? (Metric = Fuel Type)

What is the primary fuel type utilized for heating of office areas? (Metric = Fuel Type)

Does provided heating equipment have estimated efficiency ratings in excess of 83%? (Metric = Estimated Average Efficiency, %)

Is plate-frame heat exchanger equipment utilized in conjunction with cooling tower systems?

Have heating units been replaced in the past 10 years? (Metric = Estimated Average Age, yrs.)

Do any boilers onsite have a water temperature reset?

Have any boilers or boiler burners been replaced in the past 10 years?

Is exhaust heat from heating and water heating equipment captured via heat exchangers?

## What is an NSPS ALTA Land Title Survey?

- A detailed land survey that meets the standards set by the National Society of Professional Surveyors (NSPS) and the American Land Title Association (ALTA).
- Used primarily in commercial real estate transactions to ensure accurate property descriptions.
- Provides critical information for title insurance, property development, and financing decisions.



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# NSPS ALTA SURVEY SERVICES

A typical assessment will include the following:

- Monumentation
- Property Address
- Flood Zone Classification
- Land Area
- Vertical Relief
- Zoning Information
- Building Dimensions
- Site Features
- Parking Details
- Party Walls
- Underground Utilities
- Government Requirements
- Adjacent Property Owners
- Nearest Street Distance
- Advanced Survey Methods
- Recent Site Changes
- Street Modifications
- Offsite Easements
- Surveyor's Insurance

# Ensuring Accurate Boundary Identification

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Why Are Clear Boundaries Important?



Prevents disputes over property lines and ownership rights.



Confirms that the land being purchased matches the legal description in title documents.



Supports compliance with zoning regulations and land planning.

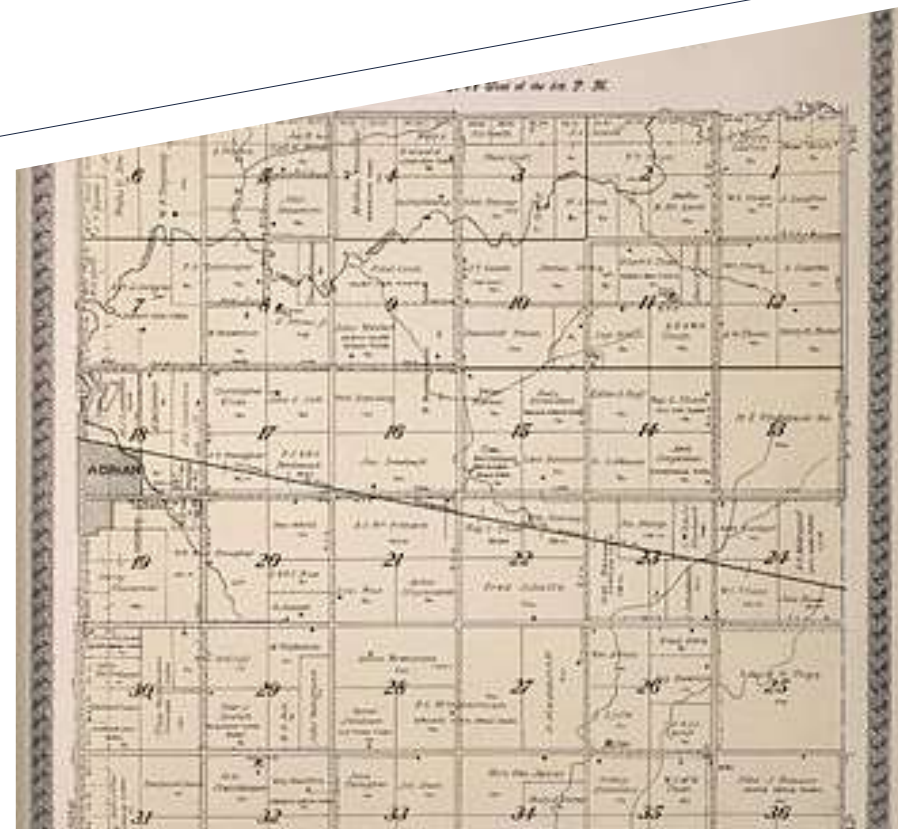
# Detecting Encroachments & Mitigating Legal Risks

## Common Encroachments Found in ALTA Surveys:

- Neighboring structures crossing property lines.
- Utility easements not accounted for in title documents.
- Fences, driveways, or landscaping built outside property limits.
- Unrecorded rights-of-way or access issues.

## Risk Mitigation Strategies:

- ✓ Identify and resolve encroachments before closing a transaction.
- ✓ Prevent costly legal disputes by addressing property line issues early.
- ✓ Ensure compliance with lender and title insurance requirements.



# The Importance of ALTA Surveys

## Avoiding a Costly Legal Dispute:

- A developer purchased a commercial property without conducting a survey.
- After closing, discovered a neighboring building encroached onto the property.
- The issue resulted in a legal dispute, delaying construction and increasing project costs.
- An ALTA survey would have identified the encroachment upfront, allowing for resolution before purchase.

## Key Takeaways:

- Conducting an ALTA survey prevents unforeseen issues.
- Proper due diligence can save time and legal costs.
- ALTA surveys are essential for protecting investments in real estate.



# The Value of ALTA Surveys

## Why They Matter:

- ✓ Essential for **accurate boundary identification**.
- ✓ Helps detect **potential encroachments** before they become legal issues.
- ✓ Provides **lenders, buyers, and title insurers** with necessary property details.
- ✓ Supports **risk mitigation and informed decision-making** in real estate transactions.

*Integrating NSPS ALTA Land Title Surveys into due diligence ensures property transactions are secure, legally sound, and financially smart.*



**VERTEX**<sup>®</sup>

# Integrated Risk Management Value

Holistic understanding of property risks

Enhanced decision-making for investors, lenders, and developers

Improved sustainability and long-term cost savings

**VERTEX**<sup>®</sup>

## Holistic Understanding of Property Risks

Integrating ESAs, PCAs, ALTA Surveys, and ESG Audits provides a comprehensive risk profile.

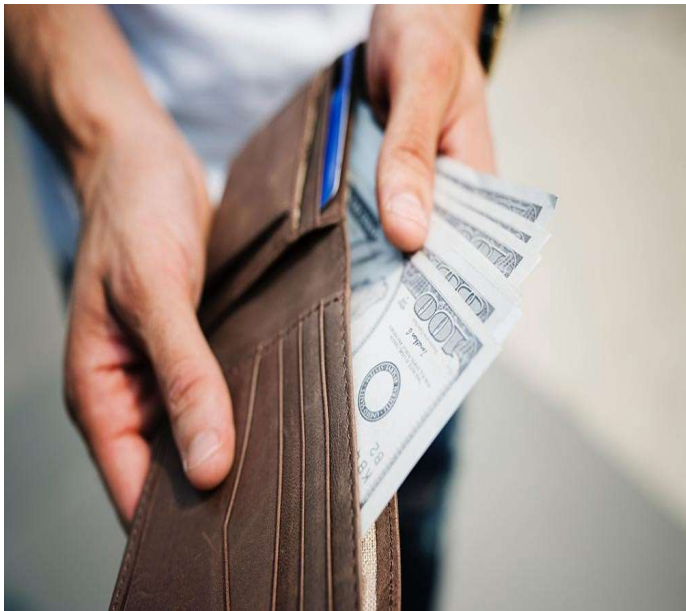
Identifies environmental, physical, legal, and sustainability risks before acquisition or development.

Reduces surprises that could impact project viability and investment returns.



**VERTEX<sup>®</sup>**

## Enhanced Decision-Making for Investors, Lenders, and Developers



Investors gain clear insights into potential liabilities and future costs.

Lenders benefit from reduced financial risk and more secure loan underwriting.

Developers can make data-driven decisions to mitigate risks early

## Improved Sustainability and Long-Term Cost Savings

- ESG & Energy Audits help align with sustainability goals and regulatory requirements.
- PCAs identify cost-saving maintenance strategies and capital expenditure planning.
- Reduces long-term operational costs by improving energy efficiency and resilience.



**VERTEX<sup>®</sup>**

# Key Takeaways

A comprehensive risk management approach provides deeper insights, better protection, and long-term value.

Integrated due diligence leads to better financial and sustainability outcomes.

Encouraging industry-wide adoption of holistic assessments for smarter property investments.

**VERTEX<sup>®</sup>**