



August 9, 2019

Comox Valley Regional District
600 Comox Road
Courtenay, BC V9N 3P6

Attn: Kris La Rose

Re: AOA of Comox Road from 17th St. to KFN IR1

This letter presents the results of an archaeological overview assessment (AOA) conducted by Baseline Archaeological Services Ltd. (Baseline). This AOA reviews the archaeological data and assesses the archaeological potential of a proposed sanitary sewer located within the Comox Road right-of-way from 17th Street to the K'ómoks First Nation IR1, in Courtenay BC.

This report is concerned with determining the potential for archaeological sites. It does not address potential impacts to traditional use activities and sites by proposed developments. As such, this report does not comprehensively document all First Nations interest in the land. The study was conducted without prejudice to First Nations treaty negotiations, aboriginal rights or aboriginal title. The work reported herein consists of an AOA as defined in the *British Columbia Archaeological Impact Assessment Guidelines* (1998).

This area specific AOA was completed by reviewing satellite imagery, data present on the remote access to archaeological data (RAAD) website and previous archaeological work conducted in the vicinity of the project area. Most significantly, the replacement of the water main along Comox Road between 17th Street and IR1 occurred in 2017 on the inland side of Comox Road.

Background:

DkSf-24 (shell midden) was originally recorded in 1977 under permit 1977-0017 by the Archaeological Sites Advisory Board. The site was reported to be completely disturbed due to previous housing and road developments. Subsequent studies within the site have identified both intact and disturbed shell midden, yielding various stone and bone artifacts, faunal remains and human remains.

DkSf-49 was originally recorded in 2009 under HIP 2009-0208 by Baseline during the construction of the Gas N Go. The site generally consists of heavily disturbed shell midden. In 2011 alterations to the site were conducted under site alteration permit (SAP) 2011-0314. This resulted in the recovery of artifacts, faunal remains and human remains. As a result of the water main replacement project, this site was found to be continuous with DkSf-24 and the sites have been merged.

Archaeological site DkSf-19 is a shell midden/habitation site which extends slightly to the west of IR1. Further discussions with the Inventory Department of the BC Archaeology Branch will determine if the site will be merged with DkSf-24 as well. The site has included human burials, artifacts and faunal remains over the course of numerous studies.

Additionally, previously recorded archaeological sites DkSf-66, DkSf-30 and DkSf-43 are located adjacent to portions of the study area. DkSf-66 was originally recorded in 2014 by Baseline on a private property on the north side Comox Road. A subsequent SAP was applied for, resulting in the recovery of faunal remains. The shell midden deposits were sparse and heavily disturbed due to previous development on the property. DkSf-30 (shell midden) was originally recorded in 1979 with minimal additional information at Rotary Outlook Dyke Road Park (Rotary Park). Further work by Baseline at this site in 2008 revealed deposits of disturbed shell midden. DkSf-43 was originally registered in 2000 and consists of fish trap and weir features within the intertidal area of Comox Harbour.

The water main replacement project was divided into two portions for the archaeological study. The eastern study area was defined as being located between 17th Street and the Rotary Wildlife Viewing Park. This portion of the development is largely characterized by deposits of native sterile material and fill. Overall, this area was considered to have a generally low archaeological potential based on its location within the Courtenay River flood plain. This portion of the project was monitored by a K'ómoks First Nation member with regular site visits by Baseline. No archaeological resources were encountered during construction of this portion.

The western portion is located between the Rotary Park and the end of the project which is near the boundary of IR1. This section was assessed as having a high archaeological potential based on the presence of previously recorded archaeological sites and its location on higher terrain above the Courtenay River and Comox Harbour. Monitoring was conducted by Baseline and a member of the K'ómoks First Nation. Previously disturbed archaeological shell midden material was encountered in various volumes for the entire length of this section. The collection included fifty artifacts, nine hundred and twenty one pieces of faunal remains and human remains representing a minimum of eight individuals.

Historic disturbances within the study area would have included the construction of the road and adjacent buildings, a wood stave water main and the asbestos coated water main replaced during the project as well as the existing sewer main.

In summary, much of the archaeological deposits located in the western portion of the development area have been subject to historic disturbances. Intact areas of archaeological deposits may exist

beneath the road, however no systematic archaeological testing within Comox Road has been conducted and the specific site boundary, condition, depth and potential significance of any buried archaeological deposits is currently unknown.

Identification/Mitigation:

Any development within the boundary of a recorded archaeological site requires appropriate permitting from the BC Archaeology Branch. The project will require a Section 12, Site Alteration Permit (SAP) for disturbances to archaeological deposits and/or mechanical operations within the boundary of a recorded archaeological site. Additionally, a Section 14, Heritage Inspection Permit (HIP) is also required to conduct testing and mitigation of archaeological deposits (systematic data recovery, raking, screening).

Upon issuance of the SAP and HIP for the project, geotechnical testing within the boundary of archaeological sites can occur. It is recommended that the CVRD conduct all geotechnical testing along Comox Road between the Rotary Park and IR1 under the permits with archaeological monitoring, otherwise drilling would have to be terminated if archaeological deposits are encountered below the road.

If conducted, geotechnical testing may provide information regarding the presence or absence of archaeological remains below the road. Should archaeological deposits be encountered, the testing will identify general deposit depths and size and may assist in determining if the deposits are intact or previously disturbed. This information should assist in developing a mitigation plan should trenching be required for the project.

In the event that significant archaeological deposits are in conflict with the proposed pipeline, the CVRD may wish to consider pre-digging the trench in advance of pipe laying crews. This will allow for the required controlled mechanical excavations of archaeological deposits under the supervision of an archaeologist. If intact and/or significant archaeological features are encountered, hand excavation (systematic data recovery) of portions of the site can occur without causing undue project delays to the construction contractor. Generally the BC Archaeology Branch recommends one cubic meter of intact archaeological material be subject to systematic data recovery for every ten being mechanically altered.

Subsequent to the pre-digging, the trench can be backfilled with the archaeological material with a barrier placed between the trench bottom and backfill or backfilled with sterile imported materials.

Removed archaeological material which cannot be used for backfill, maybe offered to KFN for deposit within IR1 or otherwise must be transported to the Edgett midden repository (DkSg-15) located on the Duncan Bay Main near the junction of Highway 19 and Piercy Road.

Should minimal archaeological remains be encountered during the geotechnical testing, archaeological monitoring during excavations for pipe laying would likely suffice.

Permitting:

Any developments between Rotary Park and IR1 should be conducted under both a SAP and HIP. It is required for operations within the boundary of the previously recorded archaeological sites, but will also authorize the testing if archaeological deposits are encountered outside of the known site boundaries. The permits can include the geotechnical work and the installation of the sewer main (trenching or drilling).

The HIP should also include the area between 17th Street and Rotary Park. This will ensure the project can proceed in the event that pockets of relocated and previously disturbed archaeological material are identified.

Currently archaeological permits are taking the BC Archaeology Branch approximately 3-5 months to process.

Costing:

Drafting permit applications and following through with the BC Archaeology Branch to issuance, is generally quoted at approximately \$1500/permit. Construction monitoring and archaeological mitigation is billed on an hourly basis of \$95/hr with assistance from a KFN member at approximately \$250/day. The costs to complete the terms and conditions of the permit, which includes the analysis of any recovered archaeological material, providing a site inventory form update and final permit report depends on what is encountered during the project. Further cost estimates can be provided when duration of developments can be provided as well as the information provided by the initial geotechnical testing.

Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,



Chris Engisch, RPCA
Archaeologist

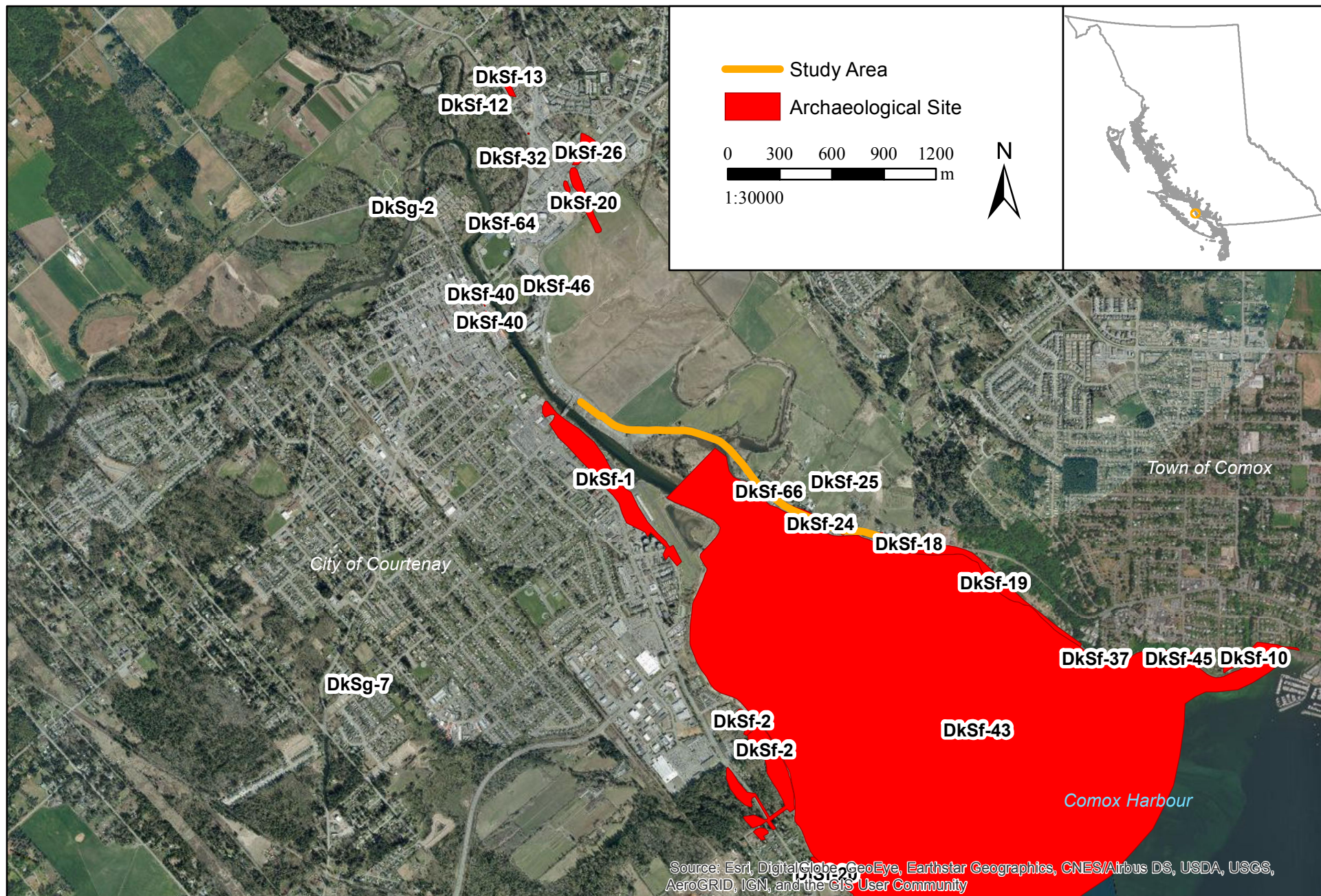


Figure 1. Location of Study Area

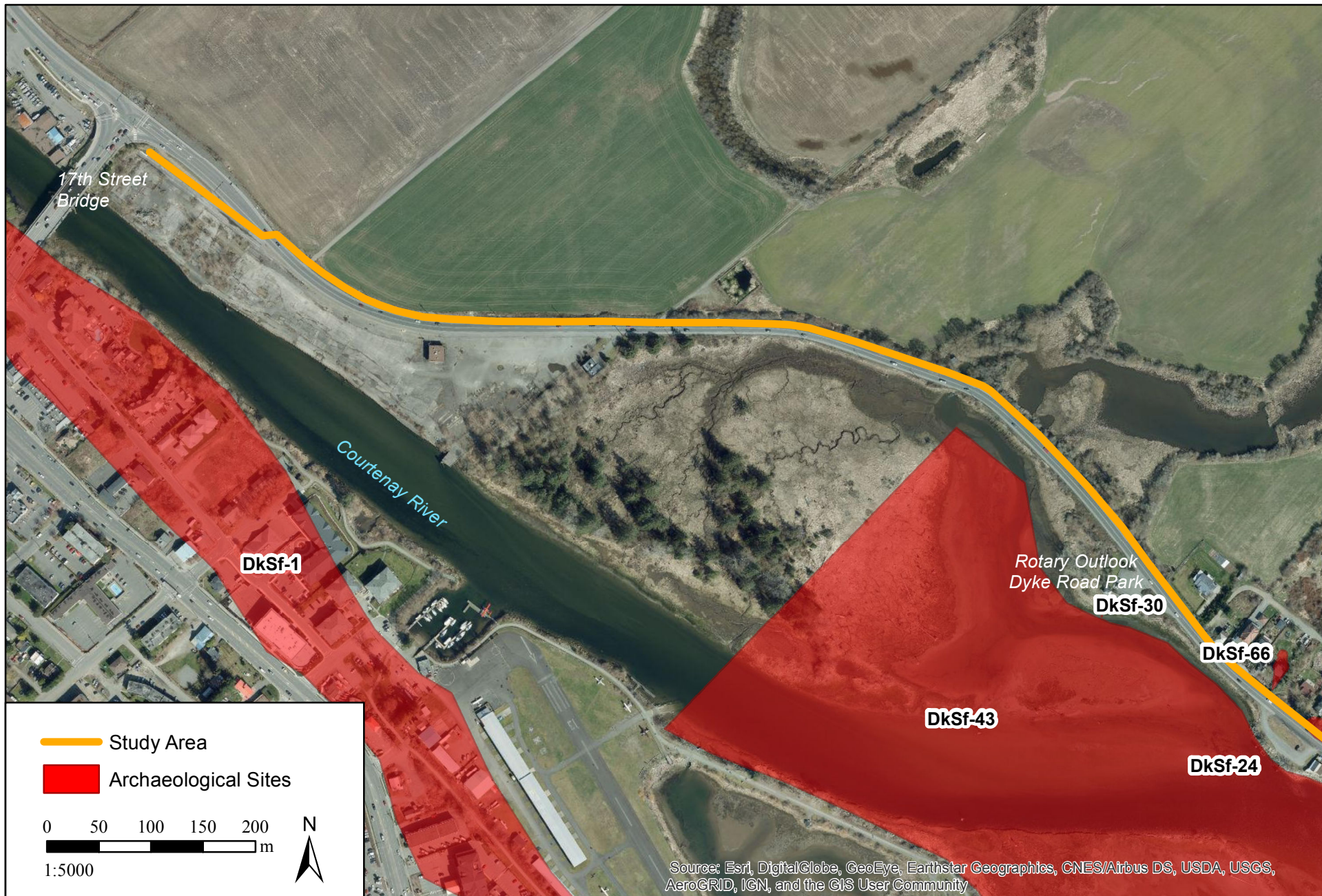


Figure 2. Midrange Development Map - West

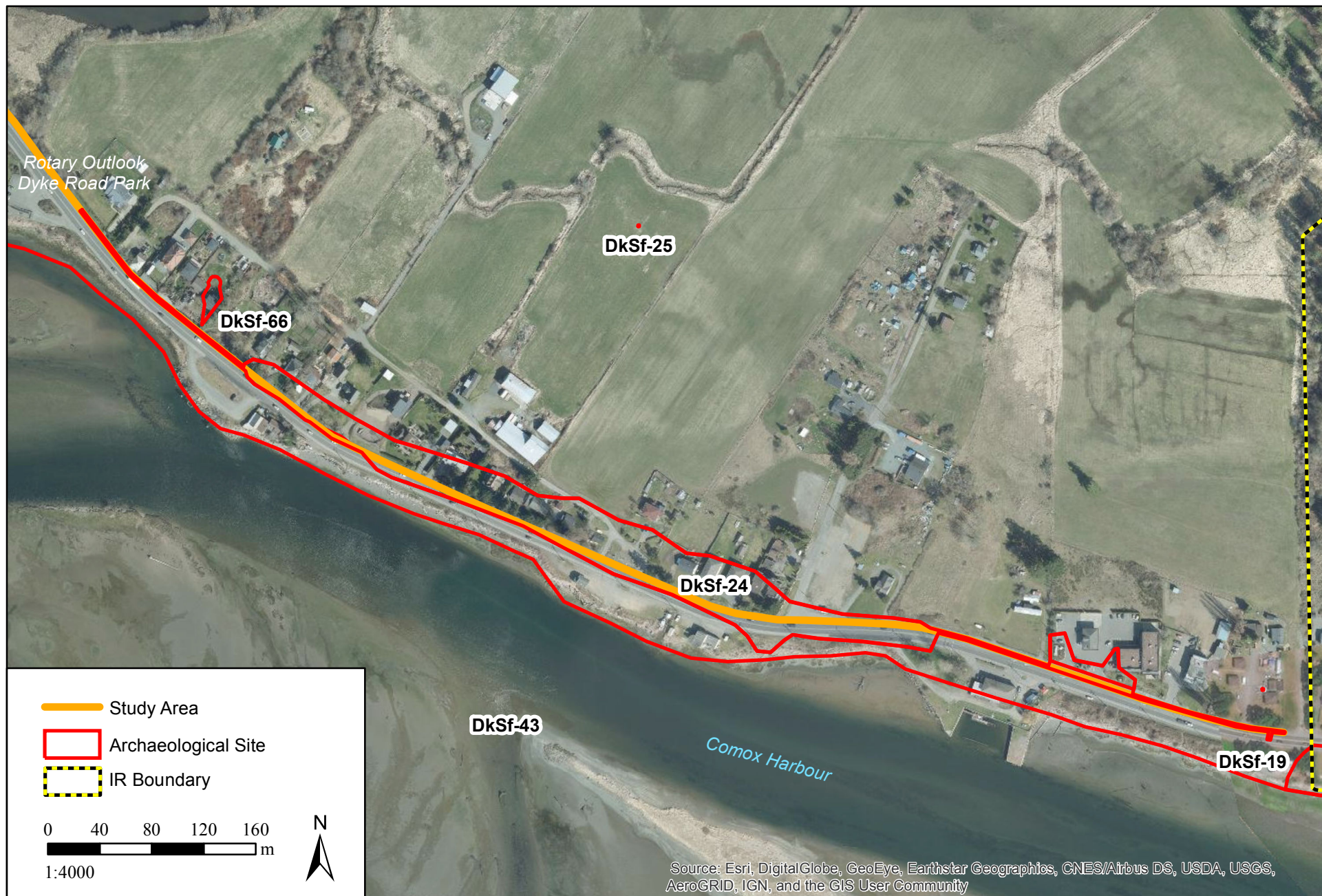


Figure 3. Midrange Development Map - East

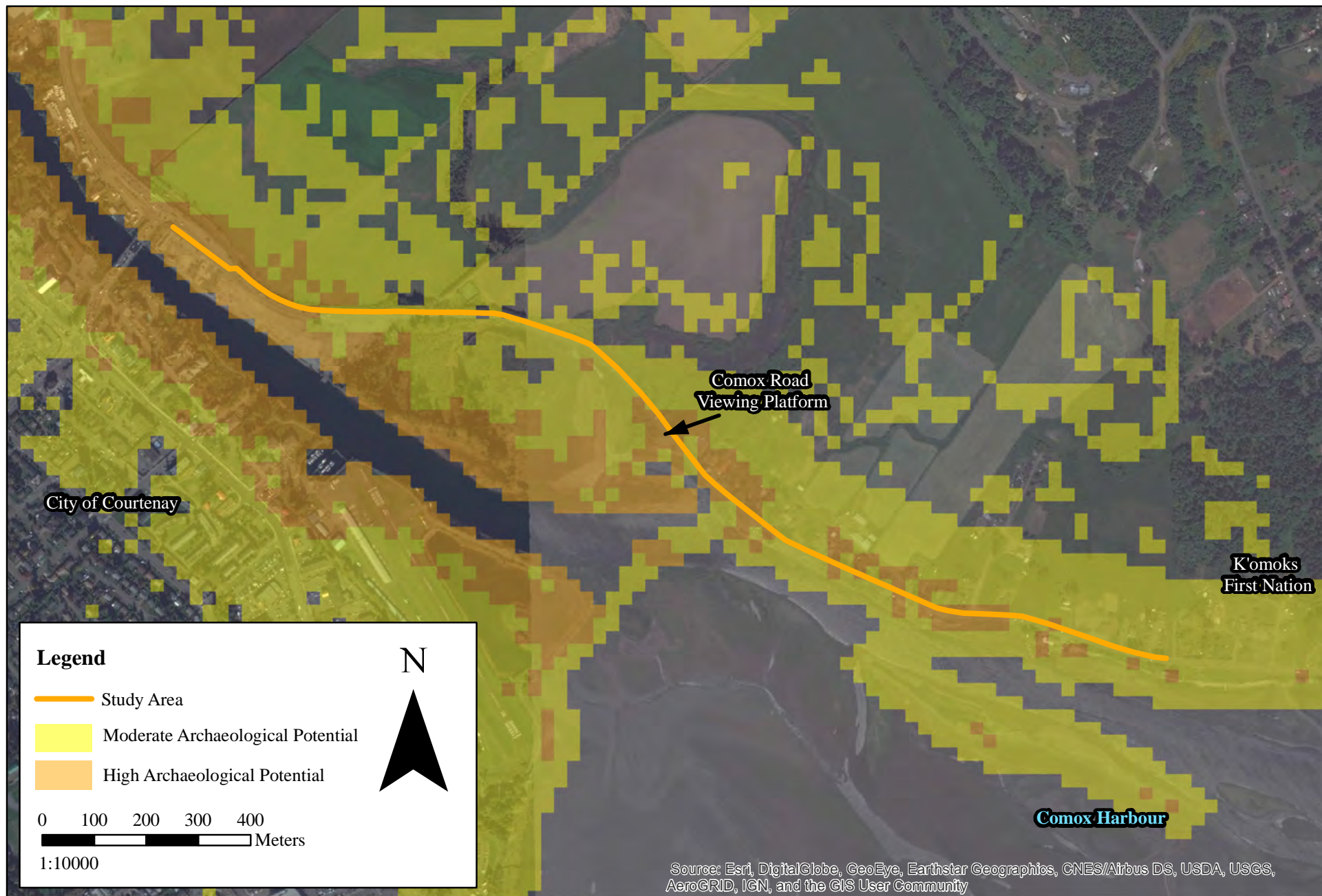


Figure 2. Archaeological Potential of Study Area

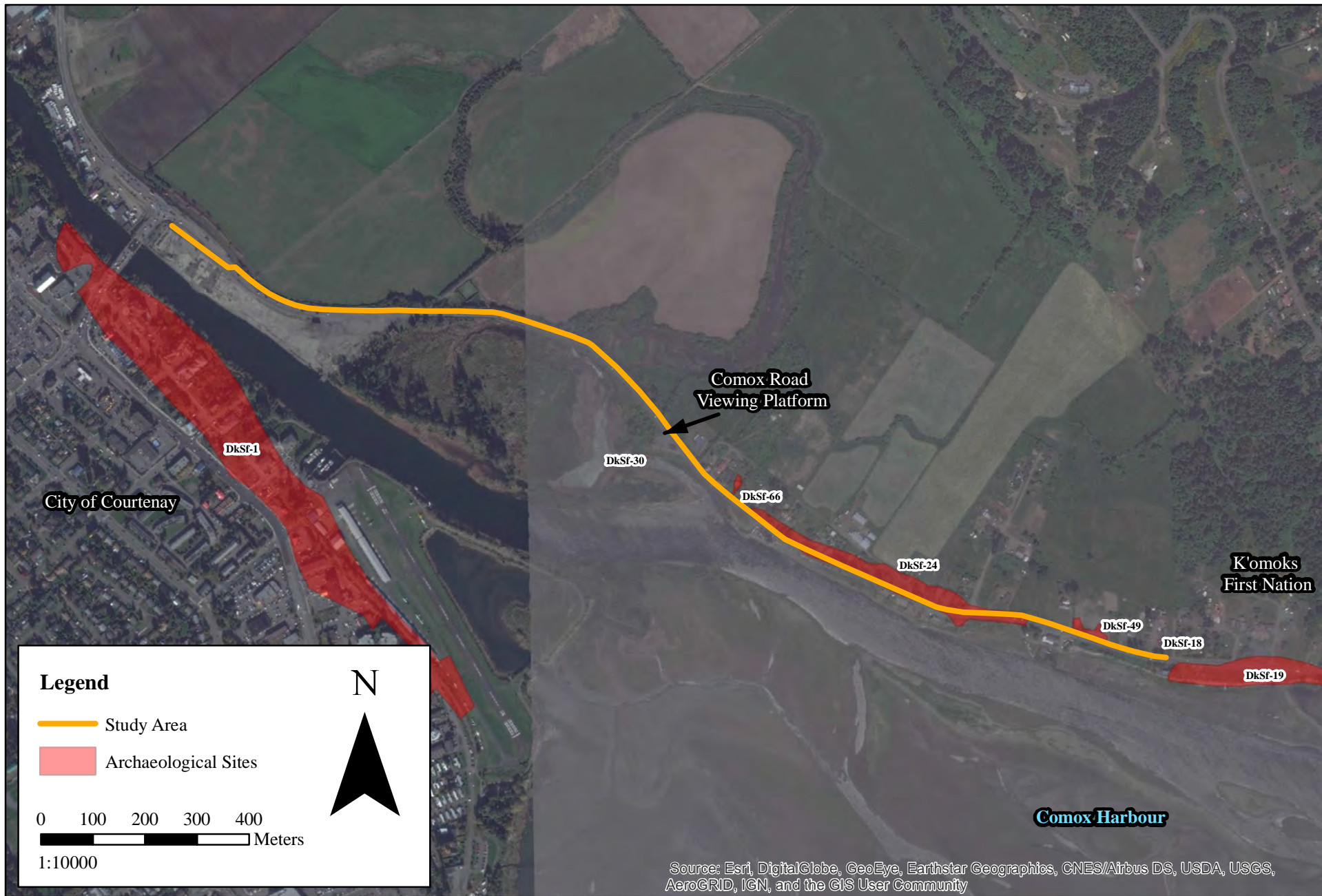


Figure 3. Archaeological Sites Proximal to Study Area

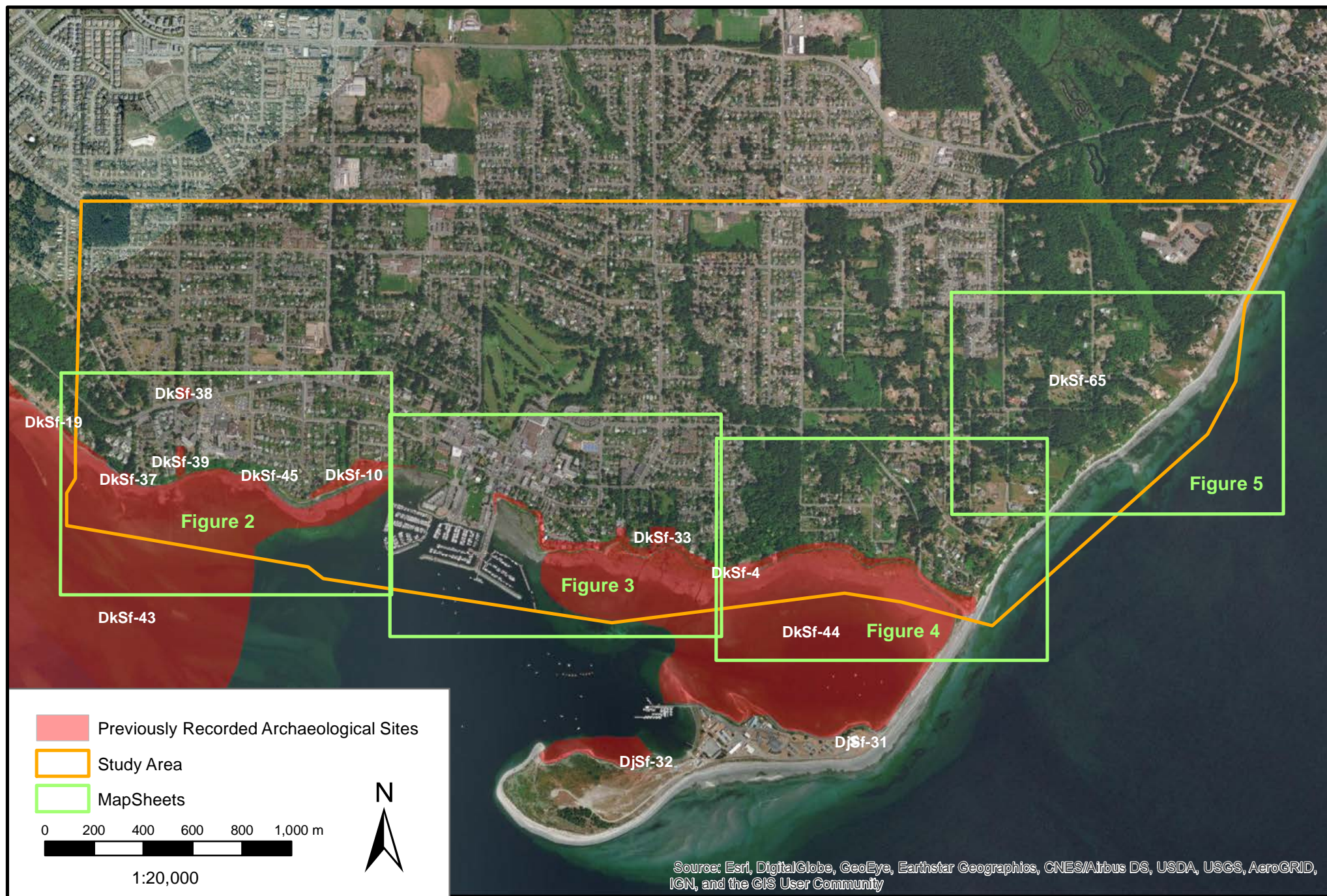


Figure 1. Overview/ Key Map

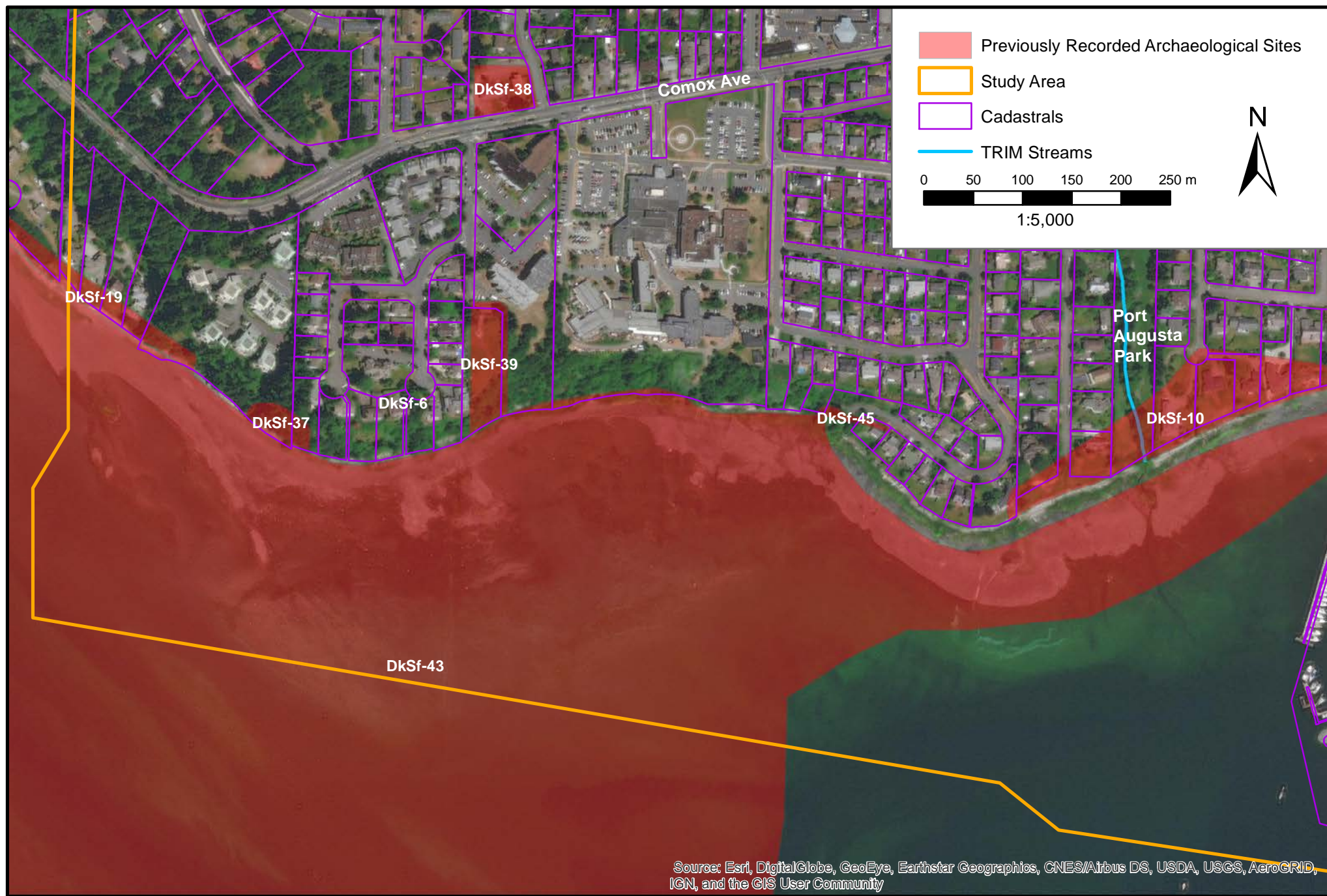


Figure 2. Midrange Map - West Extent

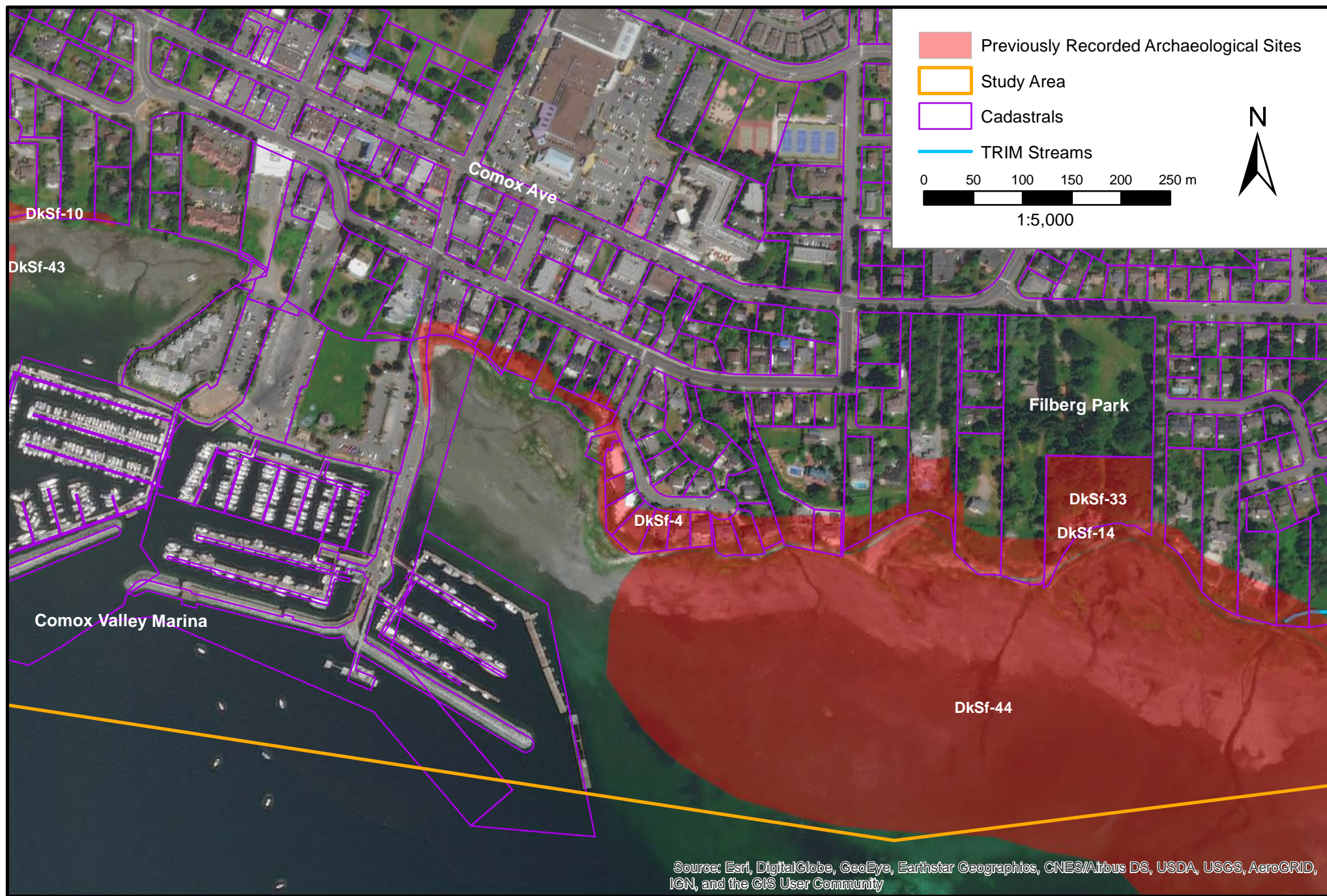


Figure 3. Midrange Map West-Central

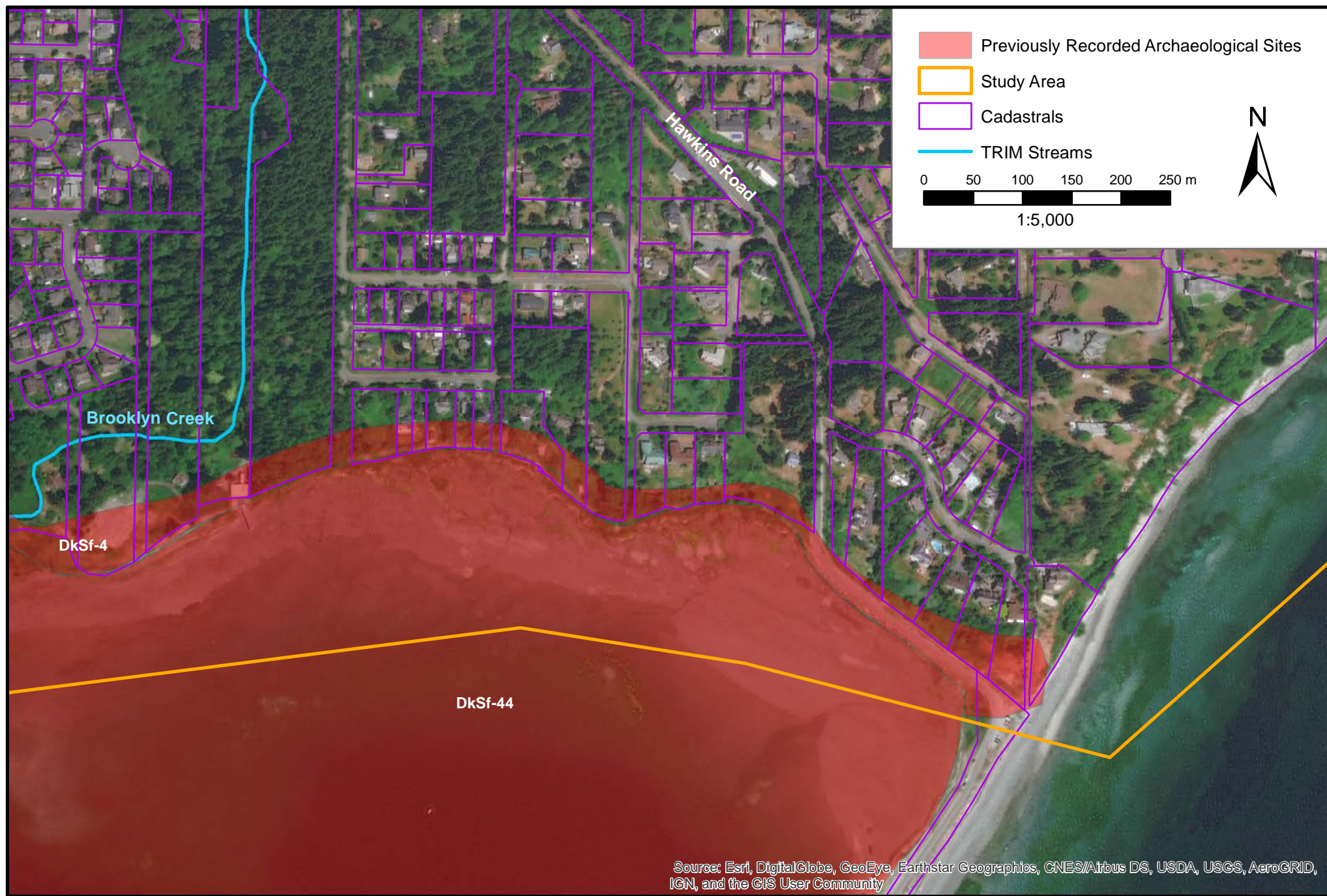


Figure 4. Midrange Map East Central

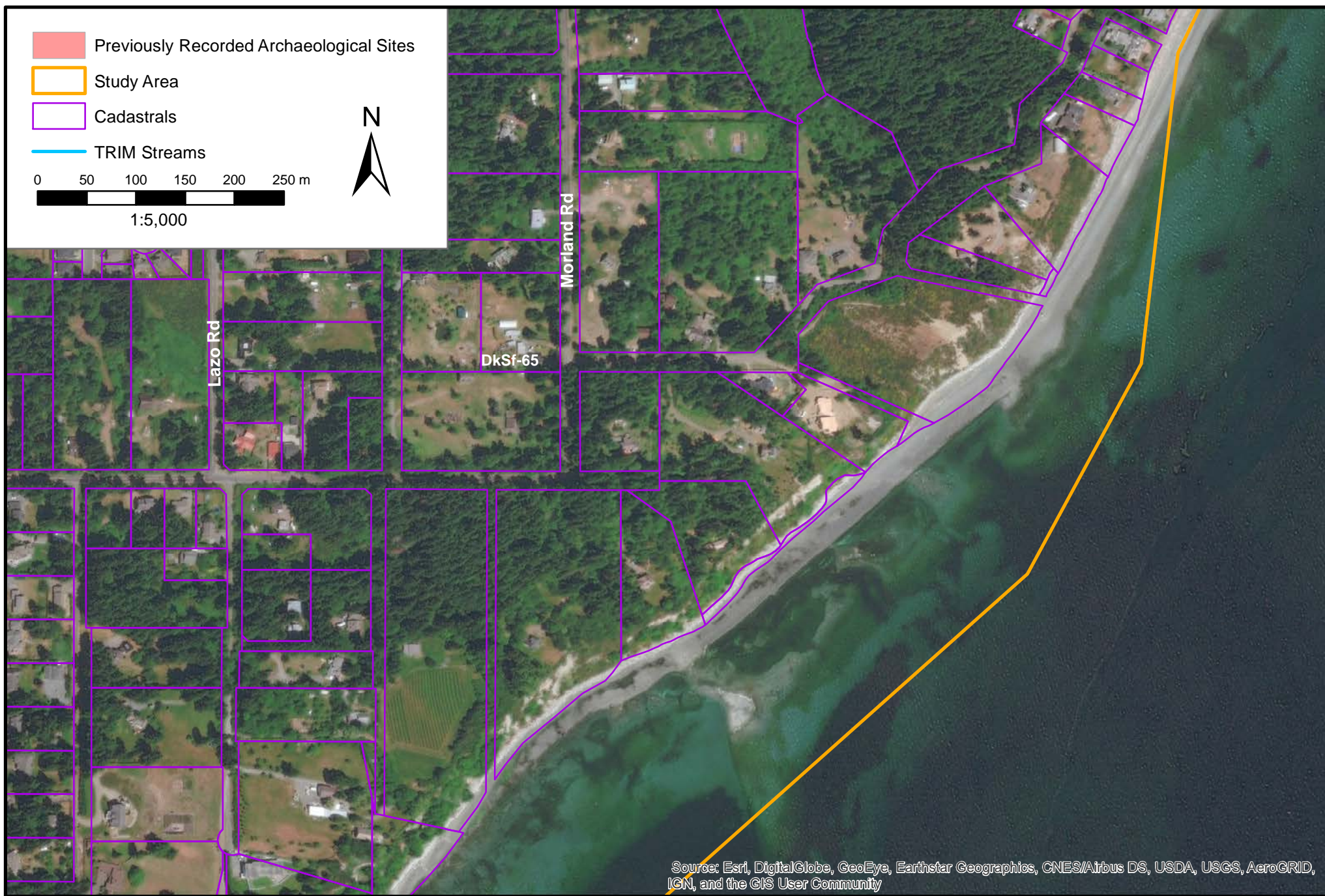


Figure 5. Midrange Map, East

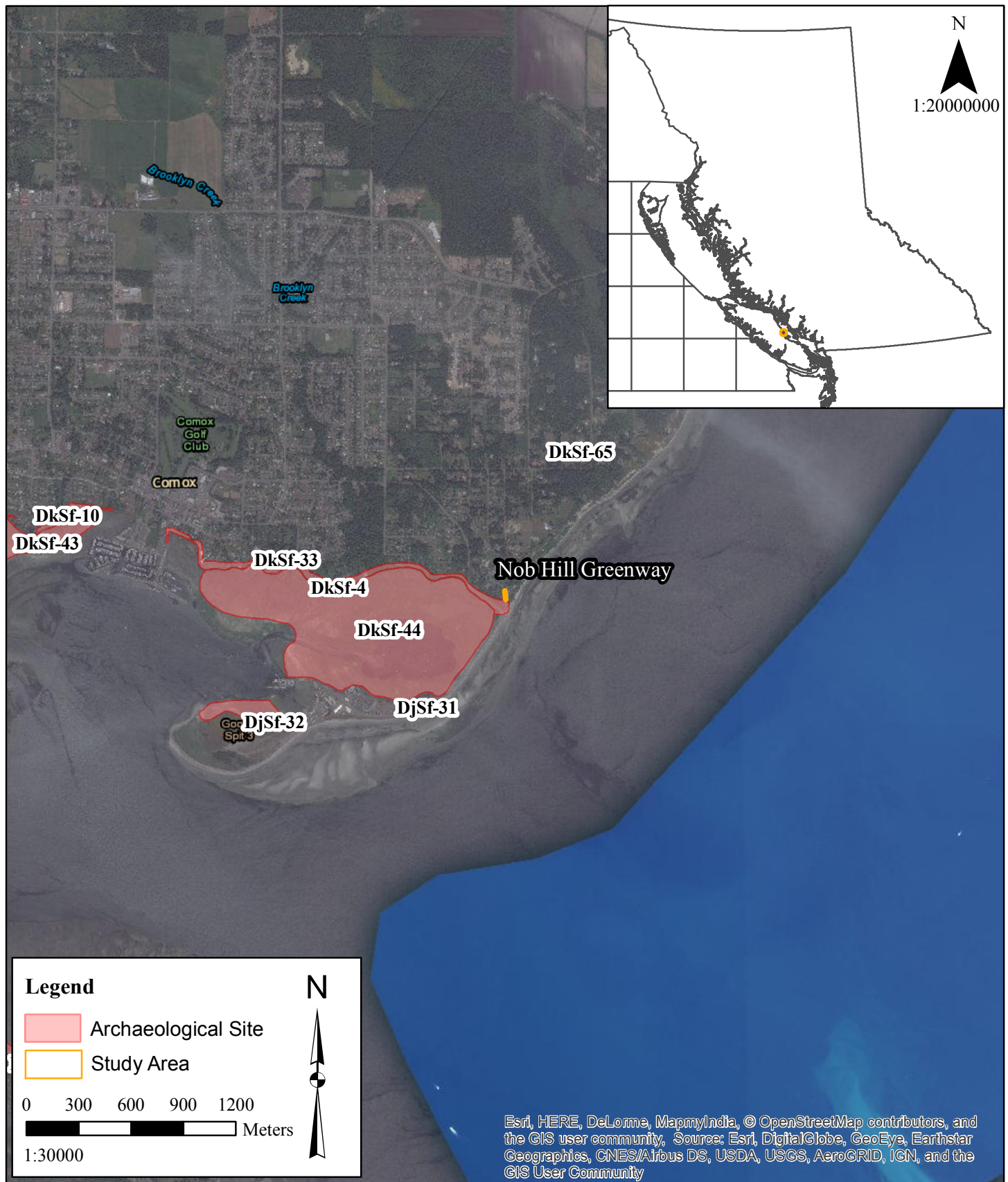


Figure 1. Location of Study Area

Baseline



archaeological services ltd.



556 Harmston Avenue Courtenay B.C. V9N 2X5 Phone: (250) 897-3853

August 12, 2019

Project #: 08020

Comox Valley Regional District
600 Comox Road
Courtenay, BC V9N 3P6

Attn: Kris La Rose, Senior Manager of Water/Wastewater Services

Re: Archaeological Site Summary: Comox Sewer Line, Komoks IR 1 to Curtis Road

Ten known archaeological sites are located within, or partially within, the study area as defined on Figure 1. These include (listed from west to east) DkSf-19, DkSf-43, DkSf-37, DkSf-6, DkSf-45, DkSf-10, DkSf-4, DkSf-44, DkSf-14 and DkSf-65, which are protected under the *Heritage Conservation Act*. A brief description of each archaeological site is presented below. Although DkSf-33 (historic building- Filberg Lodge), DkSf-38 (historic building- Little Red Church) and DkSf-39 (historic cemetery) are shown in these figures, they are not considered archaeological and not included in the scope of this review.

DkSf-19 (shell midden/human remains) likely represents the remains of ethnographically reported Pentlatch village q"umu?x"s but is also known as the "Hardy Site". The site is located at IR1 and is over 1 km in length. Since 1977, DkSf-19 has been subject to numerous (>10) archaeological studies including impact assessments and archaeological monitoring. Previous studies at the southwest extent of the site have defined the site boundary through subsurface testing, and found archaeological deposits up to 200 cm depth below surface (DBS).

DkSf-43 (fish trap complex) was first mapped in 2004. The site encompasses the majority of the intertidal zone of the Comox Harbour and consists of more than 300 wooden stake fish traps, representing more than 150,000 individual stakes. Radiocarbon dating of the wooden stakes has yielded dates from ~ 100 to 1300 years ago.

DkSf-37 (shell midden) was originally recorded in 1992. The site is located southeast of DkSf-19 on a small terrace (~70 m long) at the toe of Robb Bluff. Natural exposures suggest cultural deposits are present to ~ 100 cm DBS. No further archaeological work has been conducted at the site to date.

DkSf-6 (trench embankment/human remains /shell midden) also known as the “Old Fort Site” is located east of DkSf-37 at the “Emerald Shores” development on Robb Bluff. The site was first reported in 1968 and initially excavated in 1974. Numerous studies indicate the site has been significantly impacted by residential development. Evidence of human remains at the site is anecdotal and suggests the remains are historic. At present, the site displays as a small polygon 1 m² in the Remote Access to Archaeological Data (RAAD) website. However, the site has previously been reported as over 70 m in length.

DkSf-45 (shell midden/lithics) is located along the shoreline at the southwest extent of Beach Drive. The site was originally recorded in 2005 by Baseline Archaeological Services Ltd. (Baseline) and expanded during another study by Baseline the following year. To date, the site has yielded disturbed or relatively thin (20 cm) intact shell midden deposits.

DkSf-10 (shell midden/lithics/human remains) is located along the shoreline of Comox Harbour from Beach Drive, through the southern part of Port Augusta Park and almost as far east as Ellis Street. The site has been subject to numerous archaeological studies since 1965, including several evaluative excavations. These studies have resulted in the recovery of faunal remains, hundreds of artifacts, and human remains representing multiple individuals.

DkSf-4 (shell midden/human remains/lithics) also known as the Comox Bay Site, extends for 2 km along the Comox Harbour shoreline from the Comox Marina to Goose Spit. The site represents the amalgamation of several previously recorded sites and has been subject to more than 20 archaeological studies, including large scale archaeological surveys, archaeological impact assessments and monitoring. Varying levels of disturbance are reported throughout this large site. Archaeological remains recovered include artifacts, faunal remains and human remains.

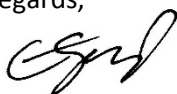
DkSf-44 (fish trap complex) also known as the Goose Spit Fish Trap Site is located within the intertidal zone of the embayment enclosed by Goose Spit. During initial mapping of the site in 2004, it was noted that the majority of the wooden stake concentrations are located on the north side and at the opening of the embayment. Despite some decay, the site is reported to be in good condition.

DkSf-14 (petroglyph) is a petroglyph which has been cemented into the fireplace at Filberg Lodge. The petroglyph was originally found on the beach, at a different unspecified location.

DkSf-65 (lithics) represents an isolated find of a single obsidian point from 267 Morland Drive, turned in/reported to Baseline by the private land owners. No other archaeological remains were observed at this location.

Please feel free to contact me if you have any questions or concerns.

Regards,



Chelsea Gogal
Archaeologist

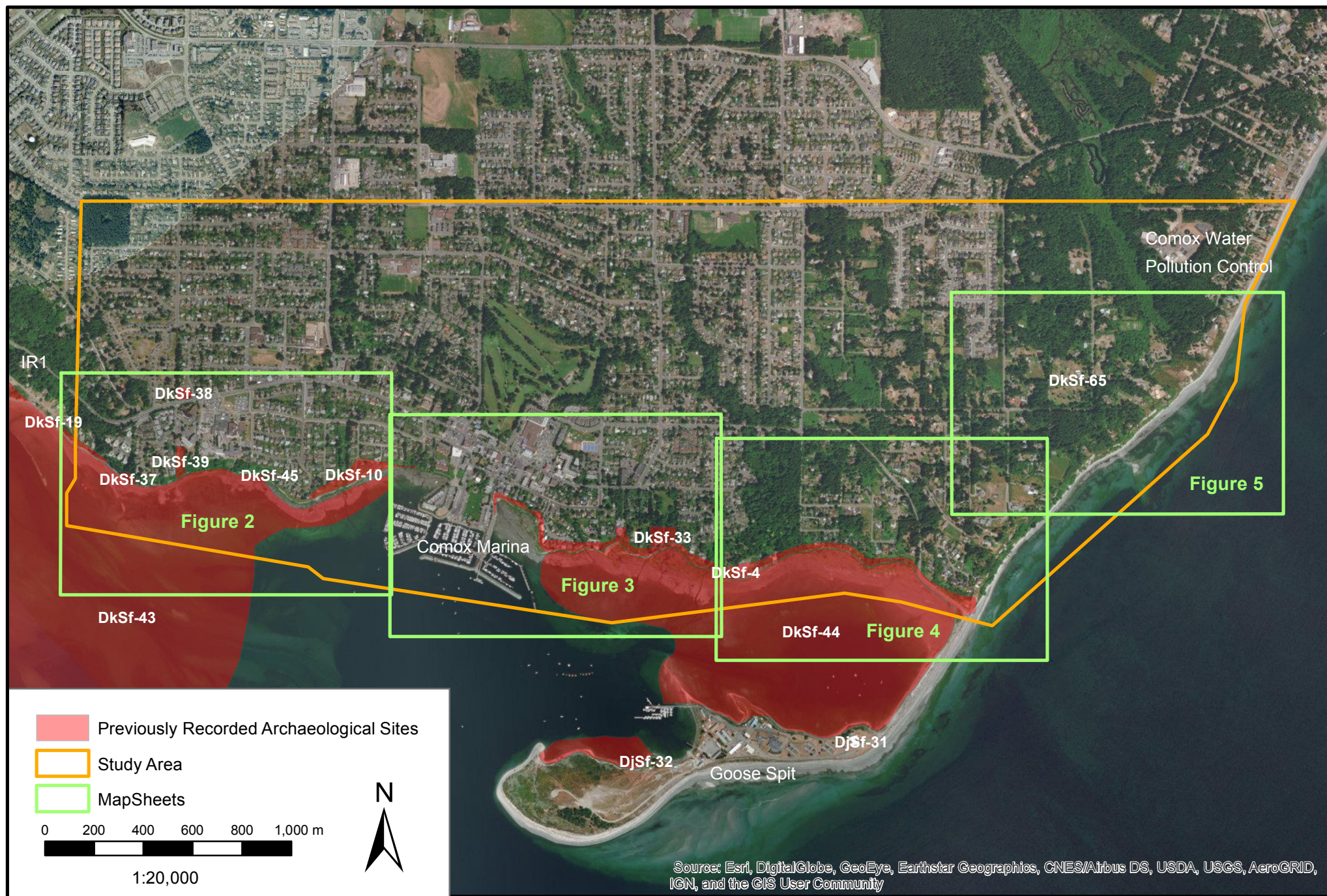


Figure 1. Overview/ Key Map

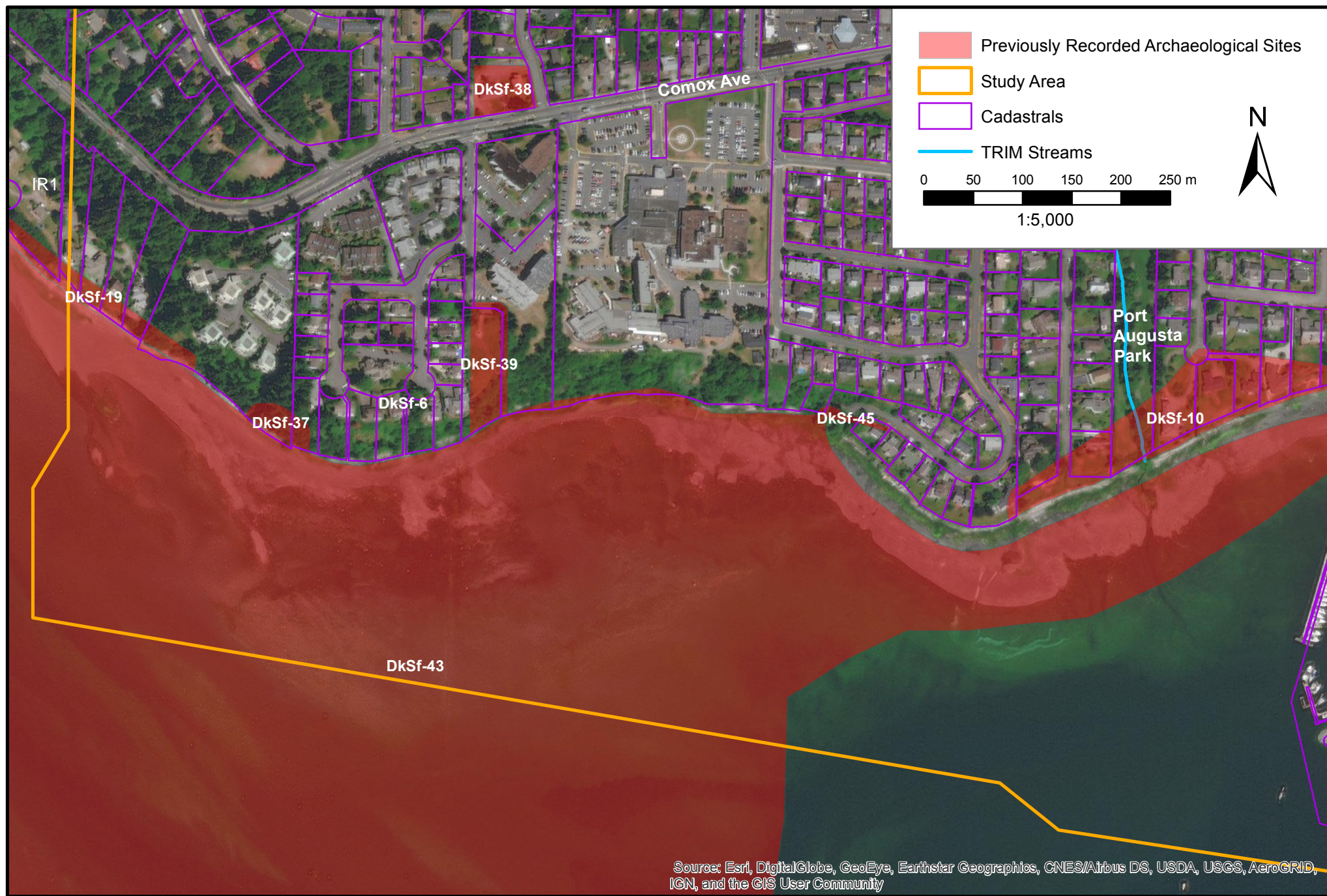


Figure 2. Midrange Map - West Extent

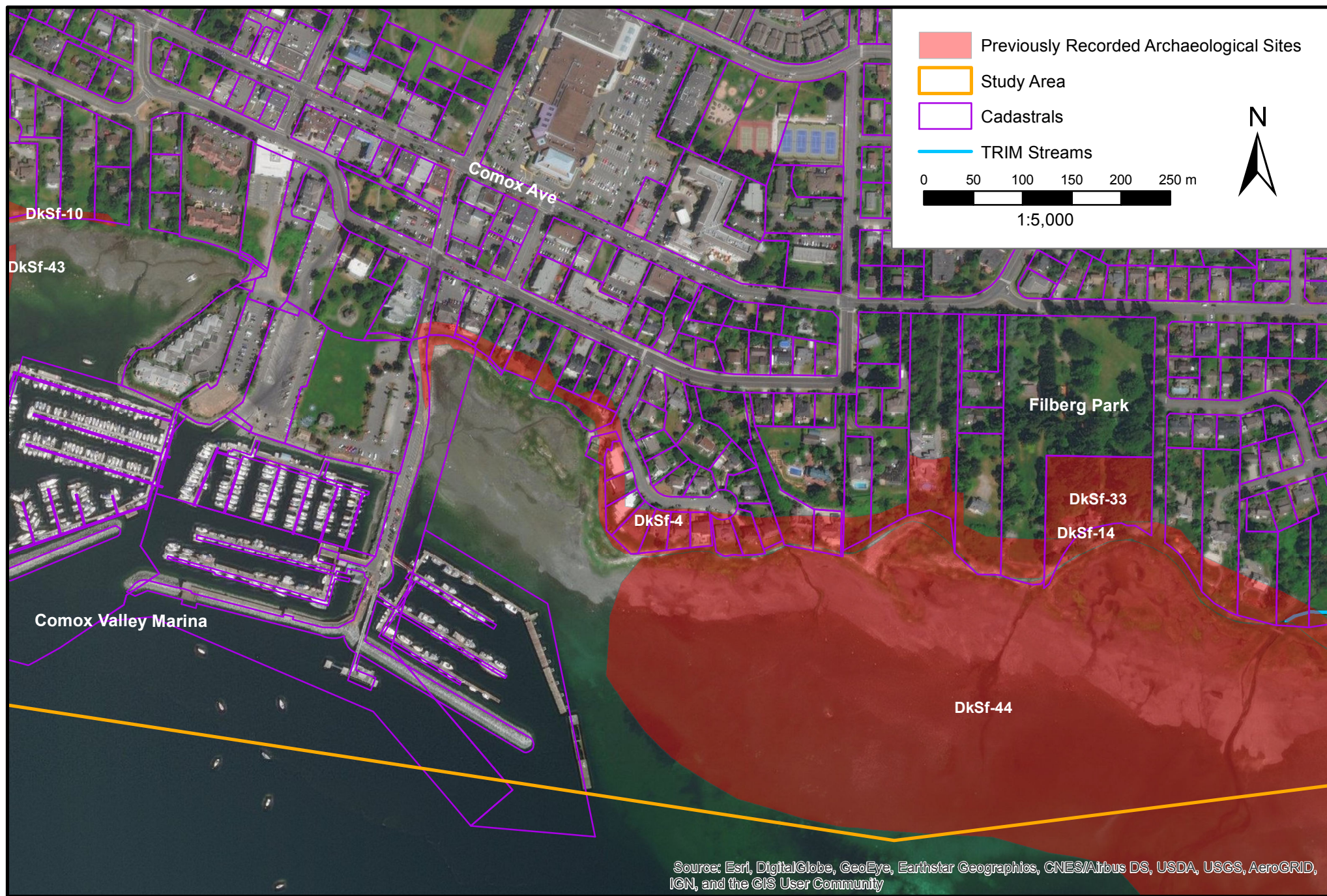


Figure 3. Midrange Map West-Central

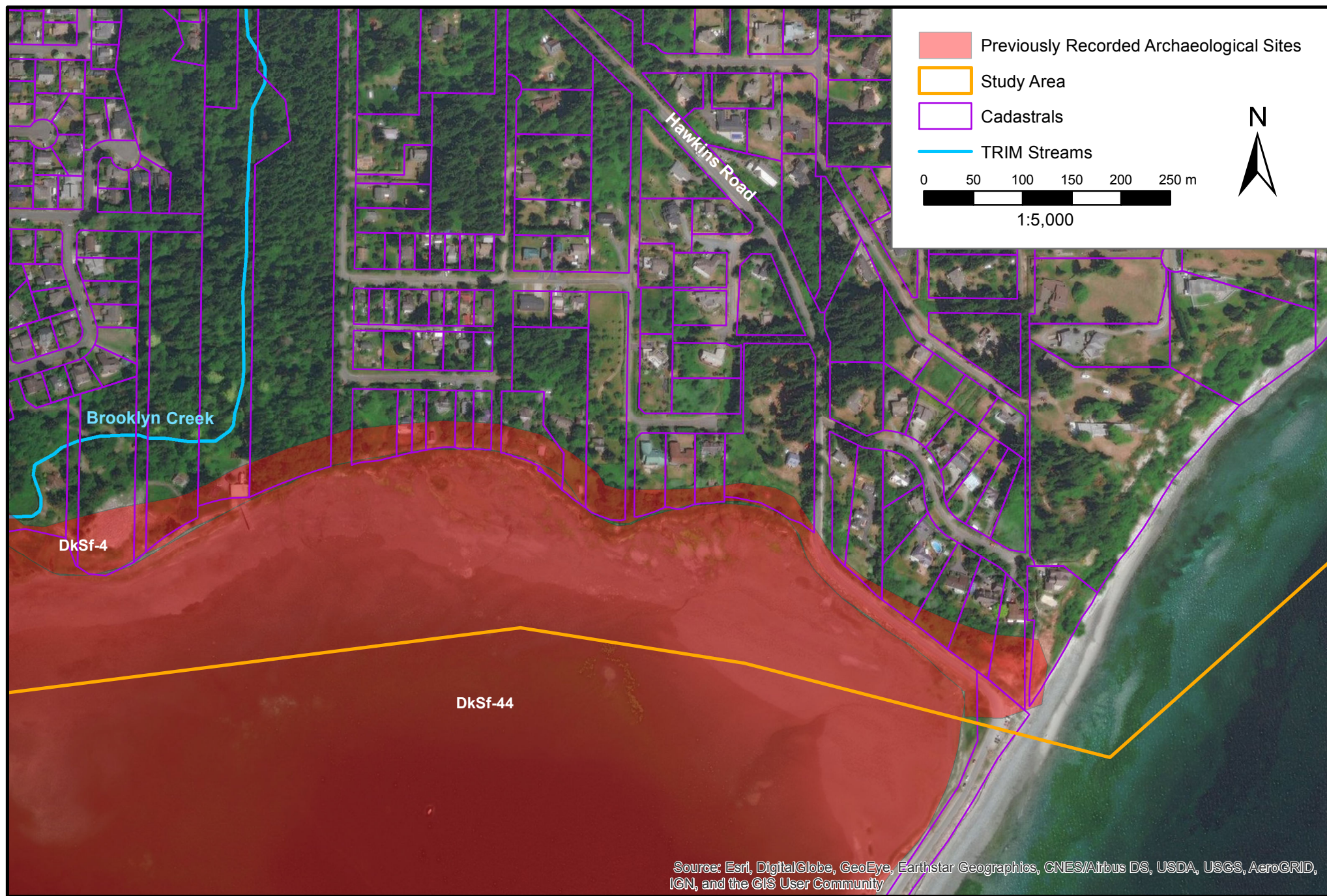


Figure 4. Midrange Map East Central

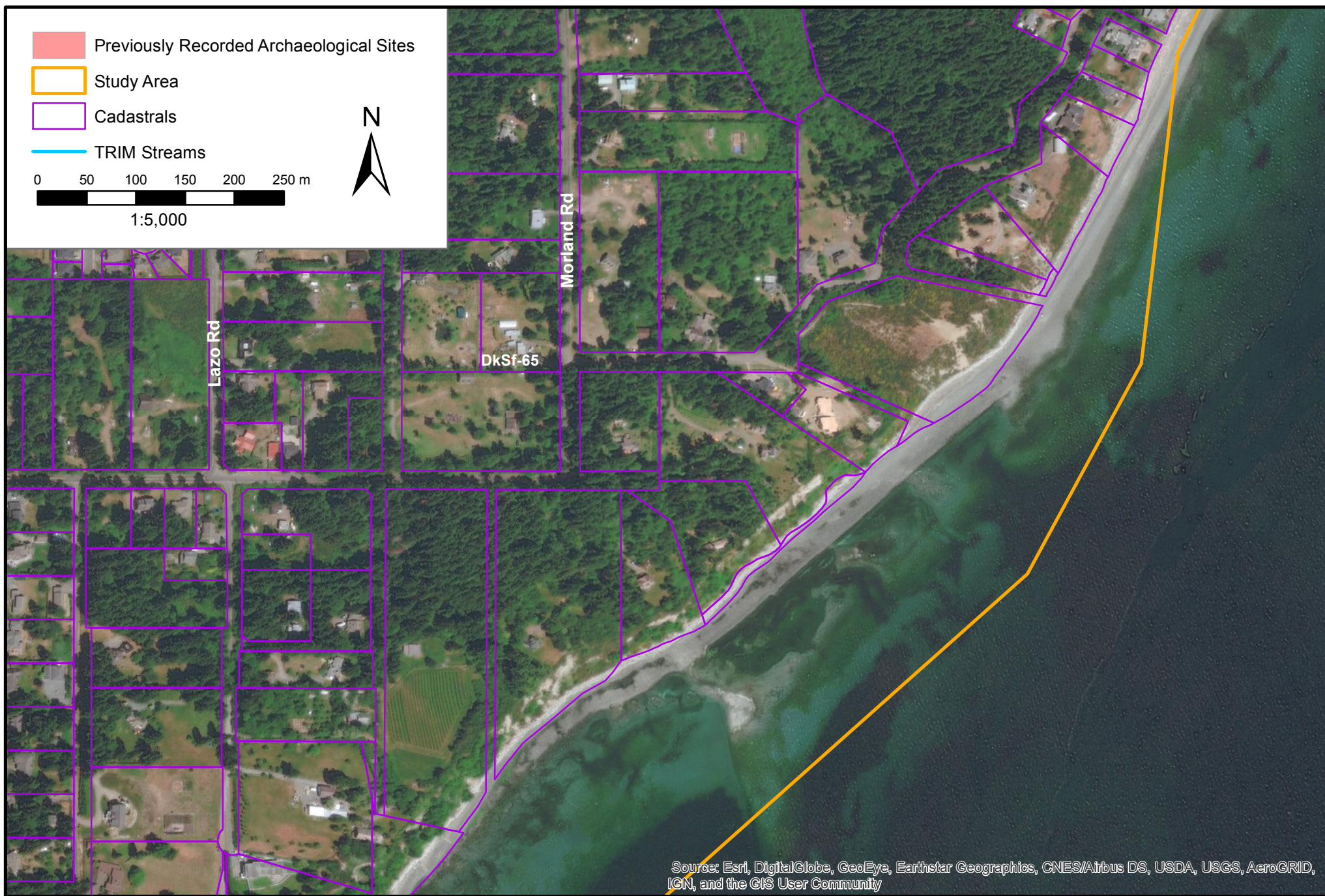


Figure 5. Midrange Map, East