TECHNICAL MEMORANDUM

Clark County North Area Transfer Station
Preliminary Siting Report
Final Draft

Prepared by JRMA

July 10, 2023

Technical Memorandum

Phase 2 – Regional System Study: Transfer Station Siting

Purpose

Phase 2 of the Regional System Study focuses on completing a capital improvement plan to build the infrastructure needed to provide cost effective services over the next 20+ years. It included a completed preliminary assessment to identify the primary areas to be considered for siting a new transfer station.

Introduction

In Phase 1 of the Regional Solid Waste System Study, JRMA prepared an evaluation of the transfer station system. This included considering the options to expand the Central Transfer and Recycling Station (CTR). CTR receives about 60% of the waste generated in the County and serves the north/central part of the County. The CTR service area is projected to receive the largest percentage of population growth over the next 20 years.

JRMA completed an evaluation of the options to build the facilities necessary to manage the amount of waste and recycling materials over the next 20 years. One option is to expand CTR onto the adjacent parcel. Recognizing that expanding CTR has challenges that could impact the ability to meet the service demands over the long term, the analysis included the possibility to site a new transfer station. One option is to site a convenience transfer station designed to receive waste from primarily self-haul customers. This facility would be a smaller transfer station and under this option CTR would continue to operate and accept waste only from the franchised collection company. A second option to build a new transfer and recycling station to replace CTR was also considered. The two later options would require the County to site and permit a new transfer and recycling station.

Preliminary Siting Study

To complete the preliminary siting study for a new transfer station, the JRMA team used the criteria guidance that was part of the 2015 Clark County Solid Waste Management Plan. Considering the process to select a new site will require a more formal and detailed study, this preliminary site analysis focuses on identifying the preferred areas that would meet the primary criteria. The new transfer station should be:

1. Centrally located to serve the north/central portion of the County.
2. Located with primary access to the arterials and main collectors.
3. Located in areas zoned industrial, commercial or areas allowable through a conditional approval process.

In addition to these preferred criteria, there are exclusionary criteria to be considered that are often defined by federal, state, or local laws or regulations and might include areas such as:

- Wetlands and floodplains
- Endangered and protected flora and fauna habitats
- Protected sites of historical, archeological, or cultural significance
- Prime agricultural land

- Parks and preserves
- Proximity to airports

Using the initial siting criteria, JRMA completed research to identify the areas of the north central part of the county that were best suited to begin a more detailed siting process. It does not necessarily exclude other potential areas, but based on the defined service needs these areas are preferrable.

Results

Considering the primary criteria to site a convenience transfer and recycling center to serve primarily self-haul customers or possibly a new transfer station to replace CTR, the JRMA team identified three areas. They are centrally located to serve the north/central that is planned to transition to an urban growth area as designated under the County's growth management plan. They also include large tracts of industrial parcels and zones that are conditionally approved as defined in the County code. Each area has direct or reasonable access to main arterials or collector streets with limited exposure to residential neighbors.

The JRMA team used the County's GIS system to assemble information to identify potential conflicts with the exclusionary criteria in these areas. This analysis represents a high-level review of potential areas where a more detailed siting study could be conducted after a decision on which option the County would select.

CTR – North Area Service Option – Siting New Transfer Station

Background

The 2015 SWMP included Appendix M that describes the process and criteria to be used for siting a new transfer station or any other solid waste facility in Clark County. Both the process and criteria described should be considered as preliminary or guidance and can be refined to address the County's desired approach. Also, the State of Washington Department of Ecology's policy requires local governments to state the need for siting a facility as part of the comprehensive Solid Waste Management Plan. This will be time sensitive since the updated SWMP will be submitted in June 2023.

General Siting Process (Excerpt from Appendix M)

The primary goal of the solid waste handling facility siting process described in this appendix is to provide decision makers with a choice of sites that maintain solid waste service levels, are environmentally acceptable, are feasible from an engineering and cost perspective, and are acceptable to the local community and general public. This generic approach has been developed with uniform procedures that will result in an efficient and streamlined process and will provide the proper comparisons of alternative sites.

The process begins with the development of "facility-specific" site screening criteria, as outlined in Step 1. Possible sites are then identified and screened with clearly unsuitable sites dropped from further consideration. This leads to preliminary feasibility and environmental evaluations on the reduced number of candidate sites. For publicly developed facilities, the evaluations may produce a preferred set of alternatives for the jurisdictional local government to pursue for development. For privately developed facilities, that same process should be followed with the lead permitting agency for the jurisdictional local government coordinating the development of the site screening criteria and assisting in the selection process.

No facility siting process should proceed unless a demonstrated need or recommendation exists in the most recently adopted Solid Waste Management Plan update. If the need or recommendation is not in the current solid waste management plan, the need must be demonstrated and recommended by the jurisdictional local government to be included in the Solid Waste Management Plan. A plan amendment must be adopted before proceeding further in the siting process.

There are eight potential steps in the generic siting process:

- Step 1 — Submit a Notice of Intent to Site a Solid Waste Handling Facility
- Step 2 — Development of Site Screening Criteria
- Step 3 — Candidate Site Identification
- Step 4 — Broad Site Screening
- Step 5 — Focused Site Screening
- Step 6 — Comparative Site Evaluations
- Step 7 — Developer and Local Government Decision Making
- Step 8 — Environmental Review Process

The actual process adopted by a jurisdiction can be modified to meet their particular needs.

Step 1 — Submit a Notice of Intent to Site Solid Waste Handling Facility

Before beginning the siting process, the developer should formally notify the local jurisdiction, Clark County Environmental Services, the Solid Waste Advisory Commission (SWAC), and Clark County Public Health of their intent to begin the siting process. This notification will provide the local government with the lead time required to properly respond to the needs and effects of the siting process and trigger the public involvement process of the affected local governments.

Step 2 — Development of Site Screening Criteria

The facility developer and the jurisdictional local government should establish a set of site screening criteria to eliminate candidate sites with "fatal flaws" and rank sites with the highest potential for successful development. These criteria should be specific to the facility category being sited and should consider those impact areas identified in **Figure 2 through 7**. The criteria may also reflect the guidance criteria established in Resource Conservation and Recovery Act (RCRA) — Subtitle D, Revised Code of Washington (RCW) 70.95, Washington Administrative Code (WAC) 173-350 and 173-351, and any other applicable federal, state, or local laws and regulations. Site screening criteria is discussed in more detail below.

Step 3 — Candidate Site Identification

The level of effort expended by the developer in identifying possible sites should depend upon the size and type of facility being sited as well as the nature of the service area. However, an effort should be made to inform citizens and businesses that a facility siting effort is under way and that the developer will be accepting nominations for possible sites. These nominations will allow sites that have other ongoing or temporary uses (that might not otherwise be considered) to be included as candidate sites. Large landholders (such as the County, cities, federal and state agencies, major commercial enterprises, and institutions) with potential land parcels appropriate in size and zoning for the intended facility can be contacted directly or through letters of inquiry. Also, real estate firms dealing in appropriate land parcels can be sent a letter of inquiry and a site selection criteria report. Advertisements can be placed in local newspapers and through other media. Other sources for identifying candidate sites include previous siting studies; use of former and present waste handling sites; aerial surveys and inventories; and county-wide listings of land parcels with GIS programs.

Step 4 — Broad Site Screening

During this initial screening step, the strategy should be to quickly evaluate candidate sites using both the siting criteria and preliminary descriptions of each of the sites. Site-screening criteria may include regulatory, environmental, physical, land use, and other locational factors. The outcome of Step 4 is a prioritized list of candidate sites. In addition, Step 4 will also identify those sites with clear fatal flaws that should be eliminated from further consideration. Depending on the number of higher ranked sites, a decision may be made to drop the lower-rated sites from subsequent (Step 5) evaluations.

Step 5 — Focused Site Screening

Step 5 will further evaluate and re-rank, as necessary, the remaining candidate sites. These evaluations may require additional field investigations, conceptual facility planning, and environmental studies. As in Step 4, the intent is to examine sites for characteristics which would preclude them from further consideration before in-depth site evaluations are performed. SWAC will review and recommend the highest ranked sites and the number that should be carried forward to the detailed comparative evaluations in Step 6.

Step 6 — Comparative Site Evaluations

Step 6 further evaluates and directly compares the remaining candidate sites based on their ability to satisfy facility-specific siting criteria, community-specific criteria, operational requirements, and potential impacts on the surrounding environment. Step 6 is somewhat more qualitative than Steps 4 and 5, with the highest-ranked sites re-examined from environmental, constructability, operational, cost, land use, and public policy perspectives in a final feasibility appraisal. In this and later steps, the screening criteria should not be exclusively utilized. Instead, all site related characteristics and impacts should be considered and assessed. SWAC will be involved in this evaluative process.

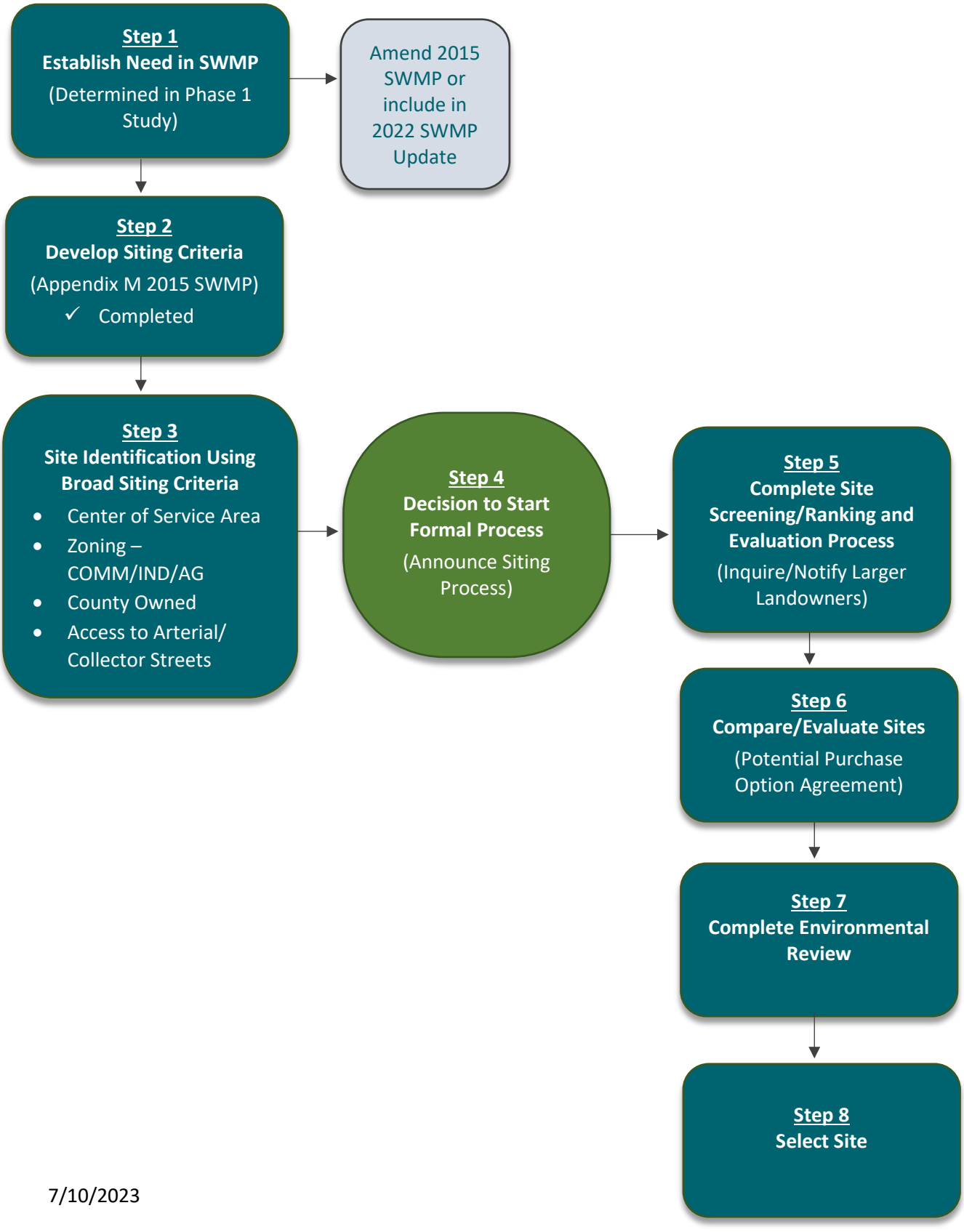
Step 7 — Developer and Local Government Decision Making

The potential developer of the facility and the local government jurisdiction should then select a preferred site for consideration for permitting by the governing body of the local government jurisdiction. If the preferred site is acceptable, the local government should support the permitting process, if necessary.

Step 8 — Environmental Review & Permitting Process

As a part of the handling facility siting permit process, an environmental review must be done as a part of the State Environmental Policy Act (SEPA) process. A SEPA determination is to be made by the permitting jurisdiction. This environmental review process will be used to establish the potential environmental impacts of the candidate site. This may require the preparation of an Environmental Impact Statement (EIS) depending on the level of determination issued by the reviewing jurisdiction and whether the project will generate significant adverse environmental impacts. Acquisition of necessary state, local, and federal permits must be completed once a specific site is selected. Potential problems in permit acquisition should be identified and resolved as early as possible in the siting process. However, if a permit is deemed unobtainable at any point in the process, the second or third ranked sites can be pursued for development.

Phase 2 - Clark County Regional Solid Waste System Study
Preliminary Transfer Station Siting Process



New Transfer Station Site Evaluation Criteria

Before entering any site search for a new or relocated solid waste facility site, elected officials or primary decision makers need to be supportive and in agreement as in almost all cases opposition will emerge to challenge a final selection.

The initial steps for locating a new transfer station site would be to define the service area and identify the primary transportation network serving the area. Next, the sponsoring agency should review local zoning regulations to determine the areas that may be considered. Typically, parcels that are zoned commercial/light industrial/industrial/manufacturing allow for solid waste facilities to be built either outright or through a conditional use process. In Clark County all zones can be considered, including agricultural land through a conditional use process. The sponsoring agency can conduct this initial process and provide a list of possible sites or locations to be evaluated using a more detailed analysis of selecting the preferred site(s) based on a set of criteria. The County should develop a public involvement process that satisfies the needs of the communities most impacted by locating the new facility and in accordance with state guidelines.

In the 2015 SWMP (Appendix M), the County identified a list of criteria to be used in siting a new facility. These criteria are similar to what other communities have used and are consistent with the US Environmental Protection Agency (USEPA) guidance document for siting transfer stations. The criteria are meant to be a guidance tool to help compare the sites to the most desirable conditions for a modern transfer station facility. In conducting a review of the sites, a rating system can be used to identify those sites that best satisfy the criteria. Also, criteria can be weighted more heavily to reflect what is most important to a local jurisdiction.

The 2015 Clark County SWMP provided guidance for siting a new transfer station.

Criteria – As listed in the 2015 SWMP

<u>Exclusionary Siting Criteria</u>

Exclusionary criteria are often defined by federal, state, or local laws or regulations and might include areas such as:

- Wetlands and floodplains
- Endangered and protected flora and fauna habitats
- Protected sites of historical, archeological, or cultural significance
- Prime agricultural land
- Parks and preserves
- Proximity to airports

<u>Technical Siting Criteria</u>

Technical criteria are used to ensure that sites selected for evaluation meet required engineering, operational and transportation needs. The technical criteria include a description that can be used by the County to assign a rating system to compare sites.

1. Central location to collection routes

    A centrally located transfer station that reduces the drive time of collection trucks from routes to the facility is best. It can offer savings on transportation costs, reduced emissions and can

improve overall services to customers. CTR is currently located to serve the population in the central and north portion of the County. With a large part of the County's growth expected to occur north of 99th street and east of I-205, this general area appears to be optimal. One factor to consider is that the cities of Ridgefield, Battleground, and LaCenter are projected to double in population from about 35,000 to as much as 70,000 in the next 15 to 20 years. Sites located within approximately three to four miles of CTR may prove to be most optimal.

2. Access to major transportation routes

A transfer station receives customers seven days week. It is most desirable to have either direct access off arterial and/or major collector streets or relatively short drives on local roads that connect to these streets provided access is not through residential neighborhoods. Customers arrive at off peak times, therefore traffic impacts to roadways or intersections are minimal (i.e., most collection trucks arrive at the station to unload between 9 a.m. and 3 p.m. and self-haul customers arrive throughout the day or on weekends).

3. Site size and shape requirements

Chapter 5 of the Phase 1 Regional Solid Waste System describes the option of building a new transfer station to serve the north part of the County. A conceptual plan was developed and suggests that a minimum of 12 acres are needed to build a new north area transfer station to serve for the next 20+ years. This would include property to build a new transfer station, a recycling drop off center and parking for rolling stock to stage transfer operations. It could provide some buffer area along the perimeter and space for managing stormwater. The size of the site is one factor, but the shape is also important. Having a rectangular or flag shaped parcel(s) with a driveway entrance is an option.

Other factors to consider:

- Sufficient space for on-site roadways, queuing, and parking.
- Ability for expansion.
- Buffer space.
- Gently sloping topography. A site that is slightly sloped to accommodate development of top load feature for the operation of the transfer station is desirable. However, a flat site with adequate space to provide convenient top load operation is acceptable. Sites that are vacant or have 30% or less of redevelopment are also preferred.

4. Truck and traffic compatibility

This criterion considers both the roads used by collection and transfer trucks to access the site. All trucks should use arterial or collector streets and not use residential or local roads. Also, close access to the interstate system is most desirable. It is important to acknowledge that most traffic associated with the transfer station occurs during off peak hours, thus it typically does not have significant impacts on access roads.

a. Collection Trucks - All collection trucks can access site from arterials, primary collectors, or limited local non-through street with truck traffic are preferred. Also having access to a freeway that is readily available is desirable. It is less desirable if collection trucks have primary access using arterials and local streets (nonresidential use) but must travel through multiple traffic signals. The least desirable is if all access is by local public through streets with no dedicated access.

b. Transfer Trailers (TT) - It is most desirable for transfer trucks to leave site on arterials or low volume streets and have access to arterials and/or freeways. Access on arterials but with multiple traffic signals to freeways is less desirable. Sites with multiple left turning movements and no access to arterials with a half mile are also less desirable.

5. Access to utilities

It is most desirable to have water, sewer, and power available within 1,000 feet (ft) of the site. Transfer stations operations do not require special utilities and therefore alternatives can be considered if costs are reasonable. If special easements are required and utilities are more than 1,000 ft, the cost to develop the site may be impacted. If all utilities must be brought in from over 1,000 ft that is the least desirable option but not a fatal flaw.

6. Zoning designations and require

Clark County allows transfer stations in any zone and are permitted though a conditional use approval process. Transfer stations are more compatible with zones designated for manufacturing/industrial or commercial uses but can include agricultural or other low density uses. Functionally, a transfer station operates similar to a distribution center in reverse; collection trucks deliver waste, and it is reloaded into larger trailers for the long haul to a disposal site.

In considering sites for this facility the criterion considers two land use situations. First and most important is the adjacent properties to the site. Second, it considers the surrounding area within 1,000 ft. For evaluating sites, the County could consider the following criteria.

a. Adjacent - Immediate neighbors should be industrial/manufacturing/commercial type developments or vacant properties such as agricultural uses. Sites with one or two sides being commercial/retail or high traffic uses at the site would be rated less desirable.

b. Land Uses in Proximity (1,000 ft) - Land uses in neighborhood (within 1,000 ft) should be predominately industrial/manufacturing/commercial and/or limited retail or high activity during daytime. Land uses that are transitional to mixed commercial/retail and with limited residences on non-conforming uses would be less desirable. Sites with large residential areas within 1,000 ft are the least desirable.

Community-Specific Criteria

Community-specific criteria address impacts that the facility may have on the surrounding community. These criteria are typically less technical in nature and incorporate local, social, and cultural factors. Examples of the criteria include:

- Environmental justice considerations
- Impact on air quality
- Impact on the local infrastructure
- Adjacent land uses
- Proximity to schools, churches, recreation sites, and residences
- Prevailing winds
- Number of residences impacted

- Presence of natural buffers
- Impacts on existing businesses
- Expansion capability
- Buffer zones and screening measures
- Traffic compatibility
- Impact on historic or cultural features
- Impact on neighborhood character

First, exclusionary criteria are applied to potential sites. Once unsuitable areas are eliminated, the technical criteria and community-specific criteria are applied to all remaining options. Information for each potential site should be developed so the sites can be ranked. Based on the ranking, the top two to four sites should undergo more rigorous analysis to determine technical feasibility and compliance with the environmental and community objectives.

This language is only a draft and should be tailored to the County's preferences and local conditions.

Preliminary Evaluation of Potential Transfer Station Areas

Note: This evaluation considers Items 1, 2, and 6 of the siting criteria as well as certain exclusionary criteria.

In Phase 1 of the Regional Solid Waste System Study, JRMA proceeded to identify areas suitable for siting the North Option Transfer Station or North Option Convenience Satellite Station.

The JRMA team used the criteria guidance that was part of the 2015 Clark County Solid Waste Management Plan. Analysis was focused on identifying the preferred areas that would meet the primary criteria:

1. Centrally located to serve the north/central portion of the County.
2. Located with easy access to arterials and main collectors.
3. Located in areas zoned industrial, commercial or areas allowable through a conditional approval process.

Additional considerations such as zoning and wetlands were applied, and the following maps were produced for the preliminary evaluation.

Figure 1: Study Area Overview

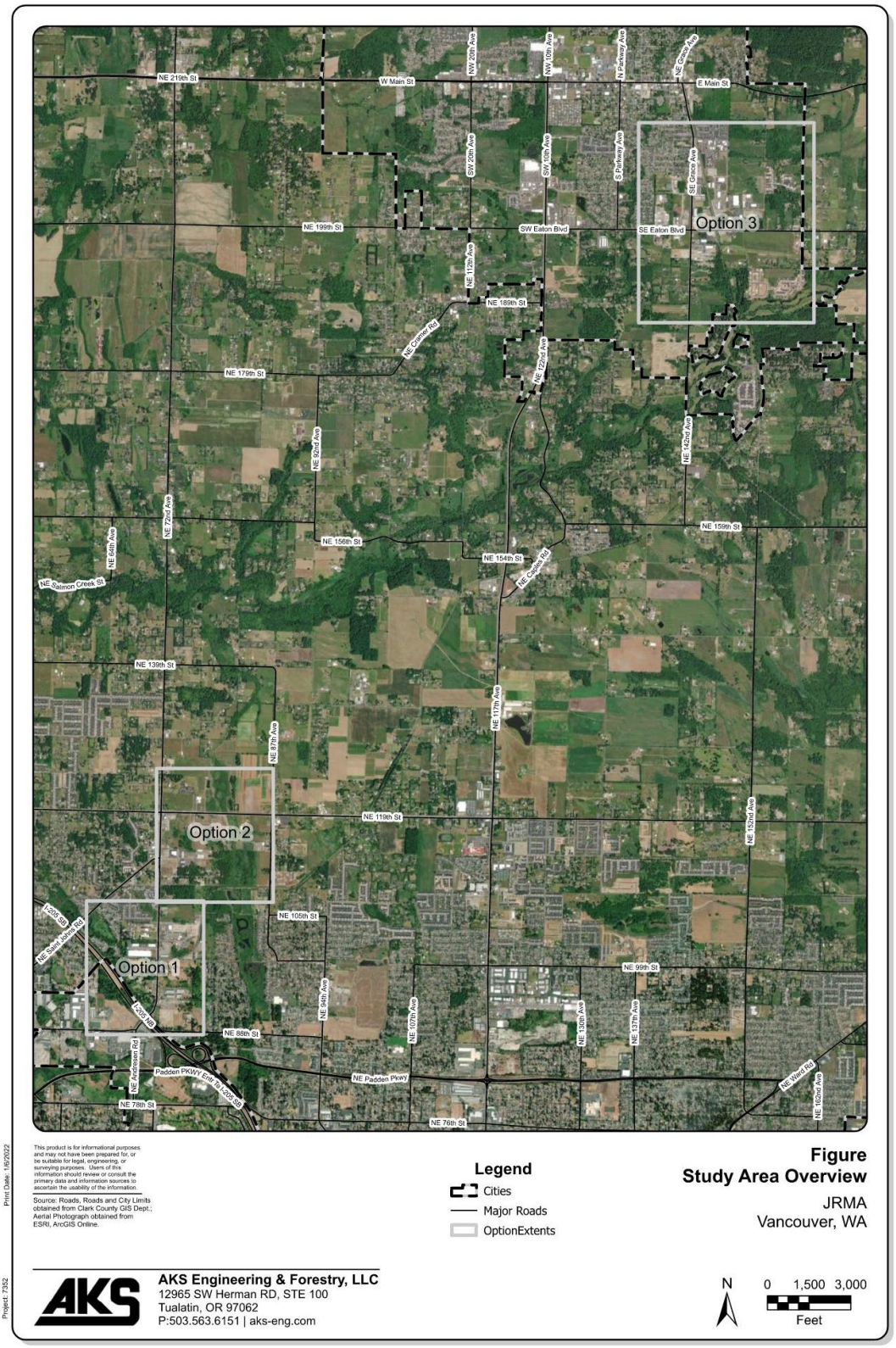


Figure 2: Option 1 – Wetland/Subdivision Buffer

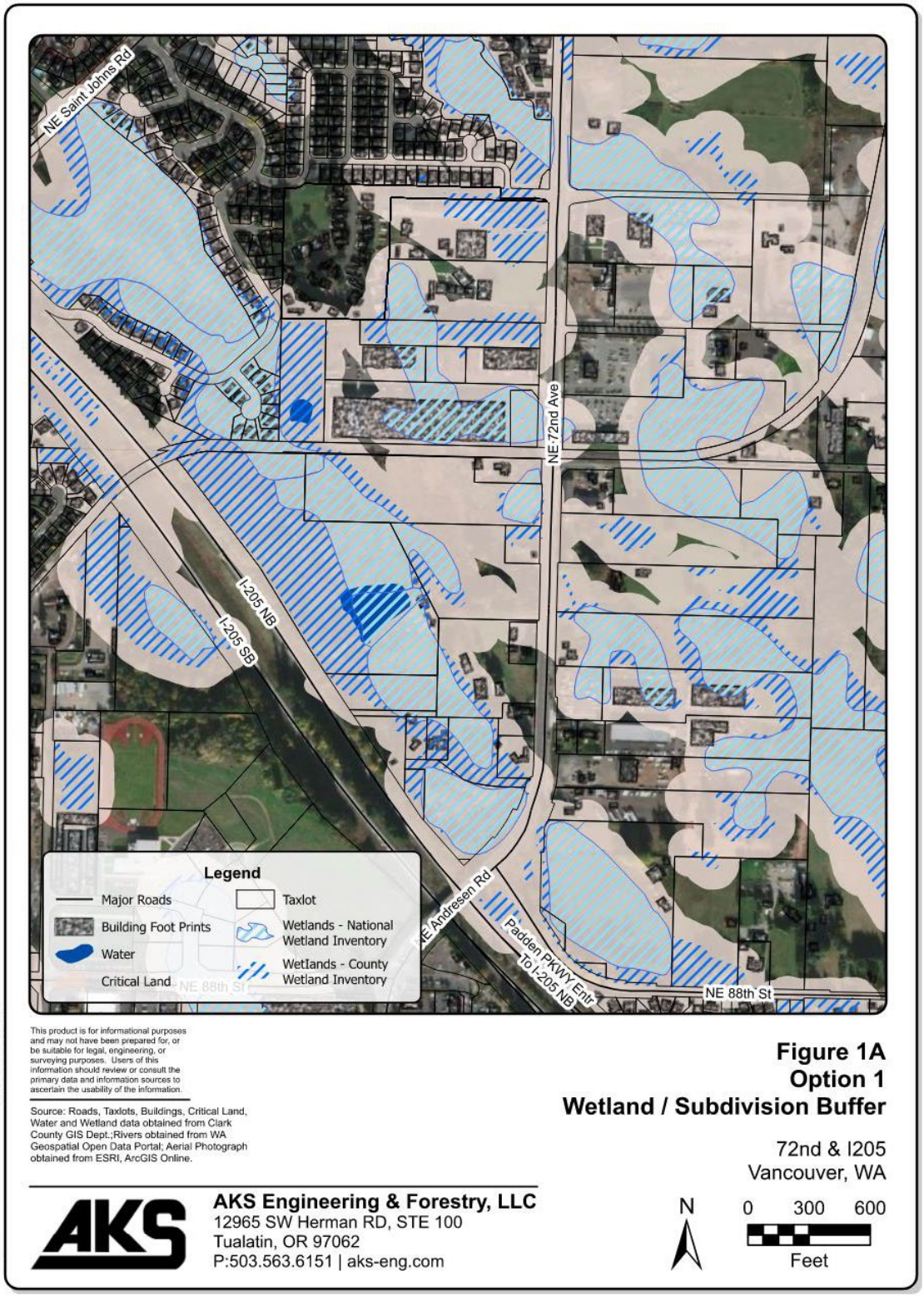


Figure 3: Option 1 – Zoning/Residential Buffer

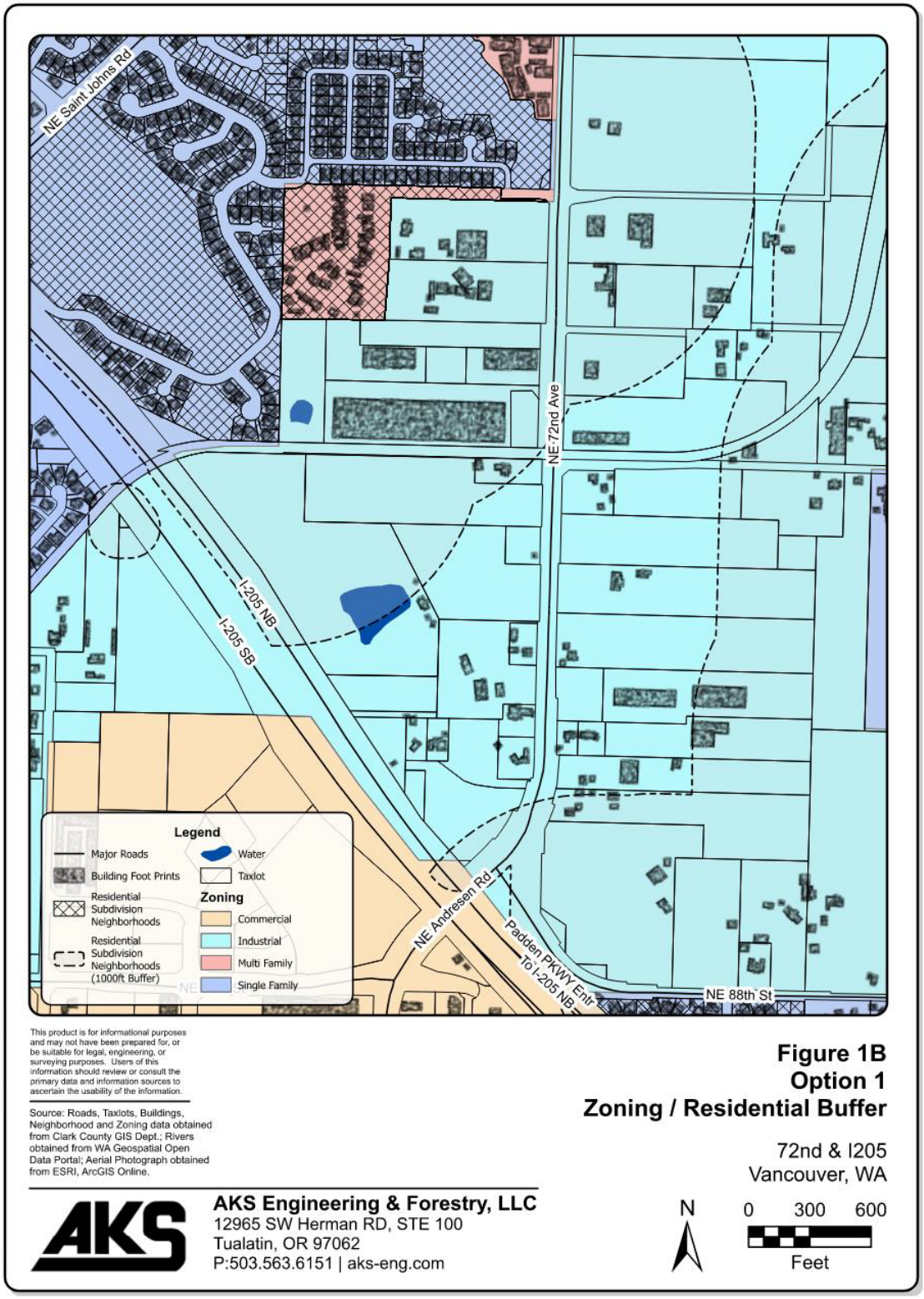


Figure 4: Option 2 – Wetland/Subdivision Buffer

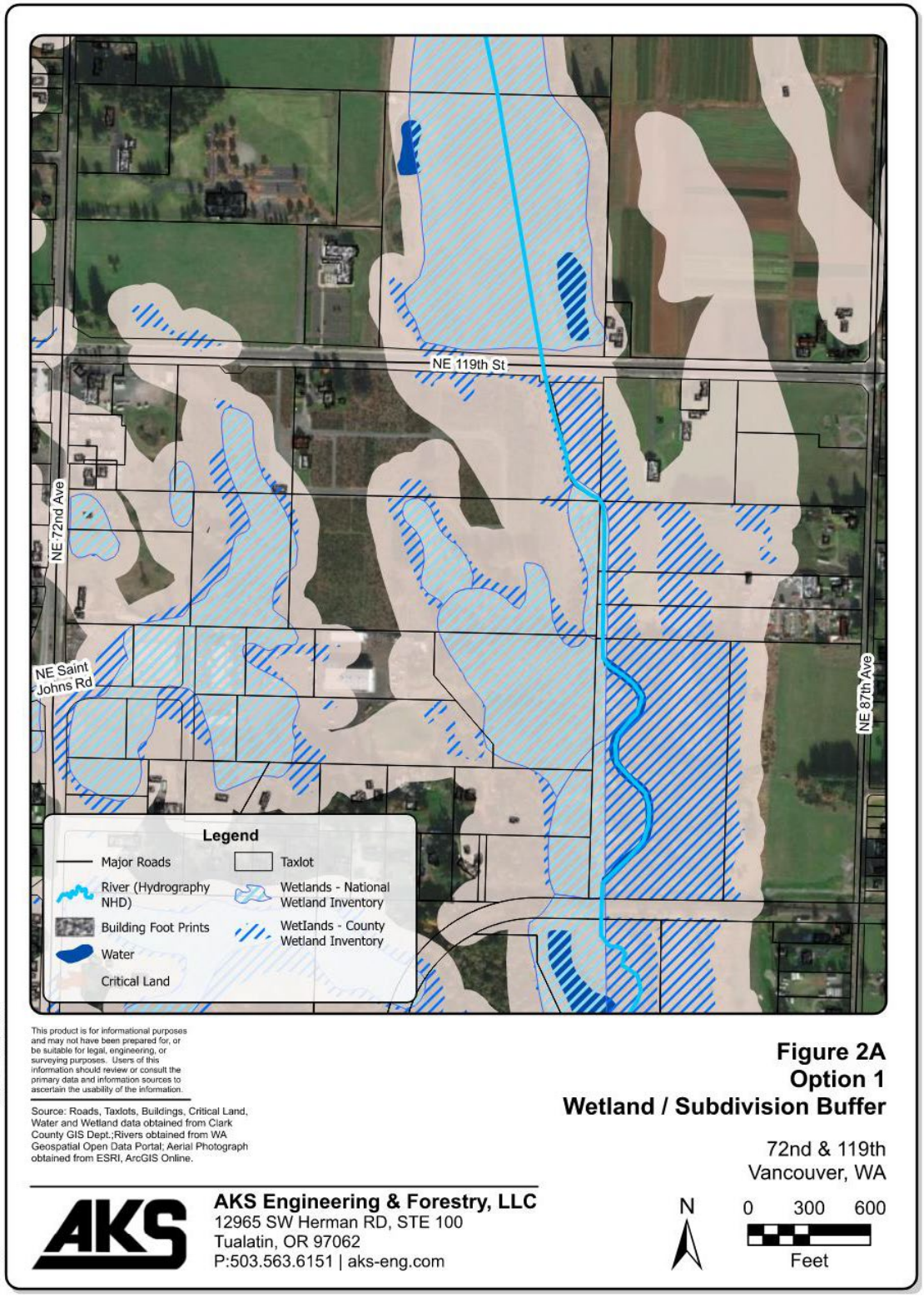


Figure 5: Option 2 – Zoning/Residential Buffer

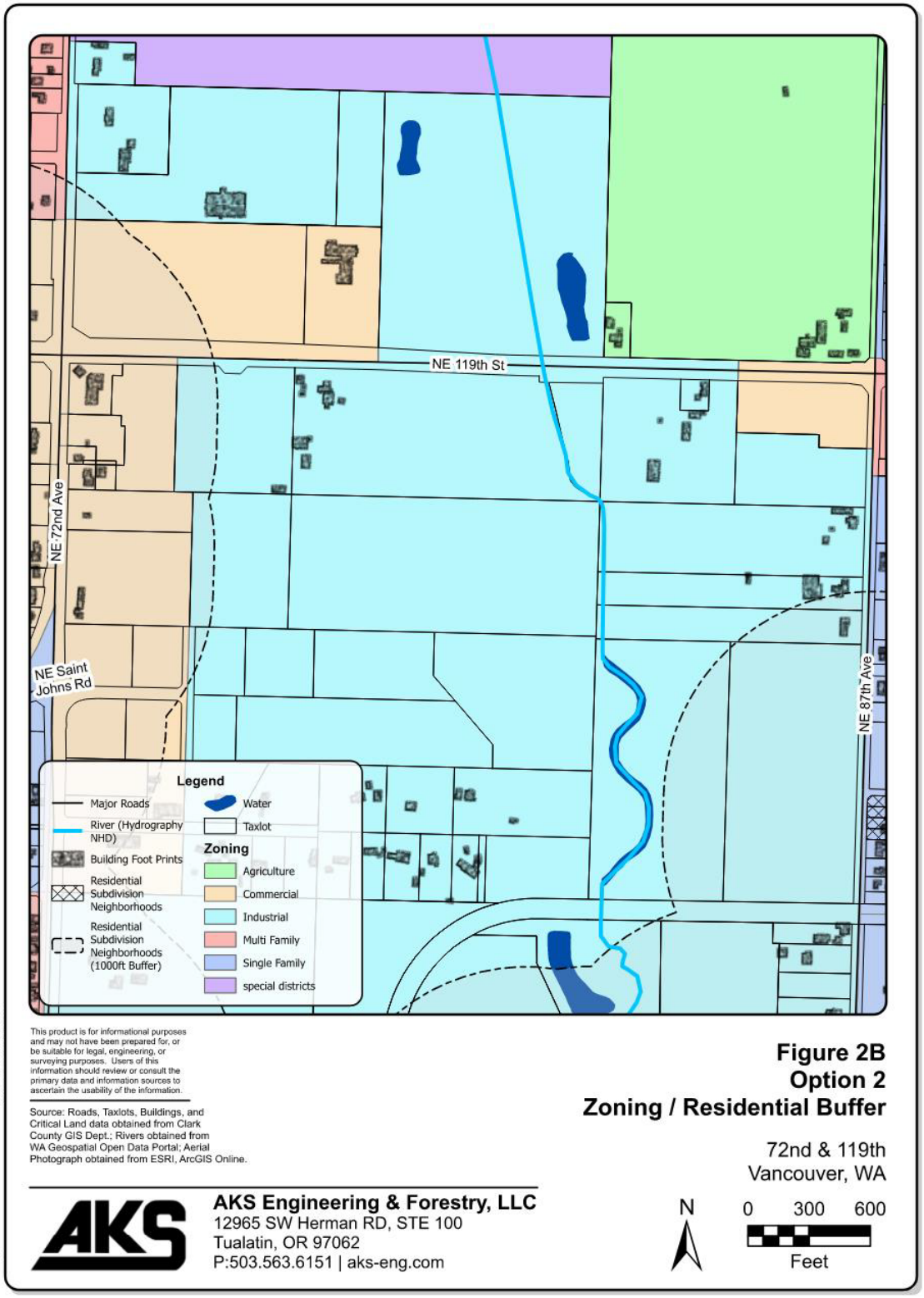


Figure 6: Option 3 – Wetland/Subdivision Buffer

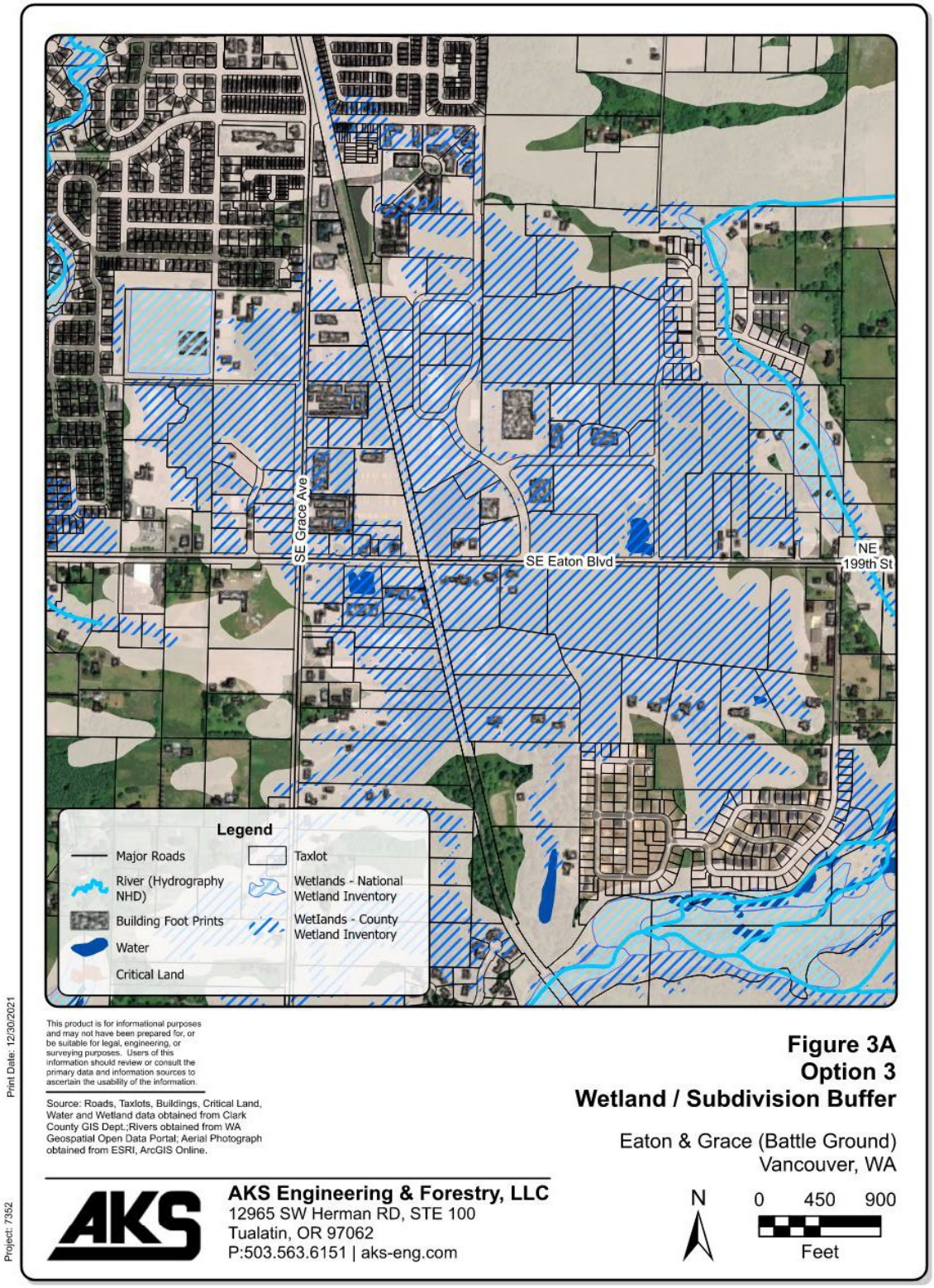


Figure 7: Option 3 – Critical Land