

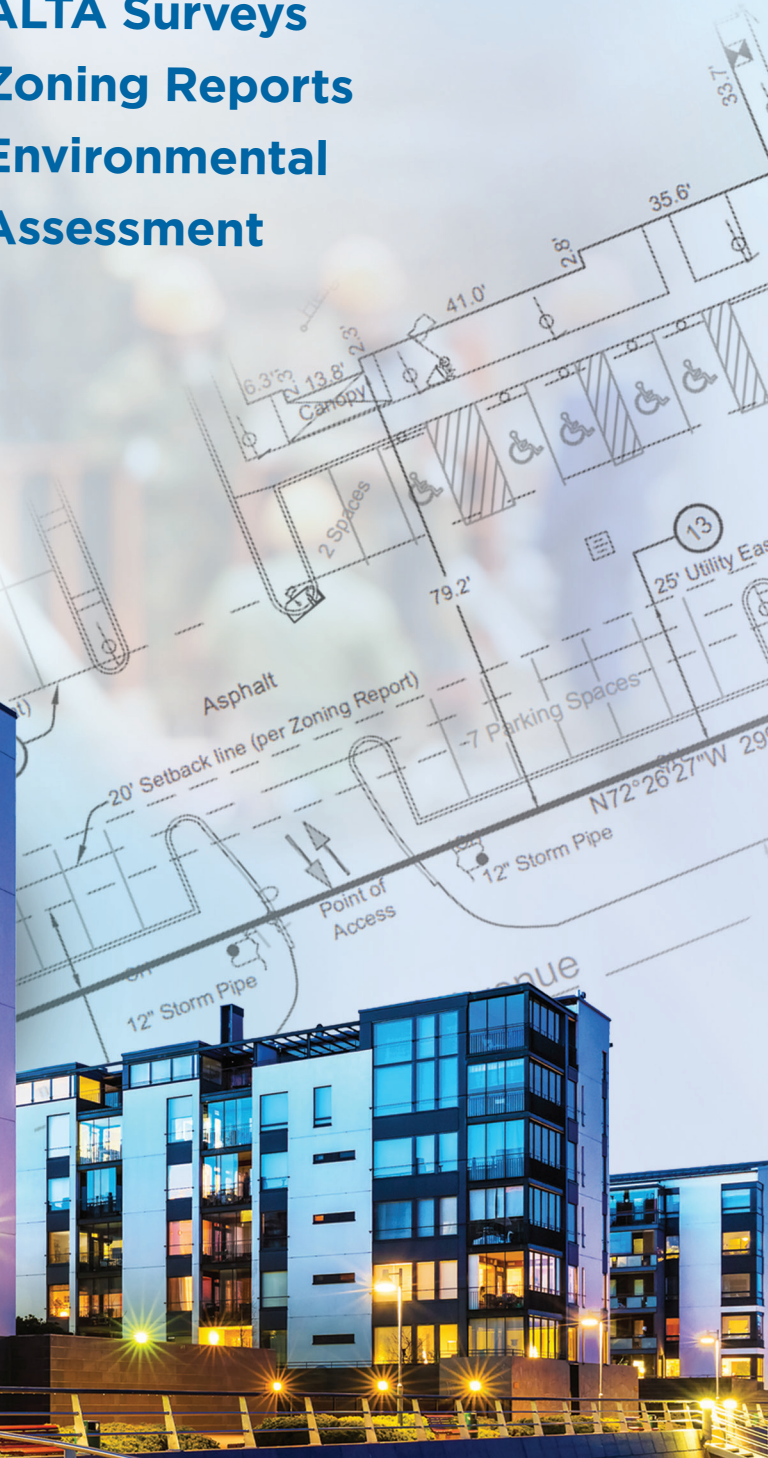
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REAL ESTATE
TRANSACTION
SERVICES

2026

HANDBOOK FOR
COMMERCIAL
REAL ESTATE
DUE DILIGENCE

ALTA Surveys
Zoning Reports
Environmental
Assessment



NV5 Handbook For Commercial Real Estate Due Diligence:

*ALTA Surveys, Zoning Reports,
Environmental and Assessment*

By NV5

NV5's objective in creating this Handbook is to provide information to our clients and the industry related to commercial real estate due diligence reports. Topics discussed include: the contents and purpose of an ALTA/NSPS Land Title Survey based upon the 2026 Minimum Standard Details, the use and contents of a Zoning Report and the components of Phase I and Phase II Environmental Site Assessments as well as Property Condition Assessments.

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Due Diligence Handbook 2026

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Contents of the Handbook

The ordering and completion of accurate, timely due diligence is an essential component of commercial real estate transactions. Quality due diligence reports adhere to the standards and practices set forth by their respective governing boards (where applicable) and the end-user should be able to rely upon the information provided to assist them in making well-researched, informed decisions about a property.

This Handbook references the requirements and standards of several professional organizations in describing the comprehensive reports associated with commercial real estate. These organizations include:

- **ALTA:** The American Land Title Association
- **NSPS:** National Society of Professional Surveyors
- **ASTM:** American Society for Testing and Materials
- **EPA:** The Environmental Protection Agency

The following five sections outline the uses of and best ordering practices for ALTA/NSPS Land Title Surveys, Zoning Reports, Phase I and Phase II Reports and Property Condition Assessments:

Section 1

ALTA/NSPS Land Title Surveys describes the uses of and how to order as well as presents the 2026 Minimum Standard Detail Requirements, adopted on February 23, 2026, in their entirety. Also included is a listing, definition and User Guide to the Optional Table A Items.

Section 2

Zoning Reports will discuss who needs zoning reports, why they need them and what to ask for when ordering.

Section 3

Environmental Site Assessments and Property Condition Assessments will describe what items are included in the standard scope of work based upon ASTM standards.

Section 4

Working with NV5 offers information on what services can be provided and how to contact us.

Section 5

Index of Terms provides a cross reference for finding topics within the Handbook.



Section 1

ALTA Surveys

Uses Of And How To Order A Survey

This section outlines the purpose of an **ALTA/NSPS Land Title Survey**, identifies the parties who rely on it, and summarizes the information a surveyor needs to prepare a proposal and complete the survey.

The American Land Title Association (**ALTA**) and the National Society of Professional Surveyors (**NSPS**), the legal successor to The American Congress on Surveying and Mapping (**ACSM**), represent the title insurance industry and the land surveying profession, respectively. In 1962, the two organizations met to develop a survey product that would satisfy the needs of the title insurer when asked to delete the standard survey exceptions from the issuance of a title policy. An ALTA/ACSM Land Title Survey, now referred to as an **ALTA/NSPS Land Title Survey**, was designed and adopted. The land surveyor's responsibilities were then outlined in the "**Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys**". Since 1962, the requirements have been revised eleven times to the most current requirements effective on February 23, 2026, and cited within this section of this handbook.

Within a Commercial Real Estate Transaction, there are multiple parties involved who have varied interests all looking to the survey for relevant information about the property. Although the main purpose of the survey serves the needs of the title insurer, information reported proves beneficial to all parties. It provides a picture of what is transpiring on the surveyed property and can answer questions or concerns. The comprehensive survey reports relevant information about the property that include but are not limited to (1) the surveyor's findings and opinion about the property boundary, (2) any observed easement evidence together with easements and survey related exceptions to coverage cited in the title commitment and, (3) the improvements, visible evidence of utilities, public and vehicular access, and significant observations such as potential encroachments. If Optional Table A Items are negotiated, the survey can reveal additional information about the property relating to zoning, flood hazard information, underground utilities, topography, parking totals and configurations, etc.

The lender and buyer are concerned with the present and future use of the surveyed property and any restriction or encumbrance that may have an effect. The information revealed on the **ALTA/NSPS Land Title Survey** helps the lender and/or buyer along with their counsel evaluate any potential risk and assess the benefits of owning or mortgaging the property.

The title insurer, when asked by the lender and/or the buyer to provide title insurance against potential use, losses or claims, looks to survey information. Such insurance includes protection for the lender or buyer against (1) boundary line conflicts with adjoining properties, (2) potential encroachments onto and from adjoining properties, into easements or setbacks, (3) rights of parties in possession to use the property for

easements, leases, or other encumbrances, (4) the contiguity, or lack thereof, of multiple parcels that combine to form the property, (5) access to public highways, and (6) matters on the property that may affect zoning issues or compliance. In the issuance of their policy, the insurer uses the survey to assess the risks and to determine exceptions from coverage. Prior to the issuance of a title policy, the title company provides a title commitment or preliminary title report that determines the property to be insured and specific exceptions to coverage based upon an examination of public records and other known documents. One typical standard exception to their coverage includes matters that would be disclosed on an accurate survey of the property. **The ALTA/NSPS Land Title Survey** is relied upon by the insurer to remove this and other standard survey exceptions. The survey is also utilized to add exceptions relating to matters reported by the surveyor.

The seller of a property, along with counsel, uses and relies on the **ALTA/NSPS Land Title Survey** as confirmation against any potential claim from the lender or buyer after conveyance. The survey will identify the conditions on the property usually near the time of transfer. This includes the locations of all improvements and their relationship to the property boundaries, and any evidence of others that may have rights to the property other than those disclosed in the form of easements, leases, or other encumbrances. The survey will also report evidence of any boundary line conflicts with adjoining properties, and relevant information pertaining to zoning use and compliance issues.

There are multiple parties in a real estate transaction who are typically represented by counsel. All parties look for the **ALTA/NSPS Land Title Survey** for pertinent information. The surveyor is assigned a complex set of responsibilities within the Minimum Standards and negotiated Optional Table A Items. Even though one party in the transaction is responsible for engaging the surveyor and paying for the survey, the surveyor's obligations are extended to other named parties. It is suggested that survey matters and associated needs are discussed among transaction parties before a surveyor is engaged. Without a clear direction, there may be confusion in requirements, timing, responsibilities or site access. It should also be understood that an **ALTA/NSPS Land Title Survey** was designed to meet the needs of the above discussed parties in a real estate transaction who are typically named within the certification appearing on the face of the survey. It should not be considered by others not named in the certification for any other purpose.

The **ALTA/NSPS Land Title Survey** is based upon a current title commitment or preliminary title report for the property as prepared by the insurer. The limits of the property to be surveyed and insured are contained within Schedule A. This should cite the description of the property as it appears of record. The Schedule A should also include any appurtenant rights that provide a benefit to the property such as easements or agreements. Per the Minimum Standards, the surveyor must review the record description, report it on the face of the survey and report any boundary discrepancies or conflicts such as gaps or overlaps based upon field evidence and mathematical closure principles. Occasionally, in addition to reporting the record description, a surveyor at their discretion may also include an "As Surveyed" or "Field" or "Measured" description based on their findings, observations, calculations and opinion. The Minimum Standards require the surveyor to provide a correlation statement of any new description to the record description and an explanation as to why it was prepared.

The title commitment also provides a listing of exceptions found in an examination of title under the section titled Schedule B-II Exceptions. The title company then looks to the surveyor to verify whether any survey related exception is located on the property. Based upon the surveyor's findings and notations, the title company will determine whether an exception has an effect on the property. If not, they may elect to delete the exception prior to the issuance of their title policy. These survey related exceptions include but are not limited to easements, covenants, rights of way, and restrictions which may burden the property. Per the minimum standards, the surveyor must also provide a Summary of Easements in notation form on the survey stating whether an easement reviewed is located on the property or not, is plotted, or if not plotted, then why.

The Schedule B-II Exceptions may also cite information previously revealed by others either by reference to a prior survey or by recorded documents that may indicate a use of the property by an adjoining property. As all these matters are integral to the completion of a survey, it is crucial that a current title commitment and copies of all the supportive documents referenced within the Schedule B-II Exceptions be made available to the surveyor as soon as possible. Without a commitment that defines the property intended to be insured, the surveyor may be assuming the limits of the property. Furthermore, without a commitment containing exceptions including easements, etc., the surveyor may note uses of the surveyed property that may be permitted based upon recorded agreements. Please refer to Section 4 of the Minimum Standard Detail Requirements outlining both the client's and surveyor's responsibilities regarding record research.

NV5 Real Estate Transaction Services recommends that as much of following information be included when requesting a survey proposal:

- Address of the property.
- Current description of the property (if available).
- Type of property, i.e., retail, multi-family, industrial, etc.
- Survey requirements and specifications, along the required (if any) Optional Table A items defined in the 2026 ALTA/NSPS Land Title Survey requirements.
- Current or Prior Title Commitment with copies of supportive documents, if available.
- Any information regarding prior surveys or surveyors who have provided previous work on the property.
- Name of the Lender, if known.
- County Tax or Parcel I.D. number.
- If available, please provide:
 - o Name of the Current Owner of the property.
 - o Name of the Lessor, if a leasehold.
 - o Name of the Purchaser, if known or applicable.
 - o Names of Transaction parties to be included within the Surveyor's Certification. **(SEE NOTE*)**
 - o If authorized to proceed, Site contact and access instruction.

***NOTE:** On occasion, a transaction party name to be included in the Surveyor's Certification will include verbiage such as "together with their respective successors and/or assigns". There are some surveying firms who may not be willing to certify to successors and/or assigns. Their attorney or an insurance provider for Professional Liability Insurance instructs otherwise. It is advisable to discuss such a need with the surveyor during the quoting process to guarantee the surveyor is comfortable in meeting this requirement. Although Section 7.B of the minimum standards states that the certification may be extended to the successors and assigns of the lender if requested, it is still a negotiation point. Please also refer to the section within this handbook regarding Surveyor Certifications for more direction and information regarding the date of survey.



Minimum Standard Detail Requirements For ALTA/NSPS Land Title Surveys (Effective February 23, 2026)

1. Purpose: Members of the American Land Title Association® (ALTA) have specific needs, unique to title insurance matters, when asked to insure title to land without exception as to the many matters which might be discoverable from survey and inspection, and which are not evidenced by the public records.

For a survey of real property, and the plat, map or record of such survey, to be acceptable to a title insurance company for the purpose of insuring title to said real property free and clear of survey matters (except those matters disclosed by the survey and indicated on the plat or map), certain specific and pertinent information must be presented for the distinct and clear understanding between the insured, the client (if different from the insured), the title insurance company (insurer), the lender, and the surveyor professionally responsible for the survey.

In order to meet such needs, clients, insurers, insureds, and lenders are entitled to rely on surveyors to conduct surveys and prepare associated plats or maps that are of a professional quality and appropriately uniform, complete, and accurate. To that end, and in the interests of the general public, the surveying profession, title insurers, and abstracters, the ALTA and the NSPS jointly promulgate the within details and criteria setting forth a minimum standard of performance for ALTA/NSPS Land Title Surveys. A complete ALTA/NSPS Land Title Survey includes:

- A. the fieldwork required pursuant to Section 5,
- B. the preparation of a plat or map pursuant to Section 6 showing the results of the fieldwork and its relationship to documents provided to or obtained by the surveyor pursuant to Section 4,
- C. any information from Table A items requested by the client, and
- D. the certification outlined in Section 7.

2. Request for Survey: The client shall request the survey, or arrange for the survey to be requested, and shall provide a written authorization to proceed from the person or entity responsible for paying for the survey. Unless specifically authorized in writing by the insurer, the insurer shall not be responsible for any costs associated with the preparation of the survey. The request must specify that a **“2026 ALTA/NSPS LAND TITLE SURVEY”** is required and which of the optional items listed in Table A, if any, are to be incorporated. Certain properties or interests in real properties may present issues outside those normally encountered on an ALTA/NSPS Land Title Survey (e.g., marinas, campgrounds, mobile home parks, easements, leases, mineral interests, other non-fee simple interests). The scope of work related to surveys of such properties or interests in real properties should be discussed with the client, lender, and insurer, and agreed upon in writing prior to commencing work on the survey. When required, the client shall secure permission for the surveyor to enter upon the property to be surveyed, adjoining properties, or offsite easements.

3. Surveying Standards and Standards of Care:

- A. **Effective Date** – The 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys are effective February 23, 2026. As of that date, all previous versions of the Minimum Standard Detail Requirements for ALTA/ACSM or ALTA/NSPS Land Title Surveys are superseded by these standards.
- B. **Other Requirements and Standards of Practice** – Many states and some local jurisdictions have adopted statutes, administrative rules, and/or ordinances that set out standards regulating the practice of surveying within their jurisdictions. In addition to the standards set forth herein, surveyors must also conduct their surveys in accordance with applicable jurisdictional survey requirements and standards of practice. Where conflicts between the standards set forth herein and any such jurisdictional requirements and standards of practice occur, the more stringent must apply.
- C. **The Normal Standard of Care** – Surveyors should recognize that there may be unwritten local, state, and/or regional standards of care defined by the practice of the “prudent surveyor” in those locales.
- D. **Boundary** – The boundary lines and corners of any property or interest in real property being surveyed (hereafter, the “surveyed property” or “property to be surveyed”) as part of an ALTA/NSPS Land Title Survey must be established and/or retraced in accordance with appropriate boundary law principles governed by the set of facts and evidence found in the course of performing the research and fieldwork.
- E. **Measurement Standards** – The following measurement standards address Relative Positional Precision for the monuments or witnesses marking the corners of the surveyed property.
 - i. “Relative Positional Precision” is the accepted indicator of measurement quality on an ALTA/NSPS Land Title Survey. It is defined as the length of the semi-major axis, expressed in meters or feet, of the error ellipse of the line connecting the monuments or witnesses marking adjacent boundary corners of the surveyed property at the 95 percent confidence level. Relative Positional Precision is most commonly estimated by the results of a correctly weighted least squares adjustment of the survey, or alternatively it can be estimated by the standard deviation of the distance between the monument or witness marking any boundary corner of the surveyed property and the monument or witness marking an immediately adjacent boundary corner of the surveyed property (called local accuracy) that can be computed using the full covariance matrix of the coordinate inverse between any given pair of points, understanding that Relative Positional Precision is based on the 95 percent confidence level.
 - ii. Any boundary lines and corners established or retraced may have uncertainties in location resulting from (1) the availability, condition, history and integrity of reference or controlling monuments, (2) ambiguities in the record descriptions or plats of the surveyed property or its adjoining properties, (3) occupation or possession lines as they may differ from the written title lines, or (4) Relative Positional Precision. Of these four sources of uncertainty, only Relative Positional Precision is controllable, although, due to the inherent errors in any measurement, it cannot be eliminated. The magnitude of the first three uncertainties can be projected based on evidence; Relative Positional Precision is estimated using statistical means (see Section 3.E.i. above and Section 3.E.v. below).
 - iii. The first three of these sources of uncertainty must be weighed as part of the evidence in the determination of where, in the surveyor’s opinion, the boundary lines and corners of the surveyed property should be located (see Section 3.D. above). Relative Positional Precision is a measure of how precisely the surveyor is able to monument and report those positions; it is not a substitute for the application of proper boundary law principles. A boundary corner or line may have a small Relative Positional Precision because the survey measurements were precise, yet still be in the wrong position (i.e., inaccurate) if it was established or retraced using faulty or improper application of boundary law principles.
 - iv. For any measurement technology or procedure used on an ALTA/NSPS Land Title Survey, the surveyor must (1) use appropriately trained personnel, (2) compensate for systematic

errors, including those associated with instrument calibration, and (3) use appropriate error propagation and measurement design theory (selecting the proper instruments, geometric layouts, and field and computational procedures) to control random errors such that the maximum allowable Relative Positional Precision outlined in Section 3.E.v. below is not exceeded.

- v. The maximum allowable Relative Positional Precision for an ALTA/NSPS Land Title Survey is 2 cm (0.07 feet) plus 50 parts per million (based on the direct distance between the two corners being tested). It is recognized that in certain circumstances, the size or configuration of the surveyed property, or the relief, vegetation, or improvements on the surveyed property, will result in survey measurements for which the maximum allowable Relative Positional Precision may be exceeded in which case the reason shall be noted pursuant to Section 6.B.x. below.

4. Records Research: It is recognized that for the performance of an ALTA/NSPS Land Title Survey, the surveyor must be provided with appropriate and, when possible, legible data that can be relied upon in the preparation of the survey. In order to complete an ALTA/NSPS Land Title Survey, the surveyor must be provided with the following:

- A. Given the purpose of an ALTA/NSPS Land Title Survey, complete copies of the most recent title commitment or, if a title commitment is not available, other title evidence satisfactory to the title insurer (if a recent title commitment is not provided, in some cases, additional title research may be required on the part of and by the insurer or on the part of the surveyor due to state law);
- B. The current record description of the real property to be surveyed or, in the case of an original survey prepared for purposes of locating and describing real property that has not been previously separately described in documents conveying an interest in the real property, the current record description of the parent parcel that contains the property to be surveyed;
- C. The following documents from records established under state statutes for the purpose of imparting constructive notice of matters relating to real property (public records):
 - i. Any recorded easements benefitting (i.e., appurtenant to) the property to be surveyed; and
 - ii. Any recorded easements, servitudes, or covenants burdening the property to be surveyed;
- D. If desired by the client, any unrecorded documents affecting the property to be surveyed and containing information to which the survey shall make reference.

Except, however, if the documents outlined in B and C of this section are not provided to the surveyor or if non-public or quasi-public documents (e.g., highway or railroad plans) are otherwise required to complete the survey, the surveyor must conduct that research which is required pursuant to the statutory or administrative requirements of the jurisdiction where the surveyed property is located and that research (if any) which is negotiated and outlined in the terms of the contract between the surveyor and the client.

5. Fieldwork: The fieldwork must be performed using practices generally recognized as acceptable by the surveying profession for purposes of an ALTA/NSPS Land Title Survey. Except as related to the precision of the boundary, which is addressed in Section 3.E. above, features located during the fieldwork shall be located to what is, in the surveyor's professional opinion, the appropriate degree of precision based on (a) the planned use of the surveyed property, if reported in writing to the surveyor by the client, lender, or insurer, or (b) the existing use, if the planned use is not so reported. The fieldwork shall include the following:

- A. **Monuments**
 - i. The location, size, character (including relationship to surface of the ground), and type of any monuments found during the fieldwork.
 - ii. The location, size, character (including relationship to surface of the ground), and type of any monuments set during the fieldwork, if item 1 of Table A was selected or if otherwise required by applicable jurisdictional requirements and/or standards of practice.

iii. The location, description, and character of any lines that control the boundaries of the surveyed property.

B. Rights of Way and Access

- i. The distance from the appropriate corner or corners of the surveyed property to the nearest right of way line, if the surveyed property does not abut a right of way.
- ii. The name of any street, highway, or other public or private way abutting the surveyed property, together with the width of the travelled way and the location of each edge of the travelled way including on divided streets and highways. If the documents provided to or obtained by the surveyor pursuant to Section 4 indicate no access from the surveyed property to the abutting street or highway, the width and location of the travelled way need not be located.
- iii. Evidence of physical access (including vehicular access such as curb cuts and driveways) to any abutting streets, highways, or other public or private ways observed in the process of conducting the fieldwork.
- iv. The location and character of vehicular, pedestrian, or other forms of access by other than the apparent occupants of the surveyed property to or across the surveyed property observed in the process of conducting the fieldwork (e.g., driveways, alleys, private roads, railroads, railroad sidings and spurs, sidewalks, footpaths).
- v. Without expressing a legal opinion as to ownership or nature, the location and extent of any potentially encroaching driveways, alleys, and other ways of access from adjoining properties onto the surveyed property observed in the process of conducting the fieldwork.
- vi. Where documentation of the location of any street, road, or highway right of way abutting, on, or crossing the surveyed property was not disclosed in documents provided to or obtained by the surveyor, or was not otherwise available from the controlling jurisdiction (see Section 6.C.iv. below), the evidence and location of parcel corners on the same side of the street as the surveyed property recovered in the process of conducting the fieldwork which may indicate the location of such right of way lines (e.g., lines of occupation, survey monuments).
- vii. Evidence of access to and from waters adjoining the surveyed property observed in the process of conducting the fieldwork (e.g., paths, boat slips, launches, piers, docks).

C. Lines of Possession and Improvements along the Boundaries

- i. The character and location of evidence of possession or occupation along the perimeter of the surveyed property, both by the occupants of the surveyed property and by adjoining properties, observed in the process of conducting the fieldwork regardless of proximity to the perimeter boundary lines.
- ii. Unless physical access is restricted, the character and location of all walls, buildings, fences, and other improvements within five feet of each side of the boundary lines observed in the process of conducting the fieldwork (see Section 5.E.iv. regarding the location of utility features). Trees, bushes, shrubs, and other vegetation need not be located other than as specified in the contract, unless they are deemed by the surveyor to be evidence of possession or occupation pursuant to Section 5.C.i.
- iii. Without expressing a legal opinion as to the ownership or nature of the potential encroachment, the evidence, location, and extent of potentially encroaching structural appurtenances and projections observed in the process of conducting the fieldwork (e.g., fire escapes, bay windows, windows and doors that open out, flue pipes, stoops, eaves, cornices, areaways, steps, trim) by or onto adjoining properties, or onto rights of way, easements, or setback lines disclosed in documents provided to or obtained by the surveyor.

D. Buildings

The location of buildings on the surveyed property observed in the process of conducting the fieldwork.

E. Easements and Servitudes

- i. Evidence of Documented Easements: Evidence of any easements or servitudes burdening the surveyed property as disclosed in the documents provided to or obtained by the surveyor pursuant to Section 4 and observed in the process of conducting the fieldwork.
- ii. Evidence of Undocumented Use (Prescriptive Easements): Evidence of easements, servitudes, or other uses by other than the apparent occupants of the surveyed property not disclosed in the documents provided to or obtained by the surveyor pursuant to Section 4, but observed in the process of conducting the fieldwork if they are on or across the surveyed drives, sidewalks, paths and other ways of access, utility service lines, utility locate markings (including the source of the markings, with a note if unknown), water courses, ditches, drains, telephone lines, fiber optic lines, electric lines, water lines, sewer lines, oil pipelines, gas pipelines).
- iii. Indication of Underground Easements: Surface indications of underground easements or servitudes on or across the surveyed property observed in the process of conducting the fieldwork (e.g., utility cuts, vent pipes, filler pipes, utility locate markings (including the source of the markings, with a note if unknown)).
- iv. Evidence of Utilities: Evidence on or above the surface of the surveyed property observed in the process of conducting the fieldwork, which evidence may indicate utilities located on, above, or beneath the surveyed property. Examples of such evidence include pipeline markers, utility locate markings (including the source of the markings, with a note if unknown), manholes, valves, meters, transformers, pedestals, clean-outs, overhead lines, and guy wires on and within five feet of the surveyed property, and utility poles on or and within ten feet of the surveyed property. Without expressing a legal opinion as to the ownership or nature of the potential encroachment, the extent of all potential encroaching utility pole crossmembers or overhangs.

F. Cemeteries

As accurately as the evidence permits, the perimeter of cemeteries and burial grounds, and the location of isolated gravesites not within a cemetery or burial ground, (i) disclosed in the documents provided to or obtained by the surveyor, or (ii) observed in the process of conducting the fieldwork.

G. Water Features

- i. The location of springs, ponds, lakes, streams, rivers, canals, ditches, marshes, and swamps on, running through, or outside, but within five feet of, the perimeter boundary of the surveyed property and observed during the process of conducting the fieldwork.
- ii. The location of any water feature forming a boundary of the surveyed property. The attribute(s) of the water feature located (e.g., top of bank, edge of water, high water mark) should be congruent with the boundary as described in the record description or, in the case of an original survey, in the new description (see Section 6.B.vi. below).

6. Plat or Map: A plat or map of an ALTA/NSPS Land Title Survey must be prepared using practices generally recognized as acceptable by the surveying profession for purposes of an ALTA/NSPS Land Title Survey and shall show the following information. Where dimensioning is appropriate, dimensions shall be annotated to what is, in the surveyor's professional opinion, the appropriate degree of precision based on (a) the planned use of the surveyed property, if reported in writing to the surveyor by the client, lender, or insurer, or (b) existing use, if the planned use is not so reported.

A. Field Locations. The evidence and locations gathered, and the monuments and lines located during the fieldwork pursuant to Section 5 above, with accompanying notes if deemed necessary by the surveyor or as otherwise required as specified below.

B. Boundary, Descriptions, Dimensions, and Closures

- i. (a) The current record description of the surveyed property, or
(b) In the case of an original survey, the current record document number of the parent tract that contains the surveyed property.

- ii. Any new description of the surveyed property that was prepared in conjunction with the survey, including a statement explaining why the new description was prepared. Except in the case of an original survey, preparation of a new description should be avoided unless deemed necessary or appropriate by the surveyor and insurer. Preparation of a new description should also generally be avoided when the record description is a lot or block in a platted, recorded subdivision. Except in the case of an original survey, if a new description is prepared, a note must be provided stating (a) that the new description describes the same real estate as the record description or, (b) if it does not, how the new description differs from the record description.
- iii. The point of beginning, the remote point of beginning or point of commencement (if applicable) and all distances and directions identified in the record description of the surveyed property (and in the new description, if one was prepared). Where a measured or calculated dimension differs from the record by an amount deemed significant by the surveyor, such dimension must be shown in addition to, and differentiated from, the corresponding record dimension. All dimensions shown on the survey and contained in any new description must be horizontal ground dimensions unless otherwise noted.
- iv. The direction, distance, and curve data necessary to compute a mathematical closure of the surveyed boundary. A note if the record description does not mathematically close. The basis of bearings and, where it differs from the record basis, the difference.
- v. The remainder of any recorded lot or existing parcel, when the surveyed property is composed of only a portion of such lot or parcel, shall be graphically depicted. Such remainder need not be included as part of the actual survey, except to the extent necessary to locate the lines and corners of the surveyed property, and it need not be fully dimensioned or drawn at the same scale as the surveyed property.
- vi. When the surveyed property includes a title line defined by a water boundary, a note on the face of the plat or map noting the date the boundary was measured, which attribute(s) of the water feature was/were located, and the caveat that the boundary is subject to change due to natural causes and that it may or may not represent the actual location of the limit of title. When the surveyor is aware of natural or artificial realignments or changes in such boundaries, the extent of those changes and facts shall be shown or explained.
- vii. The relationship of the boundaries of the surveyed property to its adjoining properties (e.g., contiguity, gaps, overlaps) where ascertainable from documents provided to or obtained by the surveyor and/or from field evidence gathered during the process of conducting the fieldwork. If the surveyed property is composed of multiple parcels, the extent of any gaps or overlaps between those parcels must be identified. Where gaps or overlaps are identified, the surveyor must, prior to or upon delivery of the final plat or map, disclose this to the insurer and client.
- viii. When, in the opinion of the surveyor, the results of the survey differ significantly from the record, or if a fundamental decision related to the boundary resolution is not clearly reflected on the plat or map, the surveyor must explain this information with notes on the face of the plat or map.
- ix. The location of buildings on the surveyed property dimensioned perpendicular to those perimeter boundary lines that the surveyor deems appropriate (i.e., where potentially impacted by a setback line) and/or as requested by the client, lender or insurer.
- x. A note on the face of the plat or map explaining the site conditions that resulted in a Relative Positional Precision that exceeds the maximum allowed pursuant to Section 3. E.v.
- xi. A note on the face of the plat or map identifying areas, if any, on the boundaries of the surveyed property, to which physical access within five feet was restricted (see Section 5. C.ii.).

- xii. A note on the face of the plat or map identifying the source of the title commitment or other title evidence provided pursuant to Section 4, and the effective date and the name of the insurer of same.

C. Easements, Servitudes, Rights of Way, Access, and Documents

- i. The location, width, and recording information of all plottable rights of way, easements, and servitudes burdening and benefitting (i.e., appurtenant to) the surveyed property, as evidenced by documents provided to or obtained by the surveyor pursuant to Section 4.
- ii. A summary of all rights of way, easements, and other survey-related matters burdening the surveyed property and identified in the title evidence provided to or obtained by the surveyor pursuant to Section 4. Such summary must include the record information of each such right of way, easement, or other survey-related matter, a statement indicating whether it lies within or crosses the surveyed property, and a related note for each of the following conditions, if present:
 - (a) its location is shown;
 - (b) its location cannot be determined from the record document;
 - (c) there was no observed evidence at the time of the fieldwork;
 - (d) it is a blanket easement;
 - (e) it is not on, does not touch, and/or – based on the description contained in the record document – does not affect, the surveyed property;
 - (f) it limits access to an otherwise abutting right of way;
 - (g) the documents are illegible; or
 - (h) the surveyor has information indicating that it may have been released or otherwise terminated.

In cases where the surveyed property is composed of multiple parcels, indicate which of such parcels the various rights of way, easements, and other survey-related matters cross or touch.

- iii. A note if no physical access to an abutting street, highway, or other public or private way was observed in the process of conducting the fieldwork.
- iv. The locations and widths of rights of way abutting or crossing the surveyed property and the source of such information (a) where available from the controlling jurisdiction, or (b) where disclosed in documents provided to or obtained by the surveyor pursuant to Section 4.
- v. The identifying titles of all recorded plats, filed maps, right of way maps, or similar documents that the survey represents, wholly or in part, with their recording or filing data.
- vi. For non-platted adjoining properties, recording data and tax parcel number, identifying adjoining properties according to current tax records, where available. For platted adjoining properties, the recording data of the subdivision plat.
- vii. Platted setback or building restriction lines that appear on recorded subdivision plats or that were disclosed in documents provided to, or obtained by, the surveyor.
- viii. If in the process of preparing the survey the surveyor becomes aware of a recorded easement not otherwise listed in the title evidence provided, the surveyor must advise the insurer prior to delivery of the plat or map and, unless the insurer provides evidence that the easement has been terminated or extinguished, show or otherwise explain it on the face of the plat or map, with a note that the insurer has been advised..

D. Presentation

- i. The plat or map must be drawn on a sheet of not less than 8.5 by 11 inches in size at a legible, standard engineering scale, with that scale clearly indicated in words or numbers and with a graphic scale.

- ii. The plat or map must include:
 - (a) The boundary of the surveyed property drawn in a manner that distinguishes it from other lines on the plat or map.
 - (b) If no buildings were observed on the surveyed property in the process of conducting the fieldwork, a note stating “No buildings observed.”
 - (c) A north arrow (with north to the top of the drawing when practicable).
 - (d) A legend of symbols and abbreviations.
 - (e) A vicinity map showing the surveyed property in reference to nearby highway(s) or major street intersection(s).
 - (f) Supplementary or detail diagrams when necessary.
 - (g) Notes explaining any modifications to Table A items and the nature of any additional Table A items (e.g., 21(a), 21(b), 21(c)) that were negotiated between the surveyor and client.
 - (h) The surveyor’s project number (if any), and the name, registration or license number, signature, seal, street address, telephone number, company website, and email address (if any) of the surveyor who performed the survey.
 - (i) The date(s) of any revisions made by the surveyor who performed the survey.
 - (j) Sheet numbers where the plat or map is composed of more than one sheet.
 - (k) The caption “ALTA/NSPS Land Title Survey.”
 - (l) Notation of any parol statements by interested landowners or occupants as to title or boundary issues relating to the surveyed property.
- iii. When recordation or filing of a plat or map is required by state statute, administrative rule or local ordinance, such plat or map shall be produced in the required form and at a legible scale.

7. Certification:

- A. The plat or map of an ALTA/NSPS Land Title Survey must bear only the following unaltered certification except as may be required pursuant to Section 3.B. above:

“To (name of insured, if known), (name of lender, if known), (name of insurer, if known), (names of others as negotiated with the client):

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items _____ of Table A thereof. The fieldwork was completed on _____ [date].

Date of Plat or Map: _____ *(Surveyor’s signature, printed name and seal with Registration/License Number)*”

- B. Certification may be extended to successors and assigns of the lender if requested.

8. Deliverables: The surveyor shall furnish copies of the plat or map of survey to the insurer and client and as otherwise negotiated with the client. Hard copies shall be on durable and dimensionally stable material of a quality standard acceptable to the insurer. A digital image of the plat or map may be provided in addition to, or in lieu of, hard copies pursuant to the terms of the contract. If the surveyor is required to record or file a plat or map pursuant to state statute, administrative rule or local ordinance it must be so recorded or filed.

Table A: Optional Survey Responsibilities and Specifications

***NOTE:** When any of the first twenty (20) items of Table A are selected, the exact wording of and fee for any selected item may be negotiated between the surveyor and client. Note that some items may be required by state statute, administrative rule or local ordinance in which case they must be included pursuant to Section 3.B. Any additional items negotiated between the surveyor and client must be identified as 21(a), 21(b), etc. Any additional items negotiated between the surveyor and client, and any negotiated changes to the wording of a Table A item, must be explained pursuant to Section 6.D.ii.(g). Notwithstanding Table A Items 5 and 11, if an engineering design survey is desired as part of an ALTA/NSPS Land Title Survey, such services should be negotiated under Table A, Item 21.

If checked, the following optional items are to be included in the ALTA/NSPS LAND TITLE SURVEY, except as otherwise qualified (see note above):

1. _____ Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the surveyed property, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
2. _____ Address(es) of the surveyed property if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork.
3. _____ Flood zone classification (with proper annotation based on federal Flood Insurance Rate Maps or the state or local equivalent) depicted by scaled map location and graphic plotting only.
4. _____ Gross land area (and other areas if specified by the client).
5. _____ Vertical relief with the source of information (e.g., ground survey, aerial map), contour interval, datum, with originating benchmark, when appropriate.
6. _____ (a) If the current zoning classification, setback requirements, the height and floor space area restrictions, and parking requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, list the above items on the plat or map and identify the date and source of the report or letter.
_____ (b) If the zoning setback requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, and if those requirements do not require an interpretation by the surveyor, graphically depict those requirements on the plat or map and identify the date and source of the report or letter.
7. _____ (a) Exterior dimensions of all buildings at ground level.
_____ (b) Square footage of:
_____ (1) exterior footprint of all buildings at ground level.
_____ (2) other areas as specified by the client.
_____ (c) Measured height of all buildings above grade at a location specified by the client. If no location is specified, the point of measurement shall be identified.

8. _____ Substantial features observed in the process of conducting the fieldwork (in addition to the improvements and features required pursuant to Section 5 above) (e.g., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse).
9. _____ Number and type (e.g., disabled, motorcycle, regular, and other marked specialized types) of clearly identifiable parking spaces on surface parking areas, lots, and in parking structures. Striping of clearly identifiable parking spaces on surface parking areas and lots.
10. _____ As designated by the client, a determination of the relationship and location of certain division or party walls with respect to adjoining properties.
11. _____ Evidence of underground utilities existing on or serving the surveyed property (in addition to the observed evidence of utilities required pursuant to Section 5.E.iv.) as determined by:
- _____ (a) plans and/or reports provided by client (with reference as to the sources of information)
- _____ (b) markings coordinated by the surveyor or client pursuant to a private utility locate request.
- Note to the client, insurer, and lender – With regard to Table A, item 11, information from the sources checked above will be combined with observed evidence of utilities pursuant to Section 5.E.iv. to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor’s assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation may be necessary.*
12. _____ As specified by the client, Governmental Agency survey-related requirements (e.g., HUD surveys, surveys for leases on Bureau of Land Management managed lands). The relevant survey requirements are to be provided by the client or client’s designated representative.
13. _____ Names of owners of adjoining properties according to current tax records. If more than one owner, identify the first owner’s name listed in the tax records followed by “et al.”
14. _____ Distance to the nearest intersecting street.
15. _____ Features, other than the boundary survey portion of an ALTA/NSPS Land Title Survey and the location of features in close proximity to a boundary or other title or relevant setback line, may be shown using imagery; however, the surveyor must:
- (a) agree with the client in writing on imagery to utilize, including source, date and/or version of imagery, and licensing costs and requirements,
- (b) discuss the ramifications of such practices (e.g., the potential accuracy, precision and completeness of the imagery gathered thereby) with the insurer, lender, and client prior to the performance of the survey, and
- (c) place a note on the face of the survey explaining the source, date, precision, and other relevant qualifications of any such imagery.
16. _____ Evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork.
17. _____ Proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction. Evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

18. _____ Pursuant to Sections 5 and 6 (and applicable selected Table A items, excluding Table A item 1), include as part of the survey any plottable offsite (i.e., appurtenant) easements disclosed in documents provided to or obtained by the surveyor.
19. _____ Professional liability insurance policy obtained by the surveyor in the minimum amount of \$_____ to be in effect throughout the contract term. Certificate of insurance to be furnished upon request, but this item shall not be addressed on the face of the plat or map, unless required by the jurisdiction.
20. _____ When observed in the process of conducting the fieldwork or otherwise identified in the process of preparing the survey the following conditions and potential encroachments must be summarized in a table and indicated on the face of the plat or map. Without expressing a statement of legal opinion or an opinion as to ownership, the table must identify the physical conditions, and provide a means by which the conditions can be readily located on the face of the plat or map by a reviewer; however, this table may not be a comprehensive list of all concerns shown on the plat or map of the survey.
- Potential encroachments over boundary lines onto the surveyed property from adjoining property and onto adjoining property from the surveyed property.
 - Potential encroachments into rights of way and easements for which written documentation of the existence of such rights of way and easements was provided to or obtained by the surveyor pursuant to Section 4.
 - Potential encroachments of front, side or rear setbacks, but only when the setback requirements specific to the surveyed property were provided to the surveyor pursuant to Table A item 6(a) or 6(b) or provided in recorded documents.
 - Physical access between adjoining parcels without benefit of an easement for which written documentation of the existence of such easement was provided to or obtained by the surveyor pursuant to Section 4.
 - Use of adjoining parcels by apparent occupants of the surveyed property without benefit of an easement for which written documentation of the existence of such easement was provided to or obtained by the surveyor pursuant to Section 4.
21. _____

Adopted by the American Land Title Association on October 8, 2025. More at: www.alta.org.

Adopted by the National Society of Professional Surveyors on October 17, 2025. More at: www.nsps.us.com.



User Guide to Optional Table A Items

Attached to the **Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys**, is a listing of “Optional Survey Responsibilities and Specifications” referred to as “Table A”. These twenty defined responsibilities are negotiated between the surveyor and client if their inclusion in the scope is necessary. If needed, the exact wording of these items may also be negotiated along with the associated fees. Caution should be exercised in any redefinition of items 1-20 as they are widely known and accepted. A redefinition may cause confusion and could then be interpreted differently even though an explanation of any alteration must be noted on the survey. Any additional items above the responsibilities in the minimum standards and in Table A Items 1-20 negotiated, shall be identified as items 21(a), 21(b), etc., and explained within notations on the face of the survey per Minimum Standard Section 6.D.ii.(g). It is recommended to also utilize item 21, etc. when it may be necessary to redefine items 1-20, rather than altering a recognized definition. Notwithstanding Table A Items 5 and 11, if an engineering design survey is desired as a part of an ALTA/ NSPS Survey, those services should also be negotiated under Table A Item 21. Also, it is understood that some of the Items defined as 1-20 may be required by state statute, administrative rule or local ordinance in which case they must be included pursuant to Section 3.B. of the minimum standards regardless of any negotiation between the surveyor and client. Examples of these may include Items 1, 4, 13 and 14.

The first consideration when determining which Table A items to include as a part of the scope of survey is any lender involvement. Most lenders have specific survey requirements or guidelines to satisfy their criteria that cite items by Table A Item number or description, (i.e. “The number of spaces and striping of the parking areas are to be shown”). It is also recommended to review any purchase agreement or sales contract that may include specific survey instructions along with who is responsible for ordering and paying. The ordering party should also consider whether the title insurer will be asked to issue any specific survey related endorsements to their title policy. It is often necessary to include a related Table A Item so sufficient information is shown on the survey so the endorsement can be offered.

The listing below provides an item-by-item guide for determining the necessity of each item. **The item numbers following with an asterisk (*) are standard to MOST lender survey requirements.** Additional explanations have been included for items that may add significant costs or cause timing issues. There is also a cross-reference made of items necessary for some of the survey related endorsements when included in the title policy coverage.

ITEM 1: Monuments

When this item is included, the surveyor must place survey monuments (iron pins, pipes, monument boxes, etc.) at the corners (or witness to the corner) of the surveyed property. A surveyor would first look to monuments that were previously placed at the corners, agree that the previous monuments are at the true and accurate corners (or take exception to) and then set monuments where none were evident. Although this item is in some lender survey requirements, it does not provide the lender with any additional benefit or assurance. The Minimum Standards outline very specific precision requirements that apply regardless of whether monuments are placed so the accuracy of the survey is not negated. Monument placement would however offer a benefit to someone else at a later date if the surveyed property is slated for any construction or reconfiguration. In these instances, there may be contractors on the site in the future who need to know the exacting location of the property corners to begin work. If an owner or potential owner has interest in seeing the exact corners, it may be a consideration. However, in many commercial transactions the investor who purchases the property may never be on site so monuments placed at the corners offer little direct benefit. This item may be included regardless of its negotiated inclusion.

At a minimum, this item can easily add \$500 to the cost of the survey and possibly extend the timing. In some western states such as California, Washington, etc., when a surveyor places a survey monument in the ground, they are required by survey statutes to file a record of survey. In those instances when Table A Item 1 is included, the fee is substantially higher to cover review and recording fees.

There are several states, Kentucky as an example, that regardless of the inclusion of Table A Item 1, monumentation is required. Pursuant to Section 3.B of the Minimum Standards, the surveyor must comply with state statutes or those of a local jurisdiction.

ITEM 2*: Address(es)

This item requires the surveyor to make a verification of the address of the property. The surveyor can note the address that may be posted on a building, signage or mailbox. **If the surveyed property has multiple addresses, then all addresses for the property should be noted.** If there is no observed address posted, the surveyor should look to any provided record documentation for reference to the address. If the surveyor reports the address as disclosed in a document, the surveyor should make a general note on the survey referencing that document. If the title insurer is asked to issue a Location or Location and Map endorsement, the notes provided on the survey relating to the observed address, or address disclosed in documents are beneficial.

ITEM 3*: Flood Zone Classification

This item requires a surveyor to review Federal Flood Insurance Rate Maps (FIRM) or any state or local equivalent and report the flood zone classification of the surveyed property based on graphic plotting only. The classification that is reported will help the lender determine whether the borrower may be required to obtain Flood Insurance. If there is an instance where a flood zone determination is being disputed, transaction parties may look to the surveyor to provide an Elevation Certificate, a government form completed by the surveyor that reports the observed elevation of the lowest level of the structure and reports the base flood elevation for the flood zone per the FEMA Flood Maps. The Elevation Certificate is NOT part of Item 3 and would have to be negotiated as an additional service with the surveyor. This can be done under a separate contract or negotiated under Table A Item 20.

ITEM 4*: Gross Land Area

Item 4 requires the surveyor to report the gross land area (and other areas if specified by the client). When included the surveyor typically reports the land area in acres and/or square footage. The inclusion of the land area is important when looking at zoning matters. There may be maximum or minimum lot size requirements. There may also be bulk restrictions and open space requirements, i.e., improvement square footage vs. land area square footage. In the review of zoning codes for the surveyed property, it may be necessary to ask the surveyor to reveal the square footage of other areas of the property based upon specific restrictions (net of right-of-way, net of setbacks, net of easements, etc.).

ITEM 5: Vertical Relief (Contours, Topographic Data)

This item is rarely included as an optional feature. It can add a significant cost and timing issues to the survey. However, it should be considered for properties where construction, engineering or redevelopment is contemplated. When included, the surveyor would provide the topography of the land usually done by reporting contours at one-foot intervals. This information is valuable to architects or site development engineers when deciding how to best utilize the property. It may make economic sense to have this work performed as a part of the ALTA survey rather than contract another surveyor through the development stages to provide this information. If more detailed information is necessary for an engineering design survey, it should be negotiated under Table A Item 20.

If included, it is best to discuss and provide the surveyor with the needs and the expectations of the parties (i.e., architect and/or engineering) relying on this information at the onset.

Another reason to include this item would be in situations where there are questions regarding drainage or if drainage easement documents were ambiguous. If the topography of the land is revealed, determinations could be made to see if drainage issues burden the surveyed property or if the property needs appurtenant rights to drain onto the lands of others.

The cost will vary based on both the specifications, topography and the size of the property.

ITEM 6(a) and 6(b)*: Zoning

When **Item 6(a)** is included, the current zoning classification, setback requirements, height and floor space restrictions, other bulk restrictions, and parking requirements will be reported on the face of the survey. The client or their representative must provide the surveyor with a zoning report or letter specific to the surveyed property for the surveyor to address this item. The surveyor must then identify the source and the date of the report or letter.

When **Item 6(b)** is also included, the zoning setback requirements may be set forth in a zoning report or letter provided per **Item 6(a)**. If those requirements DO NOT require an interpretation by the surveyor, they will be graphically depicted on the survey. The surveyor must identify the source and the date of the report or letter.

If it is necessary for this information to be reported on the face of the survey, then **6(a) and/or 6(b)** should be negotiated. In many transactions, parties involved look to the zoning information and then to situations revealed on the survey to confirm compliance to zoning matters (i.e., the required building setback vs. how far the building is set back from the property line). Also, the title company is referencing this information if they are asked to provide a Zoning Endorsement to their title policy.

If Table A Items **6(a) and/or 6(b)** are included and the client does not provide a zoning report or letter, the surveyor should still include a note stating: *"The surveyor was not provided with a zoning report or letter from the the client pursuant to Table A Item 6(a) and/or 6(b)."*

ITEM 7(a)*: Exterior Dimensions of All Buildings at Ground Level

This item is typically included and does not often impact the cost of the survey. In showing the buildings on the survey, a minimum detail requirement, the surveyor is already obtaining these dimensions. The dimensions of the building are helpful for planning purposes and to exhibit how the surveyor determined building footprint square footage if **Item 7(b)(1)** is included.

ITEM 7(b)(1)*: Square Footage of Exterior Footprint

If included, the surveyor calculates the square footage of all buildings based upon the building footprint dimensions at ground level. If asking the title insurer to issue a zoning endorsement, this information is important to make comparisons to any bulk zoning restriction or requirement. It may also be important to make a comparison between the building size(s) that may have been revealed in a purchase agreement. Note that the square footage information reported by the surveyor will only be for the footprint of the building and will not include the gross square footage (total) of a multi-floor building. If that information is necessary, it can be negotiated under **Item 7(b)(2)**. Frequently, there are discrepancies in square footages reported by the surveyor and an appraiser. An appraiser may be reporting the square footage based on room sizes, county appraisal records, etc., that typically report interior square footage information.

ITEM 7(b)(2): Square Footage of Other Areas As Specified by The Client

If there is a transaction specific need for the surveyor to report the square footage of other areas on the surveyed property, those can be negotiated under this item. As noted above, Item 7(b)(2) can be utilized if the gross building square footage is needed. Other examples would include areas that may need to be reported for compliance to zoning matters in specific zoning codes. For instance, there may be restrictions for impervious areas, open space restrictions, recreation areas, parking areas, etc. These specific needs would all have to be relayed to and then negotiated with the surveyor.

ITEM 7(c)*: Measured Height of All Buildings

If included, the surveyor will report the measured height of all buildings on the property above grade. The client may designate to the surveyor a specified location where the measurement should be taken. If not, the surveyor will take the measurement and report the point of measurement on the survey. This information becomes valuable if the title insurer is issuing a zoning endorsement so that comparisons to any zoning restriction or requirement can be made. There may also be other height restrictions for the property that may be cited within a specific zoning ordinance, Schedule B Exceptions or within government related requirements such as FAA restrictions. Specific instruction should be given to the surveyor if it is necessary to also report the number of stories of multi-floored structures or if heights of other improvements are to be measured (i.e., towers, signage, etc.). The client may want to negotiate these specific needs under Item 20.

ITEM 8*: Substantial Features

Per the Minimum Standard Detail Requirements in Section 5D, the buildings on the surveyed property will be reported and shown. If it is necessary to locate any substantial additional features observed while conducting the fieldwork, such as parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse, etc., the client should consider including this item. Some of the additional features may be necessary for a zoning endorsement.

ITEM 9*: Parking

If included, the surveyor must show the number (count) and type (e.g. handicapped, motorcycle, regular, etc.) of parking spaces in parking areas, lots and structures. Furthermore, the surveyor is to show the striping of clearly identifiable parking spaces on surface parking areas and lots. Although the surveyor must include the count and type of spaces within structures, the surveyor is not required to show the striping within the structures.

When addressed, the user should be able to look to the survey to find a total count of the number of parking spaces on the surveyed property broken down by type. For surface parking areas and lots, the striping, if identifiable, is to be shown on the drawing.

If there is parking within a structure of a surveyed property, just a parking count will be indicated. If the reporting of striping within the structure is required, it must be negotiated separately preferably under Item 20. The surveyor and the client should further discuss how this is to be delineated on the survey. For instance, if there is a multi-level parking structure, is it necessary for the surveyor to provide detailed drawings of each level showing the location of each space and striping which could greatly impact pricing.

Another consideration is for parking that may be available to the subject property within a beneficial easement or reciprocal easement. If such easements and parking exist, the client should consider the inclusion of Optional Table A Item 18 to make these easements subject to the survey requirements. Zoning codes may dictate a required number of parking spaces based on use, lot size, number of employees, units, etc. Item 9 is typically included to determine compliance to these requirements. The title company will also look to this issue if they are asked to provide a zoning endorsement.

ITEM 10: Party (Common) Walls

This item can be utilized for properties that share a common or party wall with an adjoining property. These would apply to properties in older urban areas such as row houses, condominiums, or shopping center/mall type properties. Shopping center properties may contain anchor stores owned separately from the remaining center. The anchor store would most likely share a common wall with the adjoining property.

When **Item 10** is included, the surveyor reports the relationship of the party or common wall to the property line. Most likely it is one in the same. The surveyor performs the necessary additional survey work to make these determinations. The client must designate which walls are of a concern and needs to obtain the necessary permissions for the surveyor to enter the interior of properties, if needed, on either side of the wall.

Most properties that utilize a common wall especially in cases of newer construction, are subject to extensive party wall agreements within covenants and restrictions that allow for some flexibility for the wall location and party responsibilities. It is advisable to review these documents before including these items.

This item will add some additional cost and timing to the survey.

ITEM 11: Evidence of Underground Utilities

IMPORTANT NOTE: Before considering the inclusion of Item 11, please review Section 5.E.iv. of the Minimum Standard Detail Requirements that outline the surveyor responsibilities in reporting VISIBLE OBSERVED EVIDENCE regarding utility locations on the surveyed property.

For **Item 11(a) and/or 11(b)**, in addition to all observed information mandatory per Section 5.E.iv, the surveyor will report information to the extent possible, regarding evidence of any underground service on surveyed property. If there are underground lines that run from a point off the surveyed property and then connect to the building or any improvement on the property, or cross the property, the surveyor will look to the following sources to report evidence of these underground features on the survey.

For **Item 11(a)**, the surveyor will review plans and/or reports provided by the client indicating evidence of any underground utility feature. These may include plans or reports the client provides from utility companies, as-built surveys, prior surveys, or site plans used for any construction or development of the surveyed property. The surveyor must include a reference as to the sources of information. These plans may reveal evidence of underground service.

For **Item 11(b)**, Either the client or the surveyor will coordinate a request independently for a private utility locate marking on the surveyed property. A utility locate company would then use equipment to determine these underground features and provide ground markings (either by spray paint or utility locate flagging). The surveyor would then report the observed evidence of these markings along with their source on the survey. In some jurisdictions, 811 or other similar locate requests by the surveyor may be ignored or result in an incomplete response. For liability reasons, the request for such markings in most cases needs to be made by the owner of the property. Additionally, some locator companies only provide ground markings if there is pending excavation. The client and the surveyor need to discuss any such potential issues.

If this option is included and there is no response to these requests, the surveyor shall note on the plat or map how it affected any determinations of this underground evidence.

Item 11(a) and/or 11(b) will add additional expense to the survey and impact the timing. Considering a lack of available information provided by the client or lack of a response for utility locate markings, oftentimes not much more is revealed on the survey than what would have been obtained with only the mandatory visible observance responsibilities included in Section 5.E.iv.

If the surveyor looks to any sources as referenced above for the evidence of the underground services, the surveyor shall state the source(s) of the information on the drawing. The surveyor should also note the lack of information provided or any incomplete response by utility locate services. It is also important to note that without excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary.

When looking to this utility information provided on the survey the transaction parties are interested in two issues. The first is that the surveyed property has sufficient utility service for its operation. The second issue is that all services enter the surveyed property either from a dedicated public right-of-way that adjoins the property, or through an appurtenant easement that gets the utility service to a property line of the surveyed property. It is typical that transaction parties can get comfortable with these issues without addressing Item 11. These are also issues the title company needs to understand when issuing a Utility Endorsement.

When there is evidence of a utility service crossing the surveyed property to service an adjoiner, the surveyor's responsibility to show and report the observed evidence is outlined in Section 5.E of the Minimum Standard Detail Requirements. If there is a concern as to whether the actual underground utility improvements are within any burdening easement for the same, Item 11(a) and/or 11(b) may need to be considered.

ITEM 12: Government Related Survey Requirements

The client may specify to the surveyor that government related survey requirements be included. As indicated in the definition of this item, these may include HUD survey related requirements, surveys on lands for leases on Bureau of Land Management managed lands or even FAA restrictions. Whatever the scenario, the client must relate the specific needs and provide the requirements to the surveyor.

Depending on the requirements, this item may add additional costs to the survey.

ITEM 13: Names of Adjoiners

Per section 6.C.vi, of the Minimum Standard Detail Requirements, for non-platted lands, the surveyor shall report on the drawing the recording data identifying adjoining tracts according to current public records along with the tax parcel number, if available. For platted adjoining lands, the surveyor shall report the recording data of the subdivision plat.

The inclusion of Item 13 requires that the names of the adjoining owners per current tax records also be included along with the above recording and tax parcel data. In the case of more than one owner, the surveyor may identify the first owner's name listed in the tax records followed by 'et al.'

ITEM 14*: Distance to the Nearest Intersecting Street

When included, the surveyor reports a distance from a property corner of the subject property that is within a road centerline or along a road right-of-way to the nearest intersecting street as specified by the client. If none are specified, the surveyor would choose the property corner and the street. Many metes and bounds descriptions may tie a property corner to an intersecting street and that information would be shown as recorded and measured dimensions on the survey per the Minimum Standard Detail Requirements. If the client wants to be sure that they can look at the survey drawing and see how far a property corner is from an intersecting street, they should opt for the inclusion of Item 14, specify the particular street and discuss with the surveyor the precision of the measurement (i.e., scaled from a map, recorded dimension or actual observed measurement). This is particularly useful if there is a zoning restriction that may apply regarding distances to intersecting streets or even to specific streets.

ITEM 15: Uses of Other Technologies and Alternative Methods to Locate Improvement or Features

This item should only be considered for non-standard type properties that are large in size. Examples might be a large ski resort, a large wind farm, a coal mining facility, a large mobile home park, an extensive golf course, etc. These properties could be hundreds or thousands of acres. The intent of this item is to save cost and time on such properties when locating interior improvements or features would be prohibitive. Including this item on standard or typical properties would not offer cost or time savings.

The inclusion of this item does not negate the need for the surveyor to comply with the Measurement Standards in Section 3.E of the Minimum Standards regarding the boundaries of the property. It only applies for the reporting of the interior features or improvements.

To perform this task there are many technologies available to the surveying industry such as rectified orthophotography, photogrammetric mapping, airborne/mobile laser scanning, etc. The accuracy these technologies provide may be sufficient to show improvements or features on the surveyed property to an acceptable accuracy of a nearby property boundary.

In all cases, the surveyor should discuss (a) the ramifications of such methodologies with the insurer, lender and client prior to the performance of the survey and, (b) place a note on the face of the survey explaining the source, date, precision and other relevant qualifications of such data to the survey. Furthermore, the client and the surveyor shall agree in writing on imagery to utilize, including source, date and/or version of imagery, and licensing cost and requirements.

ITEM 16*: Evidence of Recent Earth-Moving or Construction

When included, the surveyor would report any observation of recent earth-moving work, building construction or building additions on the surveyed property. If any work has occurred, it may indicate a possible mechanics lien against the property. The surveyor should show any feature indicating these recent improvements on the drawing and also provide a note on the survey stating the observations or any knowledge of pending improvements per Item 16. If the surveyor did not observe any indication or has no knowledge of recent earth-moving work or construction, a note should be provided.

ITEM 17*: Observed or Proposed Changes within Street Rights-Of-Way

When included the surveyor would observe any recent change that may have been made within any street right-of-way adjoining the property. These may include any roadway improvements, sidewalk, or utility improvements. The surveyor would also report any knowledge of any proposed changes for the right-of-way if information is available from the controlling jurisdiction. The client may be concerned with these changes because a widening of the right-of-way may indicate a need for a land take or easement affecting the subject property or could also indicate an assessment charged to the subject property for the improvement. The surveyor should show any feature indicating these recent improvements on the drawing and also provide a note on the survey stating the observations or any knowledge of pending improvements per Item 17. If the surveyor did not observe any indication, or has no knowledge, a note should be provided.

ITEM 18: Offsite (Appurtenant) Easements

In Section 6.C.(i) of the Minimum Standard Detail Requirements, the surveyor must show, report, and indicate the location along with the width of all plottable rights-of-way, easements and servitudes both burdening and benefiting the surveyed property. Regardless of the inclusion of Table A Item 18, the limits (boundaries) of these known benefiting easements (a.k.a. appurtenant or off-site easements) will be shown on the survey if plottable.

By including Item 18, those easement areas now become subject to Sections 5 and 6 of the Minimum Standards along with any applicable Table A Items (excluding Item 1). In essence the “easement parcel” would be addressed and included within the limits of the survey as if it were a “fee parcel”. As these easement rights are on the lands of others, the client must obtain the necessary permissions for the survey work to commence.

These appurtenant rights are typically not revealed until the title work is provided. They sometimes appear within the Schedule A of the commitment as “together with” statements or as “easement parcels” as the title company may be asked to include the beneficial easement in their coverage when possible. A surveyor may also observe evidence of an appurtenant right in performing fieldwork.

Examples of what may be involved may vary from a 50’ x 100’ driveway easement across an adjoining property for access to a public road to an outparcel having appurtenant easements across a very large mall parcel that provides access to roadways, utilities and parking. The need and the cost and additional timing for this item should be considered and discussed with the surveyor. Keep in mind that the surveyor may not have knowledge of these beneficial easements until advised or by reviewing a title commitment or report.

There may be an opportunity for the surveyor to present additional information about the appurtenant easement under a definition of responsibility in Optional Table A Item 20 that may be more cost and time efficient than the inclusion of Item 18.

ITEM 19*: Professional Liability Insurance

This item allows the client to require that the surveyor carry professional liability insurance in an amount specified and for it to be in effect throughout the contract term. The surveyor shall provide a Certificate of Insurance if requested. If required by the jurisdiction, the surveyor may need to address this item on the face of the survey.

About 85% to 90% of land surveyors carry professional liability (errors and omissions) insurance. The typical industry standard amount of a surveyor’s coverage is \$1,000,000 per occurrence. If the client elects this amount or lower, the chance is good that most surveyors could comply. However, if a higher amount were necessary, it would either limit the number of available surveyors or require the surveyor to obtain an additional coverage rider to their policy to satisfy the requested amount. These costs would be passed on to the client. Some land surveying firms, typically those associated with a civil engineering or architectural firm may have \$2,000,000 to \$5,000,000 of coverage.

One of the reasons the ALTA Survey is prepared is so that a title insurer is positioned to provide survey coverage. That coverage offers the client insurance through survey matters with exception to any survey matters addressed in the Schedule B Exceptions of the title policy. The inclusion of this item is very beneficial to the title insurer in a case where a surveyor is pursued for any loss to a survey related title claim. Requiring a surveyor to carry professional liability insurance offers a comfort to all transaction parties that the surveyor practices good business.

Furthermore, as defined, Item 19 requires the insurance coverage be in effect throughout the contract term. The contract term typically is from the date the surveyor is engaged to the date the surveyor is paid. An error or omission is typically something that is uncovered well after the satisfaction of the contract, sometimes years later. This is entirely independent of how long the surveyor is liable for their work. That may be a function of state law and depends on the state statutes for limitations and repose. It may be advisable to address any additional needs for professional liability insurance, general liability insurance and workmen’s compensation as a part of the contract terms and conditions rather than as a part of the survey requirements.

ITEM 20*: Table listing conditions and potential encroachments (NEW ITEM)

Pursuant to sections Section 5.B.v. and 5.C.iii of the minimum standards, the surveyor is required to report evidence and the location of any of the below items or conditions on the survey drawing as observed in the process of conducting the fieldwork. When Item 20 is included, in addition to reporting these features on the drawing, the surveyor must provide a table on the face of the survey that gives a summary. Without expressing a legal opinion or an opinion as to ownership, the table must identify the physical conditions and provide a means by which the conditions can be readily located on the face of the plat or map by a reviewer.

- Potential encroachments over boundary lines onto the surveyed property from adjoining property and onto adjoining property from the surveyed property
- Potential encroachments into rights of way and easements for which written documentation of the existence of such rights of way and easements was provided to or obtained by the surveyor pursuant to Section 4.
- Potential encroachments of front, side or rear setbacks, but only when the setback requirements specific to the surveyed property were provided to the surveyor pursuant to Table A item 6(a) or 6(b) or provided in recorded documents.
- Physical access between adjoining parcels without benefit of an easement for which written documentation of the existence of such easement was provided to or obtained by the surveyor pursuant to Section 4.
- Use of adjoining parcels by apparent occupants of the surveyed property without benefit of an easement for which written documentation of the existence of such easement was provided to or obtained by the surveyor pursuant to Section 4.

The word “potential” prefacing encroachments above is included because whether something is truly encroaching is not a matter of survey, but a legal determination. Surveyors are cautious in using the word encroachment as it could be misconstrued as an indication of ownership or an illegal use. Section 4 is cross referenced several times above as the surveyor is relying on information cited within a title report or by something uncovered in any necessary research performed by the surveyor to comply with requirements outlined therein. This does not require the surveyor to provide any additional research for recorded documentation that may alleviate the condition observed and reported. Likewise, if a potential encroachment is reported over a setback line, it is only the setback lines that were cited in zoning information provided to the surveyor pursuant to Table A Items 6(a) and/or 6(b) or a setback that is contained in a recorded document provided or obtained by the surveyor pursuant to Section 4.

Many surveyors have provided similar notations on their surveys to what is now defined in this Table A Item. In doing so, not only does it make it easy to review and understand these conditions for the user of the survey, but it greatly reduces questions and explanations. Surveyors who have not done this in the past may now include additional fees to provide this item.



ITEM 21:

This item was left blank intentionally. If there is a need for something to be included on the survey, that is not included in the Minimum Standard Detail Requirements or defined in Optional Items 1 through 20, it can be negotiated here. If what is contemplated is within the realm of a surveyor's expertise, the surveyor may be willing to include the item. Within the introduction preamble to the Optional Table A Items, an example is cited for requirements that would be needed for an engineering design survey that may be done in conjunction with the ALTA Survey. This blank item is not limited to that example.

If multiple items are negotiated, they should be addressed as Items 21(a), 21(b), etc.

Per Section 6.D.(g) of the Minimum Standards, should the client and the surveyor negotiate and agree on a definition for Item 21, etc., or a modified definition of Items 1-20, the surveyor must include a note on the survey as to what was defined and negotiated. This is helpful information to another party that may be looking at the survey unaware of the definition or modified definitions.

Standards Of Survey Practice And Definition Of Terms

***NOTE:** All bold black texts reference sections of the Minimum Standard Detail Requirements and Table A Optional Items in Section 1 of this Handbook.

- 1. ALTA/NSPS Land Title Survey:** Developed in 1962 by members of the title insurance industry ALTA (The American Land Title Association) and the survey industry, now the NSPS (National Society of Professional Surveyors), to depict a set of responsibilities and requirements for a specific survey product. The ALTA Survey was designed to meet a need within the title industry for a uniform and comprehensive survey upon which they could rely to delete the standard survey exceptions from the issuance of a title insurance policy and to offer endorsements to the same.
- 2. Minimum Standard Detail Requirements:** Outline the standards and responsibilities that the surveyor and the client address throughout the procurement of the survey. Although most of the requirements apply to the surveyor's responsibilities, when entering into a contract for a provision of a survey, the client is also obligated by a few responsibilities to ensure the survey's completion. The requirements tend to be updated and revised by ALTA and NSPS about every five years to meet the changing needs in the title industry and new technologies utilized in survey practice.
- 3. Optional Table A Items:** In addition to the Minimum Standards, attached thereto is a listing of 21 Optional Items that may be negotiated and added to the scope of service. The client must give the directive of what Table A Items need to be included. The surveyor is not responsible for assuming what may be needed. It is important that all transaction parties discuss these specific needs prior to engaging the surveyor. Please see the "User Guide to Table A" (page 17) of this Handbook for further explanation.
- 4. Request for Proposal:** An order for an ALTA/NSPS Land Title Survey may be requested from an owner, attorney, title company, buyer, broker or other interested party. It is recognized that these parties may all be the ultimate users of the survey and therefore should partake in discussions prior to contacting the surveyor to be certain that any imposed survey requirements or Optional Table A Items required for the transaction are identified. The party responsible for payment should also be identified so that the surveyor can provide a proposal and a contract outlining the scope seeking written authorization to proceed per **Section 2** of the Minimum Standards. Also, some types of properties may present issues outside those normally encountered in the preparation of an ALTA Survey such as mobile home communities, coal mines, wind farms, etc. During the proposal process, a surveyor may be able to suggest some alternative methods to complete the survey to save costs and expedite timing as outlined in **Optional Table A Item 15**.

5. Limits of Survey (See Sections 2 & 4): The client is to define the land that will be the limits of the survey and thereby subject to the survey requirements. For the purpose of quotation, the client should give sufficient information so that the surveyor can provide pricing and timing for completion. Once the surveyor is engaged, they anticipate receipt of the information outlined in Section 4 of the Minimum Standards to complete the survey. The limits of the survey may include offsite appurtenant easements. If Optional Table A Item 18 is included, the surveyor will address additional responsibilities to survey those appurtenant easements. The client may need to secure permission for the surveyor to enter upon the property to be surveyed, adjoining properties or appurtenant easements.

Note: Often the client or surveyor is unaware of an appurtenant easement right until the title commitment is prepared or until survey inspection. If **Optional Table A Item 18 is included, it may be necessary to renegotiate fees for additional work when the limits of these rights are defined.*

6. Authorization to Proceed: Per **Section 2**, the client (the party responsible for paying for the survey) shall provide a written authorization to the surveyor to commence work. The client may need to secure permission for the surveyor to enter the surveyed property, adjoining properties or offsite appurtenant easements.

7. Other Requirements and Standards of Care: It must be recognized that when a surveyor is providing a survey to meet the Minimum Standard Detail Requirements, they must also adhere to state statutes or administrative rules that regulate the practice of land surveying. Also, there may be local jurisdictional requirements that dictate their practice. In **Section 3.B**, it clearly states that a surveyor must address these other requirements and on the occasion where there may be a conflict with the Minimum Standards, the more stringent shall apply.

8. Normal Standards of Care: Referenced in **Section 3.C** and throughout the Minimum Standards, many of the responsibilities require that the surveyor report information using Normal Standards of Care. This refers to any local, state, regional or common practice that may be unwritten, but performed by a “prudent surveyor” in those areas. It is imperative that a surveyor be familiar with all of these practices in their localities on any given date.

9. Measurement Standards: **Section 3.E** refers to the precision standards a surveyor uses to establish boundary lines, corners, controlling monuments, lines of possession, etc. throughout the preparation of a survey. Although technologies used in the industry make precision more of an exacting science, there are still conflicts that will surface either in field observations or in record documents. This section (along with any state or jurisdictional requirements) contains the measurement standards and the definition of Relative Positional Precision that dictate the formulation of the surveyor’s opinion in establishing the boundaries, property corners and other features shown on the survey.

10. Boundary Resolution: The Minimum Standard Detail Requirements describe the responsibility in **Section 3.D** that the boundary lines and corners of any property subject to the limits of the lands shown on the ALTA Survey be established or retraced in accordance with governing boundary law principles. The surveyor must resolve the boundary of the property and reflect the same on the survey dictated by any statutory or jurisdictional requirement.

11. Records Research: Per **Section 4**, the surveyor anticipates receipt from the client of certain materials as outlined to perform and prepare the survey. A surveyor must also perform only the additional research according to statutory or administrative requirements in the jurisdiction where the property is located if they are not provided with sufficient materials to comply.

12. Supportive Documents are also called “Underlying Documents to Title” and refer to the documents relating to the insured estate. These are typically referenced in the exceptions to coverage (Schedule B-II Exceptions) of the title commitment or report. They are generally the recorded documents that disclose

the limits of the property, vesting deeds, easements, recorded surveys or plats, covenants, restrictions, mortgages, etc. **Per Section 4**, these items are to be provided to the surveyor. They will be shown and addressed on the survey per **Section 5.E and 6.C**.

13. Fieldwork: ALTA/NSPS Surveys are to be based upon fieldwork conducted on the ground (unless alternative methods are determined when **Optional Table A Item 15** is negotiated). **Section 5** outlines the multitude of responsibilities on the part of the surveyor in not only conducting the fieldwork, but in making significant observations on the property at the time the fieldwork was performed. These include but are not limited to evidence of easements, access, use of others, cemeteries, etc. By making and reporting the required observations, the title insurer can look to the information for the preparation of their title policy.

14. Monuments at Corners: Survey monuments are considered iron pins, pipes, concrete monuments, or other permanent survey markers commonly used in local areas to establish or mark property corners. The setting of monuments at property corners is optional (**Table A Item 1**) for an ALTA/NSPS Land Title Survey. The fees to include this item usually add significant cost and timing to the survey. Sometimes when the inclusion of this item is a prescribed requirement (either imposed by the lender or buyer), a client may decide to waive the request to reduce the costs.

In some states, particularly along the west coast, there are statutory laws requiring the surveyor to file a monumentation plat or record of survey with the local county governing officials whenever new monuments are placed or set. This can cause an extraordinarily high cost when performing an ALTA/NSPS Land Title Survey. A surveyor should inform the client that such statutory requirements exist and advise the client of the additional cost and timing issues.

Per **Section 3.B**, some statutory or jurisdictional requirements mandate that surveyors set survey monuments regardless of the client's inclusion of **Table A Item 1**. Other statutes may dictate monument placement and/or the filing of record of survey plats to conform to boundary resolution per **Section 3.D**.

15. Access: The surveyor is obligated by **Section 5.B and 6.C** to specifically show and note physical and vehicular access to the property or state the lack thereof. The surveyor must report the name of any street, highway or other public or private roadway abutting the property along with any dedicated right-of-way width stating clearly whether the road is public or private. In addition, the surveyor must indicate the edge of the travelled way along with the width of pavement. The surveyor must also report visible evidence of physical and vehicular access to and from the property to the travelled way such as curb cuts or depressions and driveways. The users of the survey are most concerned whether or not the property has ingress and egress to the travelled roadway within a public road right-of-way and the surveyor has the responsibility per these sections in the Minimum Standards to provide and note a clear indication of how that is or is not achieved.

16. Encroachment: Encroachments are any improvements or uses which extend across a property line, easement line, building or other restriction line for which there is no known right or permitted use. This includes but is not limited to improvements or uses encroaching onto the surveyed property from adjoining properties or from the surveyed property onto adjoining properties. This also includes uses or improvements which cross or encroach into easements or setback lines.

Per section **5.B.v. and 5.C.iii and 5.E.iv**, the surveyor must provide evidence of possible encroachments, but should not provide a legal opinion regarding the ownership or nature of the potential encroachment. Surveyors will often use words such as "potential" or "possible" when reporting an observed use. Some surveyors may also specifically state "without making a legal determination as to ownership", etc. If **Optional Table A Item 20** is negotiated in the scope of survey, In addition to showing these features or conditions on the survey drawing, the surveyor must also provide a table on the face of the survey to summarize and indicate the potential encroachment or condition.

17. Utility Locations: The Minimum Standard responsibilities in **Section 5.E.iv** require the surveyor to report the location of all visible and/or observed evidence of sub-surface utilities, which exist on, cross or serve the surveyed property. This will include, but is not limited to, above-ground power and utility lines, and any surface indications of underground utilities such as manholes, valve vaults, catch basins, fire hydrants, cable boxes, gas valves and meters, water valves and meters, sanitary sewer clean outs, utility poles or pedestals, and ground markers of subsurface utilities.

In addition to the visible/observed evidence, **Optional Table A Items 11(a) and/or 11(b)** may be negotiated to include evidence of UNDERGROUND utility installations. If **Item 11(a)** is considered, the surveyor will report evidence of these features based upon plans provided by the client. These may include prior surveys, as-built surveys, development or site plans or utility company plans. The surveyor would then reference the source of information on the survey drawing or within notations. If **11(b)** is considered, the surveyor or client requests or coordinates a request with the client for a private utility locate marking on the surveyed property. If markings are provided, the surveyor would indicate evidence of any underground utilities based on the provided markings along with a notation as to their source. The surveyor may need to converse with the client regarding these marking requests. In some jurisdictions, 811 or other similar locate requests from surveyors may be ignored. These services may require the current property owner make the request for liability. If there is an incomplete response or no response to the request, the surveyor shall make a note on the survey. By including **11(a) and/or 11(b)**, the surveyor is relying either on plans or markings by others to report evidence of these features. It does not report exacting locations. Where more detailed information is needed, the client is advised that excavation may be necessary.

Regarding utility service concerns, the buyers/borrowers, lenders and title companies want to be comfortable that the subject property has sufficient utility service for its operation and that all of those utilities enter the property from a dedicated public right-of-way abutting the property or that there is an appurtenant easement that carries that utility service to the property. Typically by addressing the surveyor's responsibilities in **Section 5.E.iv**, these concerns are satisfied and sufficient information is provided so that the title insurer can offer a utility endorsement.

18. Contours and Elevations (Vertical Relief): Contours and elevations reveal the topography of the surveyed land. This may be of interest to potential owners of a property when considering the expansion of the current use of the land or creating new uses (development). This topographic information can be included in an ALTA/NSPS Land Title Survey by negotiating optional **Table A Item 5** and can be valuable when considering drainage issues.

19. Plat or Map: **Section 6** sets forth the surveyor's responsibilities in the preparation and presentation of the survey map or plat drawing reflective of their Records Research (**Section 4**) and Fieldwork (**Section 5**) performed to the Surveying Standards and Standards of Care (**Section 3**). It outlines the specific information that is to be shown and in many cases how the information is to be reported.

20. Exceptions to Coverage are generally the second part of a title commitment entitled "Schedule B-II Exceptions" or "Exceptions to Coverage." Listed items include: encumbering easements, taxes, restrictions of record, covenants and conditions, mortgages, leases, REAs, consent decree, encroachments known from available surveys, or other encumbrances available to the title company. Any survey related exception will be addressed on the survey per **Section 5.E and Section 6.C**. Per the standards, a surveyor must provide a summary of these survey related items within notations on the face of the survey as outlined in **Items (a) through (g)** of this section.

21. Appurtenant (Beneficial or Offsite) Easements are defined rights or uses onto other properties, usually adjoining or contiguous to the subject property, allowing the subject property to use the area for parking, access, utility access, storm drainage, etc. These are typically noted within the **Schedule A** of a

title commitment. The limits (or boundaries) of these easements will be shown and plotted on the survey pursuant to Section 6.C. By negotiating **Table A Item 18**, these easement rights are now subject to the Minimum Standards and any other applicable Optional Table A Items. If included, the client must secure any necessary permission from property owners for the surveyor to enter and survey those properties.

22. Reciprocal Easement Agreements (“REAs”, also referred to as Cross Easements) burden and benefit a property. These easements are sometimes referenced both in the Schedule B Exceptions AND within the Schedule A of a title commitment or report. They burden the property by allowing others to use the subject property or a portion for parking, access to public highways, access to utilities, storm drainage or management, etc. Likewise, they provide benefits to the subject property by allowing the same uses onto lands owned by others. The limits of these easements will be shown and plotted pursuant to **Section 6.C**. By negotiating **Table A Item 18**, any appurtenant right within the REA is now subject to the Minimum Standards and any other applicable Optional Table A Items. If included, the client must secure any necessary permission from property owners for the surveyor to enter and survey those properties.

23. Exclusive Access Easements are usually appurtenant or beneficial to the subject property and provide the only or exclusive vehicle and utility access to the property. Properties not having frontage on dedicated public road right-of-ways need exclusive rights to gain access. The lack of these easements for a parcel of land not having road frontage is a major concern for lenders and buyers. Without the same, the parcel would be considered land locked. Should a survey be provided for a land locked parcel where no appurtenant access easement is revealed, the surveyor should clearly state on the survey the lack of access either by a public or private right-of-way to the property. The surveyor should also indicate on the drawing and within a notation how the subject property achieves access (i.e., a driveway or roadway and/or utilities crossing adjoining properties to the dedicated public right-of-way.) Access or any lack thereof would be shown and reported per **Section 5.B and 6.C**.

24. Surveyor’s Responsibilities Regarding Exceptions to Coverage: Per Items **6.C.i and 6.C.ii**, the surveyor is given specific instruction to address and provide notes relating to rights-of-way, easements, servitudes, etc., which may be listed as Exceptions to Coverage within the title commitment or report. In **Section 6.C.ii**, the surveyor must provide a written summary of the survey related items reviewed and learned throughout the preparation of the survey. Within the summary a surveyor should cite the record information for the item and whether or not the item is shown or located on the survey. Furthermore, as defined in definitions (a) through (g) of this section, a surveyor should provide any explanation as to why an item is or is not shown or located on the plat or map. It is the surveyor’s responsibility to state whether an item is located on the property or not. If located on the property, plot its location. If located on the property and not plotted, then provide an explanation. Based upon these reported findings and notes, the title company may determine whether the item affects or does not affect the property. If the surveyor determines that any item is NOT located on the surveyed property, the surveyor may provide objective information opining as to the subject’s effect on the property qualifying that any opinion is based solely on the description contained within the referenced document. This DOES NOT require the surveyor to determine any legal effect of any such matter.

If the surveyor should become aware of a recorded easement not identified in the title evidence (typically a commitment or report), the surveyor must advise the title insurer of any matter PRIOR to the delivery of the survey. If the title insurer provides no evidence that the easement has been vacated or released, the surveyor must include the item within the easement notes.

25. Lines of possession or evidence of occupation: The surveyor must exercise normal standards of care in the performance of making field observations and report any evidence of possession or occupation either by the subject property or adjoining regardless of the proximity to the actual boundary line. Such evidence may be fence lines, or landscaping features such as tree or shrub lines or mowing lines. The surveyor will not opine as to ownership or usage, just indications of evidence .

26. Parol: Executed or made by word of mouth or by a writing not under seal, the pleadings in a legal action formerly presented by word of mouth. A Parol agreement is an oral agreement between the owners establishing the boundaries dividing adjacent land. Parol evidence is oral evidence; that which is given by word of mouth; the ordinary kind of evidence, given by witnesses in court. Per **Section 6.D.ii.(I)**, the surveyor must provide a notation of any parol statements by interested landowners or occupants as to title or boundary issues relating to the surveyed property. It is understood that the surveyor does not have responsibilities to research or seek this information, but only report if learned while performing field work, or by local knowledge.

27. Zoning Classifications, Building Setback, Height and Area Restrictions: Often the lender, buyer, and/or title company require that the surveyor report zoning information on the survey. They are most interested in this information to check for compliance or violations of zoning restrictions. When **Table A Item 6(a)** is included, the surveyor looks to the client and/or the client's representative to provide a zoning letter and/or a zoning report specific to the surveyed property to note the information on the survey. The surveyor shall provide the notes and state the source of the information or lack of provided information.

If **Table A Item 6(b)** is included and if the zoning setback requirements are set forth in a zoning letter or report provided by the client or their representative, the surveyor will graphically depict the setback. A surveyor will not be able to depict the setback restriction if the definition is ambiguous or requires an interpretation. The surveyor shall state the source of the provided information or lack thereof.

28. Interior Parcel Lines/Adjoining Property Lines: The reporting of any gaps, gores, or overlaps of parcel or property lines is critical. Their existence may indicate ownership by a previous owner or claims by others. This applies to both interior parcel lines for the surveyed property that is comprised of two or more parcels and also to properties that adjoin the surveyed property. Title companies are asked to issue contiguity endorsements which ensure the buyer or lender that the common lines of ownership are one in the same and that no gaps, gores, or overlaps exist between adjoining properties. (See **Section 3.D and 6.B.vii**).

29. Descriptions: **Section 6.B.** gives guidance to surveyors regarding both the record description(s) and the preparation of any new descriptions. The current record description(s) of the property shall appear on the map or plat. This description comes from the last instrument of conveyance (deed, etc.) and should be the same description(s) cited in Schedule A of the title commitment. The surveyor should report any discrepancies between the record description(s), as they appear on the instrument, from what is cited in the Schedule A of the commitment. Furthermore, the surveyor shall report all distances and directions identified in the record description on the survey per **Section 6.B.iii and iv**. Should the record description not form a mathematically closed figure the surveyor shall report the same per **Section 6.B.iv**, along with any gaps, gores or overlap.

The surveyor shall cite differences of any measured or calculated data from any corresponding record data if deemed significant per **Section 6.B.iii**. Per **Section 6.B.ii**, should the surveyor deem it necessary that measured or calculated dimensions merit the preparation of a new surveyed description, the surveyor shall provide the same on the face of the survey along with a notation as to why the new description was prepared. Also, in these cases per **Section 6.B.ii**, the surveyor must provide a correlation statement between the new description and the record description stating that they are one in the same or describing how the new description differs.

Section 6.B.ii additionally notes that the preparation of a new description should be generally avoided when the record description is a lot or block in a platted, recorded subdivision.

30. Certifications: When the surveyor is comfortable that they have met all of the Minimum Standard Detail Requirements and any negotiated Optional Table A Items, the surveyor provides the form of Surveyor's Certification outlined in **Section 7** of these requirements. The surveyor is looking to the client to

provide the names of the parties to include in the certification. Within the certification the surveyor states that the map or plat (**Section 6**) and the survey on which it is based (**Section 5**) was made in accordance with the 2021 Minimum Standards (**Section 3**). The surveyor must state the Optional Table A Items within the certification that were a part of the negotiated scope. Also, the surveyor must state the date of the fieldwork corresponding to the date all reported observations were made. For more information see the Surveyor Certification on page 34 of this Handbook.

31. Review Comments: As multiple users may have review comments and revision requests, it is advisable that the client or a designated representative collect and consolidate survey review comments from all transaction parties. The coordination helps the surveyor by avoiding multiple revisions and conflicting instruction. It is also recommended that all comments be presented to a surveyor in a written format rather than verbally or as a mark-up of a survey drawing. Efforts to consolidate these comments can greatly alleviate confusing instruction and multiple revisions.

32. Deliverables and Electronic Files: **Section 8** discusses delivery of surveys to clients and other transaction parties by hard copies or in a digital format. The client can dictate how they wish to receive the survey (hard copies and/or digital). If only digital delivery transmission is negotiated, it is recognized as an acceptable form. Note however that surveying laws in some states such as Florida prohibit a surveyor from signing and sealing a digitally transmitted survey. It is typical that the digital format will be in a .PDF file that can easily be opened by the receiver.

If there is a need for drawing (CAD) files of the survey(s), it is important that it be discussed in negotiations when requesting a survey. Most surveyors are reluctant to relinquish their drawing files as they can be changed or manipulated with CAD software. Surveyors have concerns about their potential liability should someone take their file and change it in a manner that would alter the observations reported on the survey. If these are needed, it is best to work with a surveyor willing to provide them. Surveyors may also be willing to provide drawing files if allowed to make certain modifications such as removing the survey certification and providing a separate drawing file. Other surveyors may require a waiver or release of liability signed by the client to provide the drawing files. The surveyor may request additional fees to provide these files.



Definitions of FEMA Flood Zone Designations

MODERATE TO LOW RISK AREAS	
ZONE	DESCRIPTION
B and X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
C and X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.
HIGH RISK AREAS Mandatory flood insurance purchase requirements apply to all of these zones.	
ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
A1-30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.
HIGH RISK COASTAL AREAS Mandatory flood insurance purchase requirements apply to all of these zones.	
ZONE	DESCRIPTION
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
VE, V1-30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30 year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
UNDETERMINED RISK AREAS	
ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Surveyor Certification

Within the **2026 Minimum Standard Detail Requirements, Section 7-Certification**, the following verbiage appears:

"The plat or map of an ALTA/NSPS Land Title Survey shall bear only the following certification, unaltered, except as may be required pursuant to Section 3.B. above" (***See NOTE below**)

"To (name of insured, if known), (name of lender, if known), (name of insurer, if known), (names of others as negotiated with the client):

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items _____ of Table A thereof. _____

Date of Plat or Map: _____ (Surveyor's signature, printed name and seal with Registration/ License Number)"

It is clear by the directive in this section that alternative forms of certification are prohibited. The verbiage states "The Survey shall bear **ONLY** the following certification, **UNALTERED**, except as may be required pursuant to Section 3.B above." (*See note below). Any certificate provided that deviates from this would be a contradiction and would nullify the Survey from being classified as an ALTA/NSPS Land Title Survey.

***NOTE:** The "except as may be required pursuant to Section 3.B above", does allow additions or alterations if Federal, State or Jurisdictional requirements, regulations or standards of surveying practice are mandated. For example, some state statutes for survey law may require some alternative or additional verbiage. Per Section 3.B of the Minimum Standard Detail Requirements, the more stringent requirement will apply.

In the past, when alternative forms of certification were considered, a majority of the verbiage contained therein was for the most part redundant statements reiterated and addressed as Minimum Standards Detail Requirements. Those reiterations within alternative certification forms offered no additional assurance other than the following statement within the prescribed form above: *"This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS."*

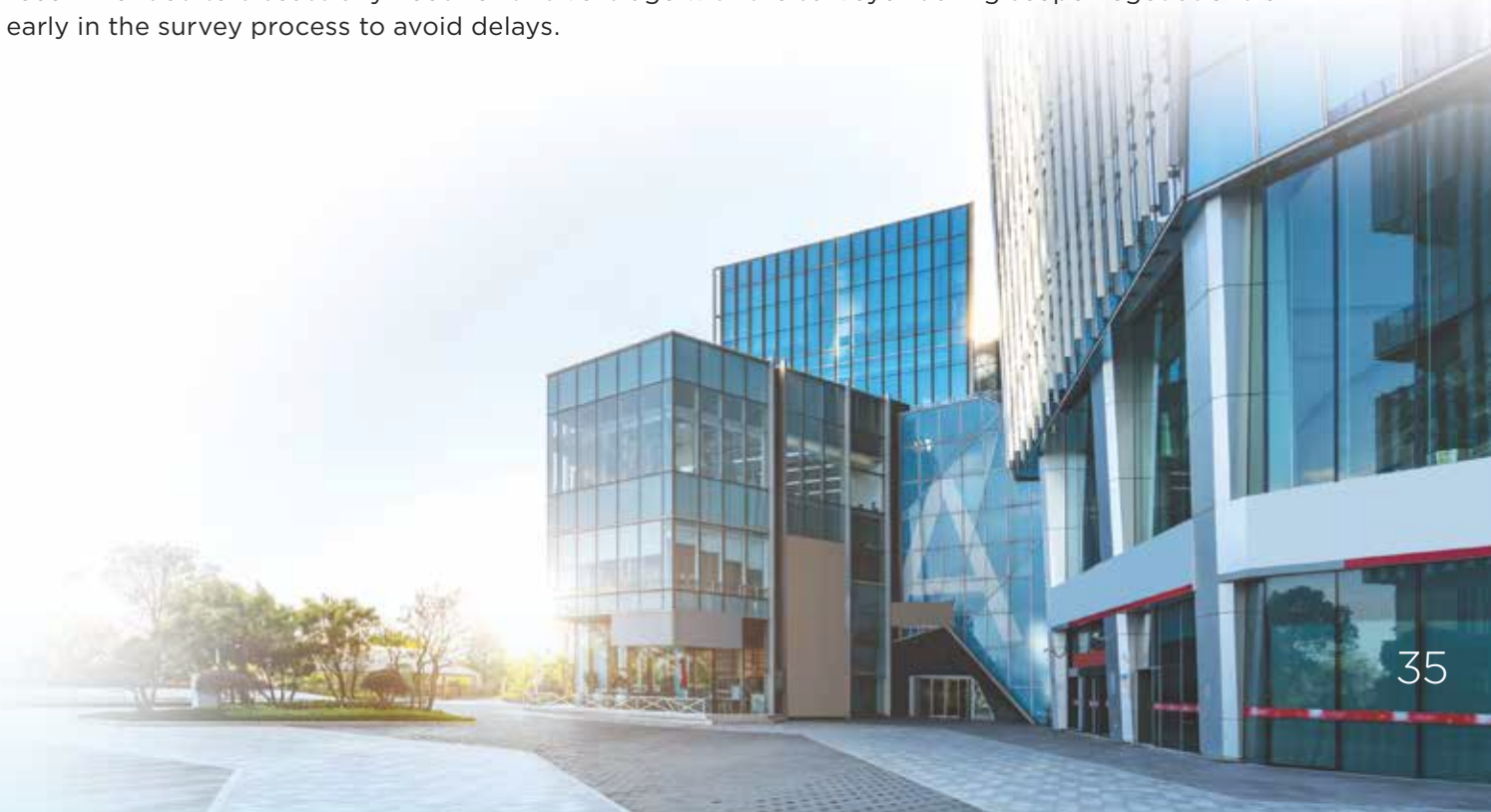
Should there be a need for a statement to be made by the surveyor to expand upon a Minimum Standard Detail Requirement, any negotiated optional Table A Items or to address any additional responsibilities, the surveyor can be asked to provide a general note(s) on the survey. The surveyor and the client can also negotiate an Optional Table A Item (Item 21) to provide such general notation(s) as long as it is within the parameters of the surveyor's expertise. The surveyor then must also comply with Section 6.D.ii.g of the Minimum Standards and explain any modification and the nature of any additional Table A Items (**e.g. 21(a), 21(b)**, etc. on the face of the survey).

Within the certification, the surveyor is asked to provide the date of the fieldwork. This is representative of the date the surveyor was on the property collecting data and making observations. Many of the Minimum Standard Detail Requirements involve the reporting of specific matters observed by the surveyor while conducting the survey. The date of the fieldwork reflects when those observations were witnessed. From both the surveyor's and the title company's perspective this is the important date relating to liability. The "date of plat or map" is at the discretion of the surveyor and typically the date that the plat or map was completed. The "date of last revision" corresponds to any revisions made by the surveyor.

It is up to the lender and the title company to determine if the date of fieldwork, date of plat or map and date of last revision are recent enough for their transaction. How long a surveyor is willing to provide revisions to a survey compared to the date of the fieldwork and the date of plat or map is at their discretion. If a surveyor is asked to update a survey to include a new date of fieldwork and/or a new date of survey, it would be necessary to also update the survey to the current Minimum Standard requirements and for the surveyor to certify to the same. In some instances, the timing for revisions is dictated by state surveying statutes or professional liability insurance policies.

If considering ordering a survey in the early stages of contemplation, a client would be advised to discuss transaction timing with the surveyor including dates of fieldwork and dates of survey. If the closing of a transaction is prolonged and parties want the surveyor to revise these dates on a survey that had been previously provided, a surveyor may require additional fees to provide any fieldwork or revision they deem necessary. If the surveyor is made aware of such timing, they may choose to discuss and provide any associated costs for updates in their initial proposal or provide a line item for such update or revision pricing.

With the adoption of the 2026 Minimum Standards, a new directive has been included for surveyors in Section 7.B. It states that the certification may be extended to successors and assigns of the lender if requested. Since the word "may" is included, it still is considered a point of negotiation between the surveyor and the client. Many surveying firms across the country are not willing or able to certify to successors and/or assigns language. Their legal counsel or an insurance provider for Professional Liability Insurance prevents them from doing so. It is advisable to alert the surveyor to such a need during the quoting process to guarantee the surveyor is comfortable in meeting this request. It is recommended to discuss any need for this verbiage with the surveyor during scope negotiations or early in the survey process to avoid delays.



Survey Review Checklist For ALTA/NSPS Land Title Surveys

Per ALTA/NSPS Minimum Standard Detail Requirements, the survey shall include the following:

(Please note that the numbered section references below refer to the subsections of the ALTA/NSPS Survey Requirements in Section 1 of this Handbook)

Section 5: Fieldwork

Section 5.A

- _____ Location, size, character, type and relationship to grade of monuments found or set (per Table A Item 1 or jurisdictional standards)
- _____ Location, description and character of lines that control the boundaries

Section 5.B.i

- _____ Distance from corner(s) of surveyed property to nearest street right-of-way lines if not butting a right-of-way

Section 5.B.ii

- _____ Names of streets, highways or public way abutting property
- _____ Width and location of each edge of traveled way relative to the surveyed property

Section 5.B.iii

- _____ Visible evidence of physical and vehicular access (i.e. curb cuts, driveways)

Section 5.B.iv

- _____ Location and character of access by others than the apparent occupants to or across the surveyed property (i.e. private roads, driveways, alleys, railroads, railroad sidings and spurs, sidewalks, etc.)

Section 5.B.v

- _____ Location and extent of potential encroachments of access features by adjoining properties onto the surveyed property

Section 5.B.vii

- _____ Observed evidence of access to and from waters adjoining the surveyed property (i.e. paths, boat slips, launches, piers, docks)

Section 5.C.i

- _____ Character and location of evidence of possession or occupation along perimeter

Section 5.C.ii

- _____ Character and location of improvements within five feet of each side of boundary lines unless access is restricted

Section 5.C.iii

- _____ Evidence and location of potentially encroaching structural appurtenances and projections by or onto adjoining properties, rights-of-way, easements or setback lines

Section 5.D

- _____ Location of buildings on surveyed property

Section 5.E.i

- _____ Evidence of easements or servitudes burdening the surveyed property disclosed in documents provided or obtained by the surveyor and observed

Section 5.E.ii

- _____ Observable evidence of easements, servitudes or other uses by other than the occupants not disclosed in the documents provided or obtained but observed, if they appear to affect the surveyed property (i.e. roads, drives, sidewalks, paths, utility service lines, water courses, ditches, drains, telephone, fiber optics, electric, water, sewer, oil or gas pipelines on or across surveyed property, and on adjoining property)

Section 5.E.iii

- _____ Surface indications of underground easements or servitudes (i.e., utility cuts, vent pipes, filler pipes), including any observed utility locate markings along with the source of markings, if known

Section 5.E.iv

- _____ Evidence on or above the surface which may indicate utilities located on, over or beneath the surveyed property (i.e., pipeline markers, manholes, valves, meters, transformers, pedestals, clean-outs, utility poles, overhead lines and guy wires) and any utility pole including crossmembers and overhangs on adjoining properties within a ten-foot limit of the surveyed property

Section 5.F

- _____ Evidence of cemeteries, gravesites and burial grounds on the surveyed property as observed or as disclosed in documents provided to the surveyor

Section 5.G.i

- _____ Location of any springs, ponds, lakes, streams, rivers, canals, ditches, marshes and swamps on, running through or within five feet of the surveyed property

Section 5.G.ii

- _____ Location of any water feature forming a boundary of the surveyed property; the attribute (i.e. top of bank, edge of water, high water mark) should be congruent with the boundary as described in the record description or new description

Section 6: Plat Or Map**Section 6.B.i**

- _____ Current record description of the surveyed property. In the case of an original survey, the current record description of the parent tract that contains the surveyed property

Section 6.B.ii

- _____ Any new description of the surveyed property (if applicable) prepared in conjunction with the survey
- _____ Statement explaining why new description was prepared
- _____ If a new description is prepared, a note shall be provided stating (a) that the new description describes the same real estate as the record description or, if it does not, (b) how the new description differs from the record description.

Section 6.B.iii

- _____ Point of Beginning, remote point of beginning, point of commencement and all distances and directions as appearing in record and new description
- _____ Measured or calculated dimensions in addition to record when differs from the record by amount deemed significant by the surveyor, such dimension shall be shown in addition to, and differentiated from, the corresponding record dimension.

Section 6.B.iv

- _____ Directional, distance and curve data
- _____ Statement if record description does not close mathematically
- _____ Basis of bearings and difference from record, if any

Section 6.B.v

- _____ Balance of parcel shown if whole parcel not surveyed and notation indicating extent of survey

Section 6.B.vi

- _____ Date of measurement of title line defined by a water boundary, which attribute(s) was (were) located and a caveat that water boundary is "subject to change due to natural cause and that it may or may not represent actual location of limit of title"

Section 6.B.vii

- _____ Contiguity, gores, and overlaps along the exterior boundaries with adjoining lands
- _____ Interior parcel lines for multiple parcel properties with gores and overlaps, if any

Section 6.B.viii

- _____ Any notation (if applicable) regarding major discrepancies between record and measured information and an explanation impacting boundary resolution

Section 6.B.ix

- _____ The location of all buildings dimensioned perpendicular to perimeter lines (i.e., where potentially impacted by a setback line)

Section 6.B.x

- _____ Any notation (if applicable) explaining site conditions negating Relative Positional Precision

Section 6.B.xi

- _____ Note identifying areas within five feet of the boundary, if any, to which access was restricted

Section 6.B.xii

- _____ Note on the plat or survey identifying the title commitment or other title evidence, effective date and name of insurer

Section 6.C.i

- _____ Location, width and recording information of all plottable rights of way, easements and servitudes burdening and benefitting the surveyed property per documents provided or obtained

Section 6.C.ii

- _____ Summary of all rights of way, easements and other survey related matters burdening the surveyed property and identified in the title evidence provided to or obtained by the surveyor. Summary must include the recording information and a statement indicating whether it lies within or crosses the surveyed property, and a related note if: (a) its location is shown; (b) its location cannot be determined by the record document; (c) there was no observed evidence at the time of the fieldwork; (d) it is a blanket easement; (e) it is not on, does not touch, and/or - based on the description contained in the record document - does not affect, the surveyed property; (f) it limits access to an otherwise abutting right of way; (g) the documents are illegible; or (h) the surveyor has information indicating that it may have been released or otherwise terminated.

- _____ For surveyed property consisting of multiple parcels, notes indicating which parcels the rights of way, easements and servitudes cross or touch

Section 6.C.iii

- _____ Note if no physical and vehicular access to a public way or an abutting private right of way was observed

Section 6.C.iv

- _____ Locations and widths of rights of way abutting or crossing and source of information (if variable, indicate as “variable”)

Section 6.C.v

- _____ Identifying titles of record plats, filed maps, right of way maps, etc. with recording or filing data

Section 6.C.vi

- _____ For non-platted adjoining land, recording data and tax parcel number (if available) identifying adjoining tracts as per current public records
- _____ For platted adjoining land, the recording data of the subdivision plat

Section 6.C.vii

- _____ If the surveyor reveals a recorded easement not identified in the title evidence and no affirmation has been received from the title insurer that said easement has been released or vacated, a notation referencing said item is to be included on the survey within the easement notes.

Section 6.D.i

- _____ Minimum size 8.5 x 11 inches (22" x 34" B&C Standard)
- _____ Written Scale and Graphic scale

Section 6.D.ii

- _____ Property boundary line distinguishable
- _____ Note "No buildings observed", if applicable
- _____ North Arrow *North orientation of plat (toward top of drawing preferred)
- _____ Legend of symbols and abbreviations
- _____ Vicinity Map reference to highways and intersection
- _____ Supplementary or detail diagrams when necessary.
- _____ Notes explaining modifications to Table A items and additional Table A items (e.g., 21(a), 21(b), 21(c)) negotiated between the surveyor and client.
- _____ Surveyor name, address, phone number, email
- _____ Surveyor project number (if any)
- _____ Surveyor seal, signature, reg. number
- _____ Date of all plan revisions
- _____ Sheet numbers
- _____ Caption "ALTA/NSPS Land Title Survey"
- _____ Any parol statement based on an oral statement or agreement or evidence acquired in the process of conducting the field work or a statement of no knowledge of any

Section 7: Certification

- _____ ALTA/NSPS Prescribed form of Survey Certification
- _____ Date of Fieldwork Completion
- _____ Negotiated Table A Items
- _____ Designated parties named in certification
- _____ Date of Plat or Map

Optional Table A Items required as negotiated

- _____ 1. Monuments placed at all major corners
- _____ 2. Verification of address(es) by observation or in documents provided or obtained
- _____ 3. Flood zone classification and graphic plotting if (2) or more zones.
- _____ 4. Gross land area (and other areas if specified by client)
- _____ 5. Vertical relief and source of information along with originating benchmark
- _____ 6(a). Current zoning classification, setback requirements, height, floor space area restrictions, and parking requirements in letter or report provided.
 - _____ Identify the date and source of the report or letter.
- _____ 6(b). Graphically depict building zoning setback requirements in report or letter provided the client if those requirements do not require an interpretation
 - _____ Identify the date and source of the report or letter.
- _____ 7(a). Exterior dimensions of all buildings at ground level

- _____ 7(b). Square footage of
 - _____ (1) exterior footprint of all buildings at ground level
 - _____ (2) other areas defined by client
- _____ 7(c). Height of all buildings above grade at a defined location
- _____ 8. Substantial observable features (i.e., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse).
- _____ 9. Number and type of parking spaces on surface parking areas, lots and in structures. Striping of identifiable surface parking spaces
- _____ 10. Relationship of division or party walls to adjoining properties as designated by the client (client to obtain necessary permissions)
- _____ 11. Evidence of underground utilities existing on or serving the surveyed property (in addition to the observed evidence of utilities pursuant to Section 5.E.iv) as determined by:
 - _____ (a) plans and/or reports provided by the client (with reference as to the sources of information)
 - _____ (b) markings coordinated by the surveyor pursuant to a private utility locate request
- _____ 12. Governmental Agency survey-related requirements as specified by the client (i.e. HUD)
- _____ 13. Names of adjoining owners per current tax records
- _____ 14. Distance to the nearest intersecting street
- _____ 15. Orthophotography, photogrammetric mapping, remote sensing, laser

scanning, and other products for the basis of locations of certain features excluding boundaries. Include a note that explains the source, date, relative accuracy and other relevant qualifications of any such data.

- _____ 16. Observable evidence of recent earth-moving work, building construction, or additions
- _____ 17. Any changes of street right of way lines either completed or proposed. Observable evidence of recent street or sidewalk construction or repairs.
- _____ 18. Include any plottable offsite easements or servitudes as disclosed in documents provided or obtained within the limits of survey subject to the Minimum Standards and any optional Table A Items (client to obtain necessary permissions).
- _____ Professional Liability Insurance (item shall not be addressed on the face of survey unless by jurisdictional requirement)
- _____ 20. Summary table of potential encroachments or conditions over boundary lines, into rights-of-way, building lines, physical access between adjoining properties and use of adjoining parcels.
- _____ 21. Any additional item(s) negotiated between surveyor/client. Definition should appear on the survey within a general note.





Section 2

Commercial Zoning Reports

Introduction: The Who, What and Why of Zoning

The practice of Zoning is defined as:

The separation or division of a municipality into districts, the regulation of buildings and structures in such districts in accordance with their construction and the nature and extent of their use, and the dedication of such districts to particular uses designed to serve the general welfare.

With this in mind, certain questions arise related to commercial real estate zoning due diligence:

- » **What Is It?**
- » **Who Orders It?**
- » **Why Do I Need It?**
- » **How Can I Order It?**

The following text will address and answer these questions:

» **What Is It?**

Zoning due diligence is a broad term that is frequently used to refer to the research and data collection needed to produce the findings within a zoning information report for a commercial property transaction.

A standard zoning report typically includes:

- the current zoning district for the property
- applicable zoning district code requirements including height, setbacks, lot area, lot coverage, density, minimum parking and the right to rebuild in the event of casualty
- results of a comparison of zoning code requirements to an ALTA Survey of the property and notice of any nonconforming items, notice of open/unresolved municipal zoning, building or fire code violations
- information regarding applicable relief and entitlements (i.e., variances, special permits, conditions, exceptions, etc.)
- information regarding applicable site/development plans and conditions of approval
- copies of existing certificates of occupancy
- adjacent property zoning
- conforming status as provided by governing municipality

» Who Orders It?

Attorneys, title insurers, property owners, brokers, buyers, lenders—anyone who wants to get a clear picture of the zoning situation for a property in which they are interested.

Zoning Information Reports from NV5 Zoning may be relied upon by all major lenders and title companies.

» Why Do I Need It?

The “why” varies depending on the ordering client’s needs. A property owner or potential buyer may want to know if the current or intended use of the property is permitted in a zoning district. A potential buyer and their lender will want to get a solid picture of any possible problems with the property such as code violations, setback or parking deficiencies, restrictive overlay, right to rebuild an existing nonconforming structure as-is in the event of casualty, etc. An individual may be seeking to obtain a zoning endorsement for title, which “insures the insured against losses arising from a court order which prohibits use of the land for specified purposes permitted by the zoning or requires the removal or alteration of a structure located on the land because certain physical characteristics of either the land or a structure located on the land violate the ordinance.” Attorneys frequently use zoning information reports as initial research prior to issuing formal zoning opinions.

It should be noted that if Table A Item 6 (b) is requested when ordering an ALTA Survey, the list of zoning requirements must be provided by a third party requiring special zoning reports for that purpose. Additionally, the user should be aware that zoning codes are updated and overlay zones are frequently added resulting in previously conforming properties becoming pre-existing nonconforming properties. Whether preparing for a property sale negotiation or finding a level of comfort regarding an investment, a zoning report will provide the most up-to-date information available regarding the property.

» How Can I Order It?

Typically, a property address is all that is needed in order to obtain a quote for zoning, but any additional information you may have, such as a parcel number, current use, prior survey, offering memorandum and turnaround time can be helpful when preparing a comprehensive proposal. Once a standard zoning report is ordered, an ALTA Survey will be required in order to complete the survey comparison portion of the report.



Types of Reports

STANDARD COMPARISON ZONING REPORT

This report is the industry-standard zoning report designed to meet 3.1 title endorsement requirements. It has an average turnaround time of 15 business days and contains the following information:

- Municipal zoning compliance or verification letter
- Applicable municipal zoning code sections, typically including:
 - Permitted uses
 - Height, setback, lot size and coverage, floor area ratio
 - Minimum parking space requirement
 - Right to rebuild nonconforming structure in the event of casualty
- Relief/Entitlements: variances, special permits, conditions, exceptions, ordinances
- Copy of, or excerpts from, applicable site/development plan, if applicable
- Notice of any open/unresolved zoning, building and/or fire code violations of record
- Copy of existing Certificate(s) of Occupancy
- Conforming status as provided by municipality
- Applicable zoning map portion
- Adjacent property zoning designations
- Table of current municipal zoning code requirements from code sections mentioned above
- Comparison of current municipal zoning code requirements as listed above to existing site survey conditions and notice of any nonconformities to zoning requirements as noted

SUMMARY ZONING REPORT

This report is ordered if a survey is not available or a survey comparison is not needed. The timeframe is similar to the comparison report (15 business days), and it contains the following information:

- Municipal zoning compliance or verification letter
- Applicable municipal zoning code sections, typically including:
 - Permitted uses
 - Height, setback, lot size and coverage, floor area ratio
 - Minimum parking space requirement
 - Right to rebuild nonconforming structure in the event of casualty
 - Relief/Entitlements: variances, special permits, conditions, exceptions, ordinances
- Copy of, or excerpts from, applicable site/development plan, if applicable
- Notice of any open/unresolved zoning, building and/or fire code violations of record
- Copy of existing Certificate(s) of Occupancy
- Conforming status as provided by municipality
- Applicable zoning map portion
- Adjacent property zoning designations
- Table of current municipal zoning code requirements from code sections mentioned above

EXECUTIVE SUMMARY ZONING REPORT

This report was designed to provide the best snapshot of a property in the shortest amount of time. The quick turn-time is possible because documents are not requested from the municipality, instead relying on information that can be provided via Internet, fax, phone and email sources. The Executive Summary can typically be prepared within 5-10 business days and contains the following:

- Confirmation via phone/fax/email/map of current zoning district
- Conforming status as provided by municipality
- Table of current municipal zoning code requirements from code sections mentioned above
- Comparison of current municipal zoning code requirements as listed above to existing site survey conditions and notice of any nonconformities to zoning requirements as noted

**This report not suitable for properties zoned PD/PUD (Planned Development)*

ZIP REPORT

This report is used to provide the zoning information required by surveyors in order to fulfill Table A Items 6(a) and 6(b) for an ALTA Survey and is typically completed within 5 business days. Contents are:

- Confirmation via phone/fax/email/map of current zoning district
- Applicable municipal zoning code sections, typically including
 - Permitted uses
 - Height, setbacks, lot size and coverage, floor area ratio, minimum parking space requirement
 - Right to rebuild nonconforming structure in the event of casualty
- Table of current municipal zoning code requirements from sections noted above
- Applicable zoning map portion

**This report not suitable for properties zoned PD/PUD (Planned Development)*

CUSTOM REPORTS

Zoning reports may be tailored to meet specific client project needs. Here are some examples of how NV5 Zoning can customize reports:

- Add certain components to abbreviated reports, such as adding violations or code pages to a ZIP Report
- Add components not listed, but within our realm of expertise, such as adding planned public improvements/condemnation information to a standard report
- Remove components not applicable or not required for a particular transaction
- Customize report template/format to client specifications
- Create a report for a specific purpose, such as a report for raw land, which might contain:
 - Municipal zoning compliance or verification letter
 - Applicable municipal zoning code sections for use, height, setbacks, lot area and parking
 - Copy of, or excerpts from, applicable site/development plan, if applicable
 - Applicable zoning map portion and adjacent property zoning designations
 - Table of current municipal zoning code requirements from code sections mentioned above

Please contact NV5 Zoning with any questions about any of our reports: 1-800-787-8390.

Report Comparison Table

	Standard Comparison Zoning Report	Summary Zoning Report	Executive Summary	Zip Report	Custom
Municipal zoning compliance or verification letter	X	X			See page 44
Confirmation via phone/fax/email map of current zoning district			X	X	
Applicable municipal zoning code sections typically including: permitted uses, height, setback, lot size and coverage, floor area ratio, minimum parking space requirement	X	X		X	
Right to rebuild nonconforming structure in the event of casualty	X	X			
Relief/Entitlements: variances, special permits, conditions, exceptions, ordinances	X	X			
Copies of, or excerpts from, applicable site/development plan, if applicable	X	X			
Notice of any open/unresolved zoning, building and/or fire code violations of record	X	X			
Copy of existing Certificate(s) of Occupancy	X	X			
Conforming status as provided by municipality	X	X	X		
Applicable zoning map portion	X	X		X	
Adjacent property zoning designations	X	X			
Table of current municipal zoning code requirements from code sections mentioned above	X	X	X	X	
Comparison of current municipal zoning code requirements as listed above to existing site survey conditions and notice of any nonconformities to zoning requirements as noted	X		X		
Timing in business days	15	15	10-15	5	



Section 3

Environmental Site Assessments and Property Condition Assessments

Introduction: Environmental Site Assessments (ESAs) and Property Condition Assessments (PCAs)

As part of a commercial real estate transaction, either driven by the acquisition or refinance of a property, various parties involved may request that a **Phase I Environmental Site Assessment (ESA) and/or a Property Condition Assessment (PCA)** be conducted. These reports can be required for one or more reasons and often serve multiple purposes related to the transaction, financing and/or liability. As each transaction party has their own interests and due diligence requirements, the reasoning for the request may differ.

For example, a potential purchaser and/or their investors may wish to have these assessments conducted to assist in making an informed purchase decision through the identification of any major environmental or engineering issues that may be present or impacting at the property. Once identified, these issues play an important part in the transaction negotiations. A related reason for having an ESA conducted is that it provides a level of assurance for regulatory purposes should an environmental issue be identified in the future. If an ESA was conducted according to the ASTM 1527-21 standards and the All Appropriate Rule requirements, the property owner will be protected as an innocent landowner from future regulatory liability. If not, then the owner could be liable for future costs related to an environmental cleanup.

When considering the lender, most lending institutions require that some level of environmental assessment be conducted. It provides them with a level of comfort that they are not lending on a contaminated property for which they could be potentially liable.

Depending on the lender (if applicable) and other circumstances, an ESA or some level of environmental assessment is required more frequently than a Property Condition Assessment (PCA). However, both potential purchasers and lenders often still require some physical assessment to ensure that the real property and its improvements are in acceptable condition and also to identify any major deficiencies requiring immediate or near term repair or replacement.

Most commonly, reports are ordered by either the lender, or their mortgage broker agent, the property owner or potential purchaser. On occasion, attorneys or management companies may be the initial ordering party. Regardless of who orders the reports, they are usually provided to the lender (as applicable) or other involved parties.

When ordering reports, the individual charged with providing the information to initiate the process should have possession of a number of key pieces of information that are critical in order to insure that the work is conducted appropriately. Most important is an accurate description of the property and the improvements that are considered part of the asset. All too often an extra parcel of land or an outbuilding is missed.

Following is a list of items requested at the time of ordering:

- An accurate description of the property and improvements
- Current address or range of addresses
- Name of the property, if applicable
- Site map or ALTA Survey of the property
- Size of the property
- Indication if there are multiple parcels and if they are contiguous or not
- Type, age and size of improvements, i.e. number of buildings, usage, number of units or tenant spaces
- A rent roll
- Any previous environmental or engineering reports
- Summaries of historical capital improvements
- Any known issues and planned capital improvements
- Required or desired scope of work

The final bullet “required or desired scope of work” is often overlooked as it may be an internal decision or dictated by the lending institution. Regardless, this must be provided in the beginning of the process to ensure that the scope is met. If not, funding or the closing of the purchase could be delayed.

Environmental Site Assessments (Phase I and Phase II Reports)

NV5 Environmental and Assessment performs Phase I and Phase II Environmental Site Assessments in conformance with American Society for Testing and Materials (ASTM) E 1527-21 and E1903 respectively and the Environmental Protection Agency All Appropriate Inquiry.

A Phase I ESA (ASTM E1527-21) is used to gather information to identify Recognized Environmental Conditions (RECs) which may be associated with a subject property. It identifies actual or potential environmental contamination through records research, site inspection and interviews with owners and occupants which may impact the property value. It is conducted based upon the standards defined by the American Society for Testing and Materials (ASTM) and the Environmental Protection Agency (EPA) All Appropriate Inquiry.

If the potential for impact is identified through the course of the Phase I process, a Phase II (limited subsurface investigation) may be warranted.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment identifies Recognized Environmental Conditions (RECs) associated with a property which may impact that ultimate value of the property. NV5/Bock & Clark Environmental and Assessment adheres to all industry standards in preparation of its reports giving the user the information needed to proceed in a commercial real estate transaction.

Preparation of the Phase I ESA (ASTM E1527-21) is overseen by an Environmental Professional and includes the following:

- Historical sources
- Radius map search of the local, state, tribal and federal databases
- Regulatory interviews of state and local government officials
- Owner/Occupant interviews—past and present—shall be attempted
- Site reconnaissance performed under the charge of an Environmental Professional - including property structures; periphery of the property; current and past uses of the property; obvious geologic, hydro-geologic and topographic conditions; roads; and potential hazardous substances
- Other observations including radon and visual inspections of lead-based paint, asbestos and mold potential. Testing not included in the basic report but can be conducted for an additional fee.

A written report of observations and conclusions will be prepared and presented in accordance with standard practices.

Visit NV5's website www.nv5.com/real-estate-transaction-services/environmental-assessment/phase-i-esa to review our Sample Phase I Environmental Site Assessment for a comprehensive list of inclusions.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

In the event that the findings of a Phase I Environmental Site Assessment result in a question of contamination, a Phase II ESA can be ordered. A more extensive report, the Phase II requires property sampling and laboratory analysis. Items that may be included in the testing and research for a Phase II can include, but are not limited to::

- Soil and water samples
- Soil vapor testing
- Subsurface soil borings
- Groundwater monitoring, sampling and analysis
- Drum sampling (if any are present on the property)
- Lab analysis
- Testing for buried tanks and drums
- Testing of underground storage tanks (USTs)

Following are some Recognized Environmental Conditions that may necessitate the request for a Phase II Report:

- Property contained underground storage tanks (USTs)
- Existing USTs are past their life expectancy
- Evidence of a release (leaking drum, compactor) or threatened release
- Historical Use: Drycleaners, Metal Plating Facility, Gas Station, Auto Repair, Lumber Yard and others

Please contact [NV5](#) for more information: [1-800-787-8397](tel:1-800-787-8397).



Reporting Practices for Environmental Site Assessments

Phase I Environmental Site Assessments

NV5 conducts Phase I Environmental Site Assessments (ESA) in conformance with American Society for Testing and Materials (ASTM) E1527-21 and the Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI). The term recognized environmental condition (REC) means (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

The identification of recognized environmental conditions in connection with the subject property may impose an environmental liability on owners or operators of the site, reduce the value of the site, or restrict the use or marketability of the site, and therefore, further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities. The Phase I ESA is completed under the responsible charge of an Environmental Professional and includes the following components:

HISTORICAL SOURCES including building department records, historical aerial photographs, local street directories, fire insurance maps, topographic maps, and other credible sources of past uses or occupancies shall be reviewed as available and necessary.

RADIUS MAP SEARCH of local, state, tribal and federal databases will be conducted according to the current ASTM and AAI standard search distances.

REGULATORY INTERVIEWS of state and local government officials will be conducted in person, by telephone, or in writing to obtain information on permits and compliance history associated with hazardous substances and petroleum products, and information indicating recognized environmental conditions in connection with the property.

OWNER/OCCUPANT INTERVIEWS including past and present owners, occupants, neighbors, and/or other persons who are familiar with the property will be attempted in person, by telephone, or in writing regarding the history, operations, management, waste management practices, and other environmental considerations for the property as those persons are available and open to an interview.

SITE RECONNAISSANCE will be performed under the charge of an Environmental Professional. This involves a reasonable observation of the property and structures, the periphery of the property, the interior common areas of structures, and a representative sample of occupant spaces. Items such as current and past uses of the property and adjoining properties; obvious geologic, hydrogeologic, and topographic conditions; structures; roads; potential hazardous substances and petroleum products; storage tanks; odors; pools of liquid; drums; containers; surface waters; suspected fill materials; stained soil or pavement; stressed vegetation; solid waste; waste water; wells; and septic systems shall be noted as reasonably and visibly observed.

NON-SCOPE CONSIDERATIONS, as defined by ASTM

E1527-21, are not included within this scope of work unless specifically requested by the client. Non-scope considerations include: asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance and wetlands.

A written report summarizing observations, findings and conclusions will be prepared.

Property Condition Assessments

NV5 Environmental and Assessment is experienced in conducting Property Condition Assessments on all types of commercial properties. The PCA, sometimes referred to as a Property Condition Report (PCR), is designed to assess the physical condition of a property by conducting a limited walk-through survey in compliance with the ASTM E2018-15 Standards Guide for Property Condition Assessments.

INCLUDED IN A PROPERTY CONDITION ASSESSMENT

The Field Observer preparing the report will note any material physical deficiencies or deferred maintenance for the following:

- Site Improvements
- Structural Framing and Building Envelope
- Facades: non-invasive and visual review
- Roofs: non-invasive and visual review
- Mechanical/Plumbing/Electrical
- Elevators
- Life Safety/Fire Protection
- Interior Elements: typical common areas
- ADA Compliance

Other Services

NV5's Environmental and Assessment division is pleased to provide the commercial real estate industry with Phase I and Phase II ESAs and Property Condition Assessments but recognizes that sometimes specific items not contained in a full report and requiring a faster turnaround time may be necessary. For these reasons NV5 also offers the following additional services.

- PML (Probable Maximum Loss Survey)
- Asbestos Surveys and Operations & Maintenance Planning (O&Ms)
- Lead Based Paint Surveys and O&Ms
- Moisture Minimization Plan
- Radon Surveys
- ADA Studies

Contact us for more information at 1-800-787-8397.

Reporting Practices for Property Condition Assessment (PCA)-Baseline

The purpose of the PCA is to assess the general physical condition of the Subject Property by conducting a limited walk-through survey. The PCA protocol will comply with the ASTM E2018-15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (the “ASTM Standard”). Based upon the concept of representative observations, the Field Observer will note observed material physical deficiencies of the following systems:

SITE IMPROVEMENTS: Topography, Stormwater Drainage, Access and Egress, Paving, Curbing and Parking, Flatwork, Landscaping, Recreation Facilities and Utilities.

STRUCTURAL FRAMING AND BUILDING ENVELOPE: Identify the material structural framing system including the foundation system (note the presence of cellars, basements, or crawl spaces). Observations are generally to be limited to grade, accessible balconies, or rooftop vantage points.

FACADES (NON-INVASIVE, VISUAL ONLY): Observe facade systems, architectural elements, fenestration, appurtenances, parapets, etc.

ROOFS (NON-INVASIVE, VISUAL ONLY): Identify the material roof systems including roof type, reported age, slope, drainage, etc., observe for evidence of material repairs, significant ponding, or evidence of material roof leaks.

MECHANICAL/PLUMBING/ELECTRICAL: Identify observed or reported mechanical (plumbing, heating and air conditioning) or electrical distress or obvious inappropriateness of design of plumbing, heating, air conditioning, ventilating, and electrical systems; remaining expected useful life; level of preventive maintenance exercised, reported deficiencies and/or inadequacies, etc.

ELEVATORS: Identify the vertical transportation systems. Observe elevator cab finishes. Identify whether a maintenance contract is reported to be in place.

LIFE SAFETY/FIRE PROTECTION: Identify and observe life safety and fire protection systems, including sprinklers and standpipes, hydrants, alarm systems, detectors, extinguishers, etc.

INTERIOR ELEMENTS: Observe typical common areas including, but not limited to, lobbies, corridors, assembly areas, and restrooms. Identify and observe typical finishes, that is, flooring, ceilings, walls, etc., and material building amenities or special features, such as spas, fountains, clubs, shops, restaurants, etc.

ADA EVALUATION: The Property Condition Assessment includes a Baseline Americans with Disabilities Act (ADA) Evaluation, which is a Visual Accessibility Survey consisting of a limited scope visual survey and based on the checklist provided in ASTM E2018-15. This evaluation screening is not to be considered an in-depth ADA or FHA survey or audit. The opinions regarding ADA compliance should be considered preliminary.

During the course of the site inspection, Physical Deficiencies/ Deferred Maintenance will be identified and an opinion of probable cost provided. Identified issues will be segregated into two categories: Immediate Needs and Short-Term Costs. Immediate Needs are identified as those where 1) circumstances or materials present unsafe conditions, 2) material building or fire code violations exist or 3) conditions that if left unremedied, have the potential to result in or contribute to critical element or system failure within one year or will result in a significant escalation of its remedial cost.

Short Term Costs are opinions of probable costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventive maintenance.

Generally, the time frame for such repairs is within one to two years. A Replacement Reserve Table (evaluation term length to be provided by the report user) will be prepared for significant components or systems not deemed to be operational and require maintenance expenses having a cost of at least \$3,000 singularly or in the aggregate over the term.

Research will be completed at the local municipal building and fire departments to determine if there are any outstanding code violations and our team will conduct interviews with onsite engineering and management staff. It is requested that a person knowledgeable about the subject property and its operations will be available to accompany and arrange for safe access to the roof and interior areas. Upon client's request, we can provide more in-depth investigations of these systems through the use of additional specialists.

A written report summarizing observations, findings and conclusions will be prepared.

Common Environmental & Assessment Acronyms:

- AAI:** **All Appropriate Inquiry** – That inquiry constituting all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice as defined in CERCLA, that will qualify a party to a commercial real estate transaction for one of the threshold criteria for satisfying the Landowner Liability Protections (LLPs) to CERCLA liability.
- ACM/ACBM:** **Asbestos Containing Material (s)/Asbestos Containing Building Material(s)**
- Aerial Photographs:** Used for historical research on the prior use of property. Available dates vary per site.
- AST:** **Above Ground Storage Tank(s)**
- ASTM 1527-13:** **Standard Practice for Environmental Site Assessments** – Phase I Environmental Site Assessment Process. This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of commercial real estate taking into account commonly known and reasonably ascertainable information.
- AUL:** **Activity and Use Limitations** – Typically used where chemicals of concern remain following an evaluation of risk or implementation of a remedial action. Frequently contained in the restrictions of record on the title itself. May not be revealed by a typical chain of title search.
- Brownfields:** Property where expansion, reuse or redevelopment is complicated by the presence/potential presence of known or potential release of hazardous substances and/or petroleum.
- CERCLA:** **Comprehensive Environmental Response, Compensation and Liability Act** – Federal law enacted in 1980 and designed to clean up sites contaminated with hazardous substances. Empowers the EPA to identify responsible parties and compel cleanup of the sites.
- CERCLIS:** **Comprehensive Environmental Response, Compensation, and Liability Information System** – potentially hazardous waste sites reported to the US EPA under CERCLA. Contains sites on or under consideration for inclusion on the NPL (National Priorities List).
- CERCLIS NFRAP:** **CERCLIS No Further Remedial Action Planned** – Sites removed from the current inventory of CERCLIS sites.
- City Directory:** Used for historical research on the prior use of property. Lists occupants by address. Frequently searched in five year increments.
- Data Failure:** Failure to achieve the historical research objectives of ASTM 1527-13 even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. This is one type of data gap.
- Data Gap:** A lack of or inability to obtain information required by ASTM 1527-13 despite good faith efforts by the environmental professional to gather such information.
- De minimis:** A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

- Engineering Controls** Physical modifications to a site or facility to reduce or eliminate the potential for exposure to hazardous substances or petroleum products in the soil or groundwater on the property.
- ESA:** See definition of **Phase I Environmental Site Assessment**
- Institutional Controls:** Post remediation requirements; groundwater, construction, and property use restrictions intended to prevent exposure to remaining onsite contaminants. Usually documented in deed restrictions.
- LUST, LPST(s):** **Leaking Underground Storage Tank(s) /Leaking Petroleum Storage Tank(s)**
- Migrate/Migration:** “Migrate” and “Migration” refers to the movement of hazardous substances or petroleum products in any form, including, e.g. solid and liquid at the surface or subsurface, and vapor in the subsurface.
- Monitoring well(s):** Shallow wells used to collect groundwater for sampling of chemical and petroleum products.
- Non-Scope Considerations:** Items included (but not limited to): asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance and wetlands. These items can be included in the Phase I ESA at the request of the client.
- NPL:** **National Priority List** – Also called Superfund Sites. A subset of CERCLIS, it is a list of priority cleanup sites. There are over 1,000 NPL sites and they often encompass relatively large areas.
- Delisted NPL** – Sites deleted from the NPL where no further response is appropriate.
- NPL LIENS** – Property liens filed by the EPA to recover remedial action expenditures on NPL sites.
- PCA/PCR:** **Property Condition Assessment/ Property Condition Report**
- Phase I ESA:** **Phase I Environmental Site Assessment** – The process by which a real estate holder (buyer, seller, lender, tenant, etc.) seeks to determine if a particular parcel of real property (including improvements) is subject to recognized environmental conditions.
- Phase II:** An evaluation of the RECs identified in the Phase I ESA for the purpose of providing sufficient information regarding the nature and extent of contamination on a site, typically involves a subsurface investigation.
- Plume:** A subsurface pattern of contaminant created by the movement of groundwater beneath the source. Often spread in the direction of groundwater movement.
- PRP:** **Potentially Responsible Party** – For NPL (Superfund) sites, the EPA works to identify all potentially responsible parties for the contamination. Owners, operators, transporters and disposers of hazardous waste are typically potentially responsible parties.

RCRA: Resource Conservation and Recovery Act – Federal law enacted in 1976 which governs the disposal of solid and hazardous waste. Creates “cradle-to-grave” hazardous waste management system in order to prevent the creation of new waste sites.

CESQG – RCRA Conditionally Exempt Small Quantity Generators – CESQGs generate less than 100 kg of hazardous waste per month, or less than 1 kg of acutely hazardous waste per month.

SQG – RCRA Small Quantity Generator – SQGs generate between 100-1,000 kg of hazardous waste per month.

LQG – RCRA Large Quantity Generator – LQGs generate over 1,000 kg of hazardous waste per month, or over 1 kg of acutely hazardous waste per month.

CORRACTS – Hazardous waste handlers with RCRA corrective action activity.

TSD – Treatment Storage and Disposal (facility) – those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

REC: Recognized Environmental Condition – ASTM 1527-13 definition “the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to any release to the environment, (2) under conditions indicative of a release to the environment, or (3) under conditions that pose a material threat of a future release to the environment.”

CREC: Controlled REC – a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls...

HREC: Historical REC – a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

Remediation: Removal of contaminants from soil, groundwater, sediment and/or surface water.

Sanborn Maps: Originally created for fire insurance underwriters. The maps provide detailed drawings of some towns and industrial areas. The oldest maps have dates from the 1870’s. Used for historical research on the prior use of property. Coverage and available dates vary per site.

UST / PST: Underground Storage Tank / Petroleum Storage Tank(s)

Vapor Intrusion: The process by which chemicals in soil or groundwater migrate to indoor air above a contaminated site.



Section 4

Working with NV5

NV5 prides itself in its commitment to excellence in customer service. We strive to work closely with our clients and have staff available to answer questions whenever necessary. We are able to achieve this level of customer service due to our experience, team environment and 50-year history.

REQUESTING A QUOTE:

Phone: Call 1-800-787-8397

Online Ordering: Complete and submit the REQUEST A QUOTE form available on our web site [www. NV5.com/real-estate-transaction-services](http://www.NV5.com/real-estate-transaction-services) – best for single site requests. For multi-site requests phone or email is preferred

Email: Send a request for quote to maywehelpyou@NV5.com including your contact information, project needs and any property information. Should you have a multi-site project, attach site listings, legal descriptions, etc

Note: By completing and submitting the order form online or via any of the above methods, you are not placing an order. You are providing information so that NV5 may prepare and provide you with a proposal for services which is **FREE** of charge. The proposal will contain the costs and timing of the service you request. Your written approval of the proposal is necessary before any cost is incurred.

PROPOSALS:

Once we have received your project information, our Project Managers and their team will begin to prepare a quote for services. The proposal will reflect price and time parameters, outline the scope of work and address particular project requirements. We quote a “not-to-exceed” fee which does not change unless the scope of work is altered.

NV5 Real Estate Transaction Services

NV5 is your one source for ALTA Surveys, Zoning Reports, Environmental Site Assessments and Property Condition Assessments nationwide.

ALTA SURVEYS

NV5 and its National Surveyors Network coordinate the following surveying services:

- **ALTA/NSPS Land Title Surveys**
- **As-Built Surveys**
- **Boundary Surveys**

We do not perform construction surveys or residential surveys. Using our own surveying offices as well as our National Surveyors Network, we can coordinate surveys in all 50 states as well as Canada.

For more information contact us at 1-800-787-8397.

ZONING

Through our zoning division, NV5 provides zoning reports and letters, and any components therein, nationwide and for parts of Canada. Managed by an experienced team, NV5 quotes zoning services for any of the following:

- **Standard Zoning Report:** a full, industry-standard zoning report offering municipality documents and designed to meet 3.1 title endorsement requirements
- **Summary Zoning Report:** comparable to a standard report but does not offer survey comparison and conformance information
- **Executive Summary:** a one page report for projects requiring quick turnaround times, does not include supporting documents
- **ZIP Report:** provides property zoning data for land surveys, does not replace a standard zoning report
- **Zoning Letter (only):** when verification of the zoning district is all that is necessary
- **Custom Reports:** contact us for more information

Contact us with questions or to request a quote on your next zoning project, 1-800-787-8397.

ENVIRONMENTAL AND ASSESSMENT

NV5 supports its own environmental and assessment team, employing experienced professionals, that provide the industry with the following services:

- **Phase I and Phase II Reports (ESAs)**
- **Property Condition Assessments (PCAs)**
- **PML (Probable Maximum Loss Survey)**
- **Asbestos Surveys and Operations & Maintenance Planning (O&Ms)**
- **Lead Based Paint Surveys and O&Ms**
- **Moisture Minimization Plan**
- **Radon Surveys**
- **ADA Studies**

For more information contact us at 1-800-787-8397.

EDUCATIONAL SEMINARS

Members of our experienced staff are available to present educational seminars in person or virtually, free of charge, on many topics related to commercial real estate due diligence. Attendance at these presentations can be used to train new associates, earn continuing education credits for groups or associations and keep real estate professionals informed of current industry news.

Session topics include:

- ALTA/NSPS Land Title Surveys
- ALTA Survey Review
- Interpreting Legal Descriptions
- Phase I Environmental Site Assessments
- Zoning Reports

Contact our Business Development team at 1-800-787-8397 or your local sales representative to schedule a presentation.

NV5 NEWSLETTER

Visit www.NV5.com/real-estate-transaction-services to sign up to receive our bi-monthly newsletter dedicated to sharing current industry information.

ADDITIONAL RESOURCES

Visit our website www.NV5.com/real-estate-transaction-services (in particular the *Educational Tools & Seminars* page) to find additional resources and information:

- The NV5 Due Diligence Handbook in PDF format
- NV5 Sample Survey
- Sample Zoning Reports
- Sample ESAs and PCAs
- Additional information pertaining to the history of NV5, our services and contact information



Section 5

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