

BOEM

Bureau of Ocean Energy
Management

Identifying and Managing Archaeological Resources in Sand Source Areas on the Outer Continental Shelf

Sand Management Working Group Workshop
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Historic Preservation Legislation

➤ National Historic Preservation Act (NHPA)

- *Section 106* (36 CFR § 800): Requires that all Federal agencies, prior to permitting or funding a project, take into consideration the effect of that project on historic properties, including archaeological sites, that are eligible for the National Register of Historic Places (NRHP).
- *Section 110* (16 U.S.C. § 470): Each Federal agency must establish a preservation program for the protection of historic properties, including nominating properties to the National Register.

➤ National Environmental Policy Act (NEPA)

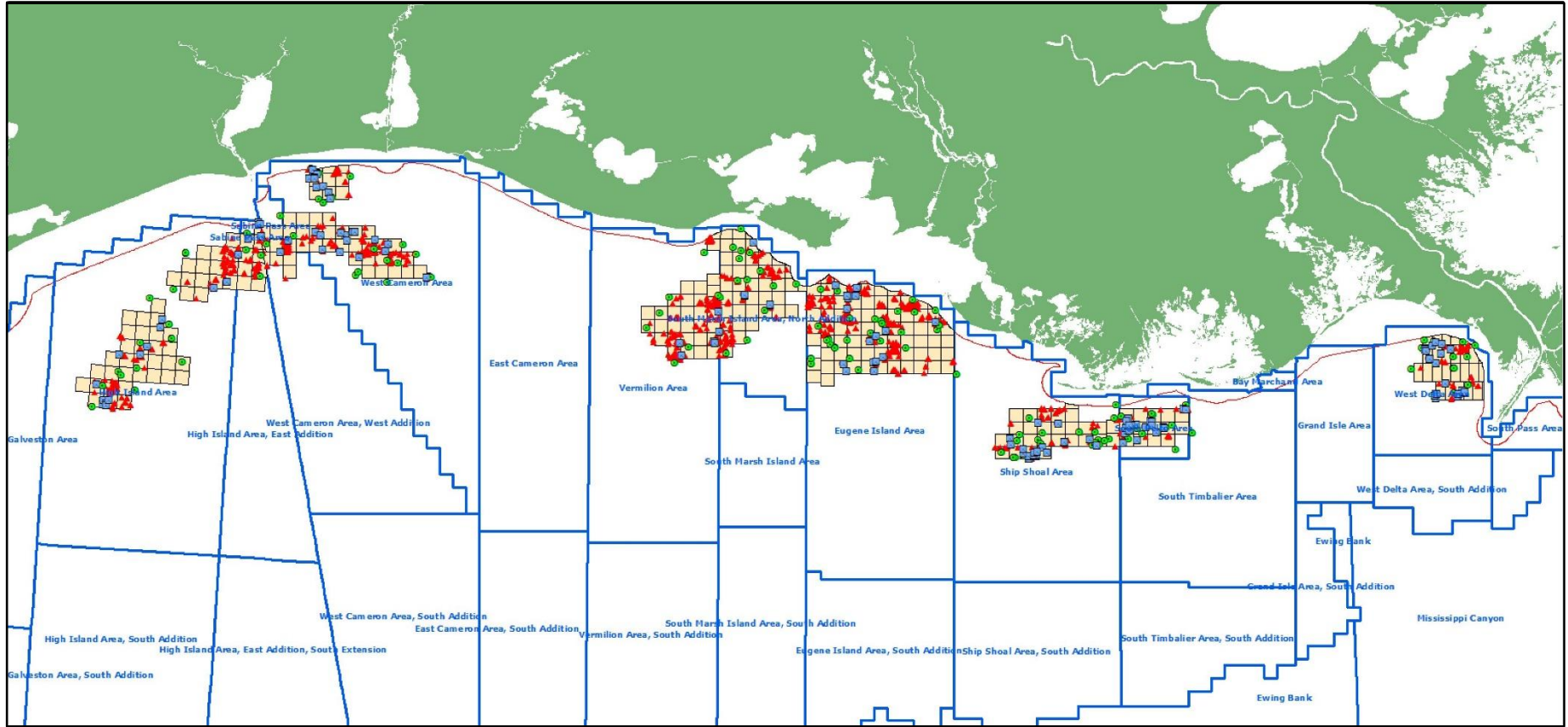
- Federal or federally-assisted projects must take into account effects on historic and cultural resources, including sacred sites and archaeological sites not eligible for the NRHP (40 CFR § 1500-1508).

➤ Outer Continental Shelf Lands Act (OCSLA)

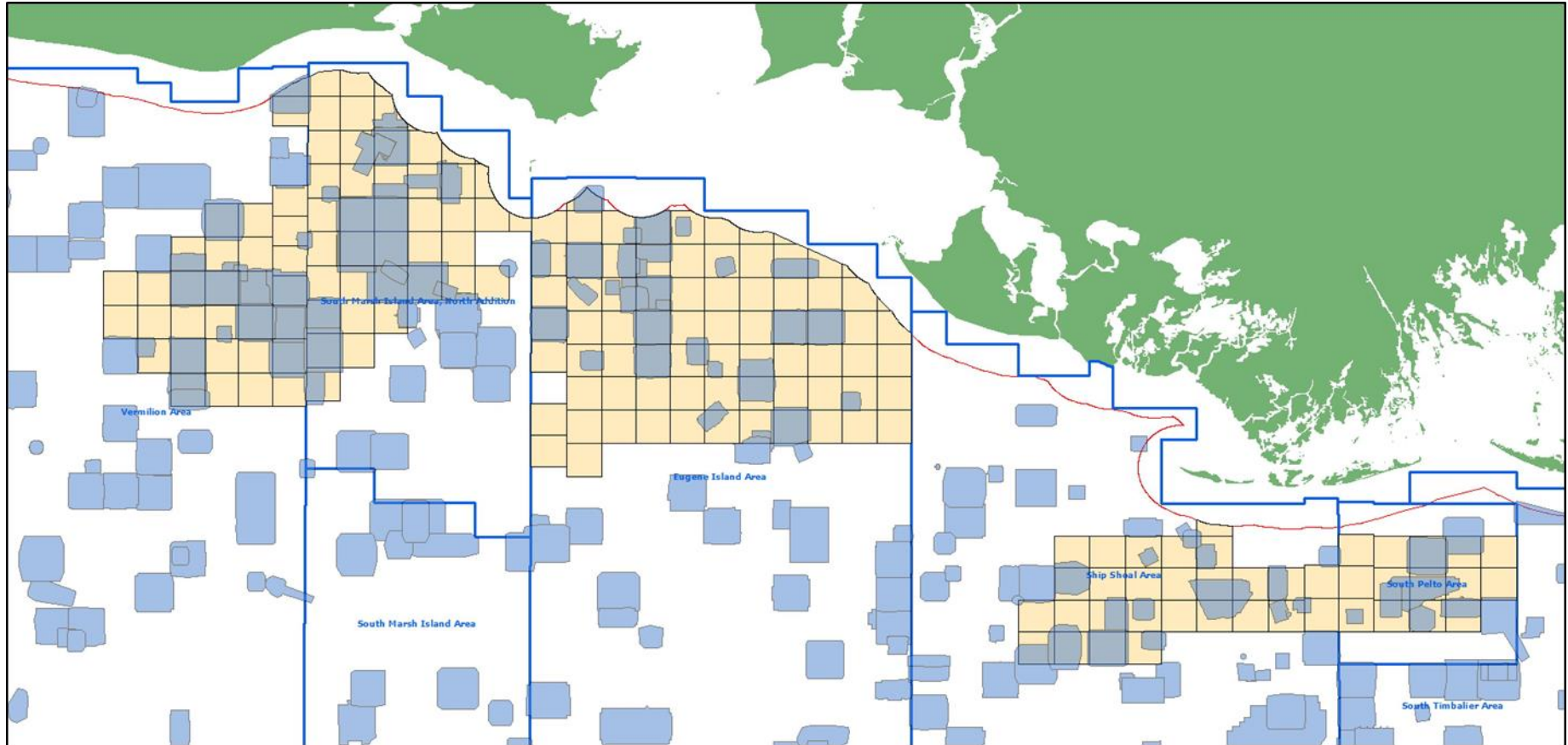
- Geological and geophysical explorations authorized by BOEM will not “disturb any site, structure, or object of historical or archaeological significance” (43 U.S.C. § 1340.(g)(3)).



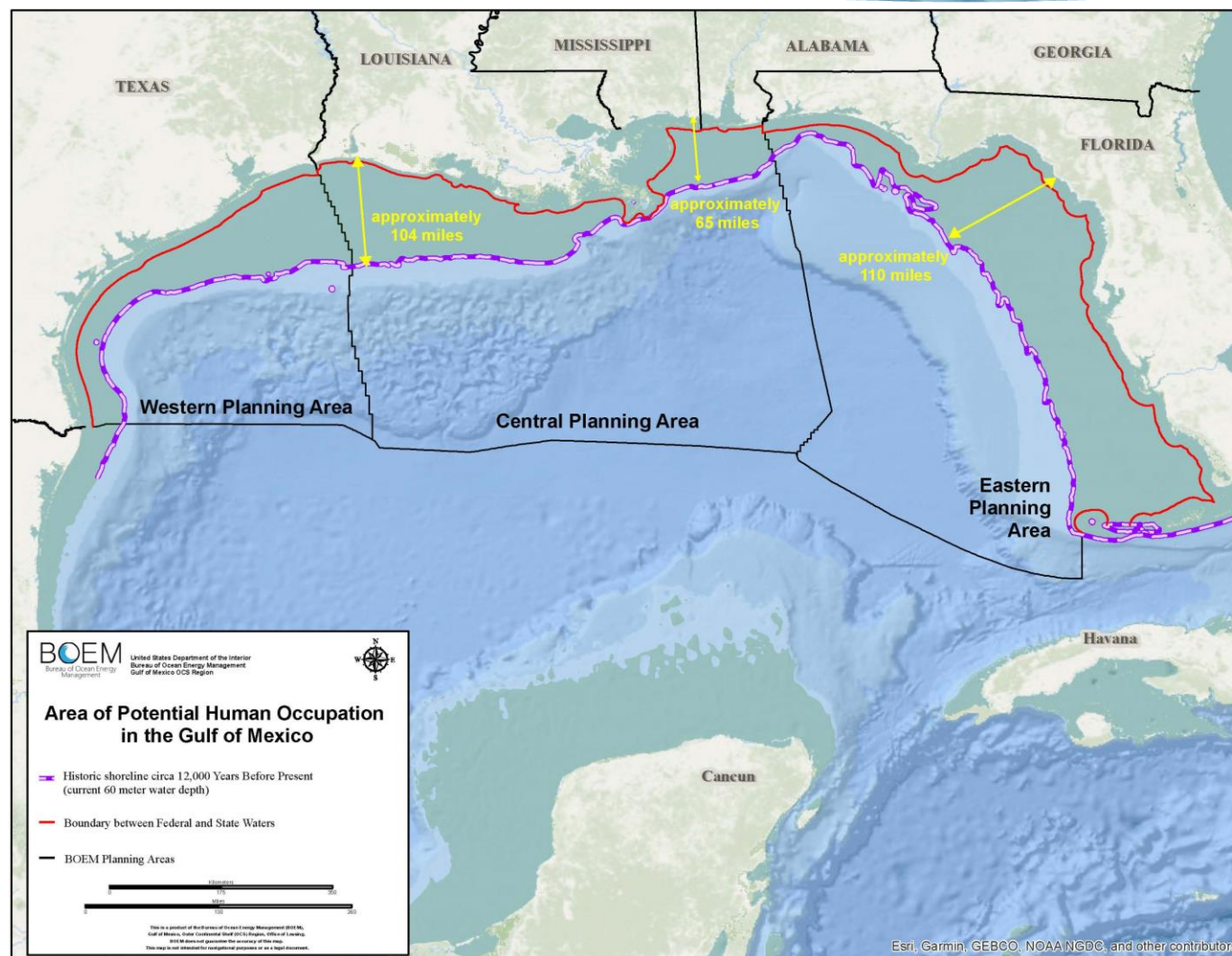
Known and Potential Shipwrecks in Significant Sand Areas



Existing Survey Coverage in Significant Sand Areas



OCS Pre-contact Archaeological Site Potential



Environmental Assessment: Proposed Sand Survey Activities for BOEM's Marine Minerals Program, Atlantic and Gulf of Mexico

- **Provides NEPA analysis for all BOEM conducted, funded or authorized activities to identify, delineate, monitor and research potential sand resources.**
- **Proposed action includes three components:**
 1. Reconnaissance-scale geotechnical and geophysical surveys to identify and delineate OCS sand resources.
 2. Site-specific, high-resolution geophysical surveys to delineate borrow areas and identify natural and cultural resources, and munitions of explosive concern (MEC)
 3. Research and/or monitoring surveys to detect morphological changes in sand resource areas.
- **Section 106 consultation included the Advisory Council on Historic Preservation (AHP), SHPOs, and federally recognized Tribes.**



Proposed Study Area for Sand Survey Activities (0-50 nm)



Archaeological Survey and Mitigation Requirements

- **Types of bottom disturbing activities:**
 1. Geological sampling (e.g., vibracores, grab samplers)
 2. Coring Vessel anchoring
 - *Dynamically positioned vessels or live-boating should be used to maximum extent possible.
- **Any bottom disturbing activities must be preceded by an archaeological clearance geophysical survey.**
 - Prior submittal of geological sampling plan to BOEM.
 - Surveys can be either sequential or concurrent.
 - Geophysical surveys must include magnetometer, sub-bottom profiler, and sidescan sonar or multibeam bathymetry.
 - Geological samples and anchors must be placed within the effective coverage of geophysical data.
 - For concurrent surveys, project archaeologist must be present for field operations or otherwise have real-time access to survey data in order to identify potential archaeological resources prior to bottom disturbing activities taking place.
- **Potential archaeological site avoidance requirements:**
 - Minimum avoidance for geological sampling (coring) = 164 ft (50 m).
 - Minimum avoidance for anchoring = 328 ft (100 m).



Archaeological Survey and Mitigation Requirements, Cont'd

- **Post-review discoveries:**

- A post-review discoveries clause must be included in the contract or cooperative agreement.
- If a suspected archaeological resource is discovered during operations, notify BOEM within 24 hrs and take precautions to protect the site:
 - Cease bottom disturbing activities in the area.
 - Maintain confidentiality of the site location.
- If discovery is made after impacts have occurred, provide a statement documenting the extent of impacts.

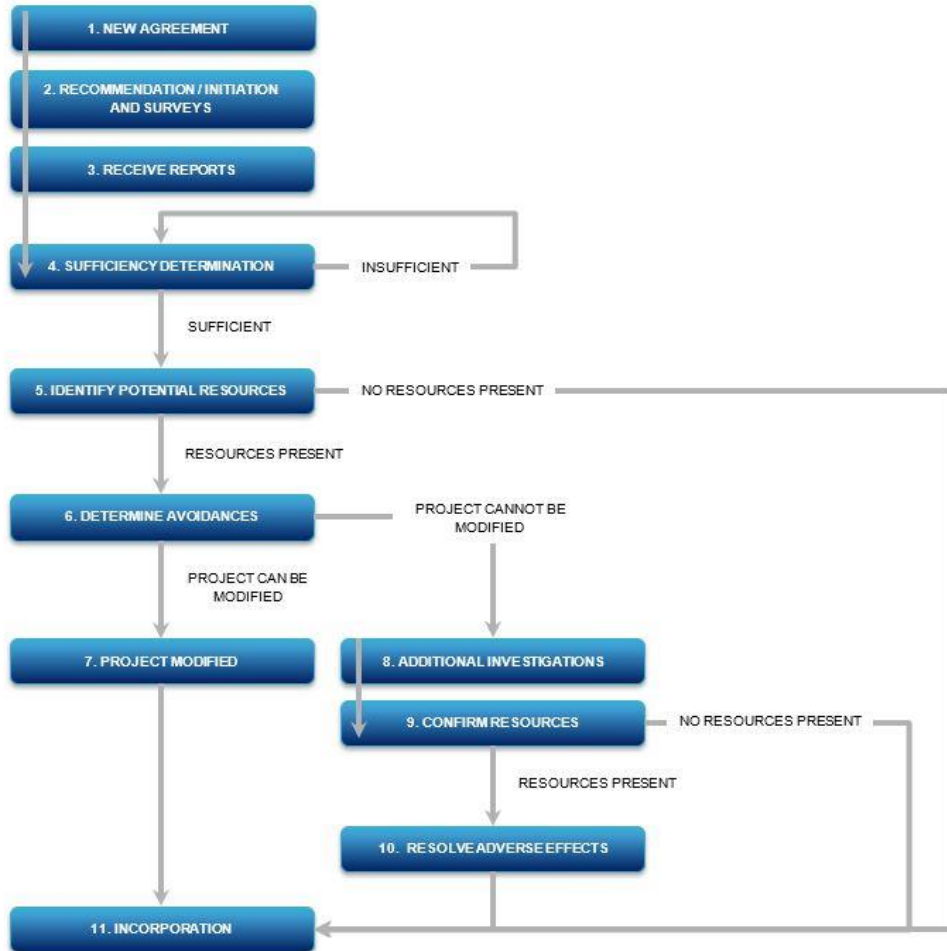
- **Site-specific geophysical survey requirements:**

- Magnetometer and subbottom profiler = maximum 30m lane spacing
- Sidescan sonar or multibeam bathymetry = 100% seafloor coverage and resolution of discrete targets of 0.5 to 1.0m

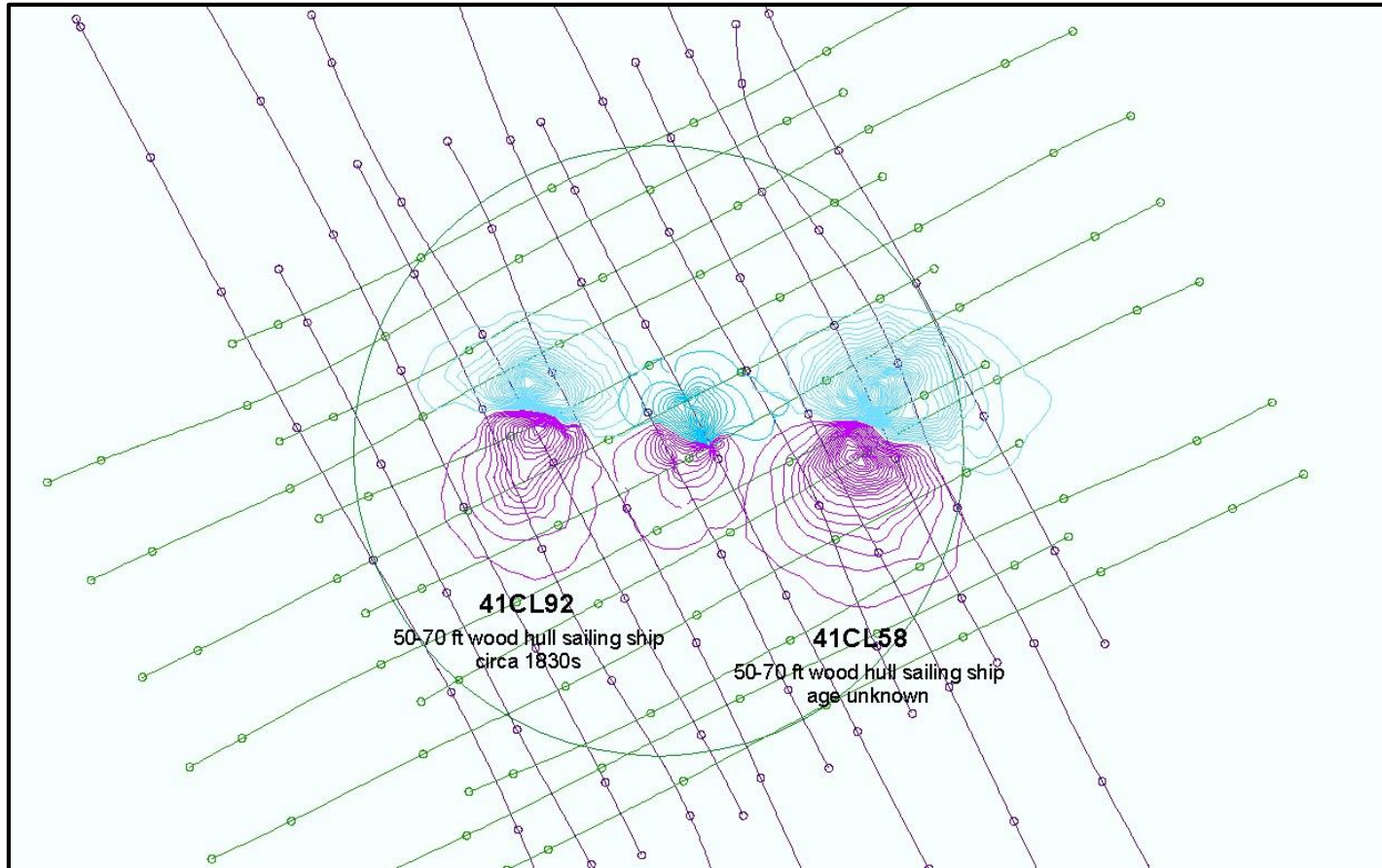


Process Flowchart for Non-Negotiated Agreements

PROCESS FLOWCHART

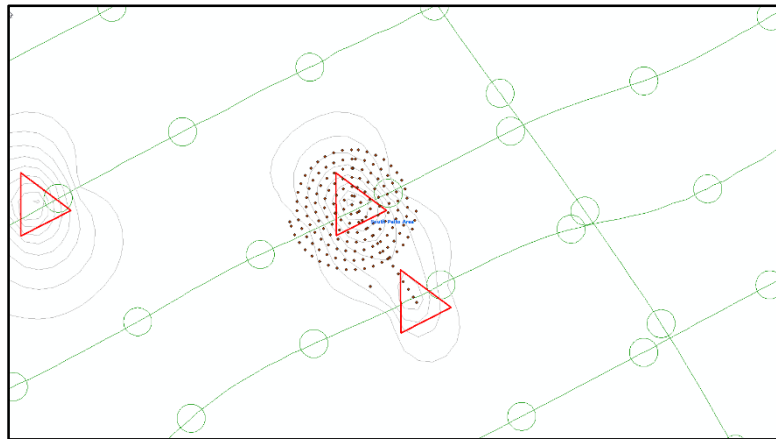
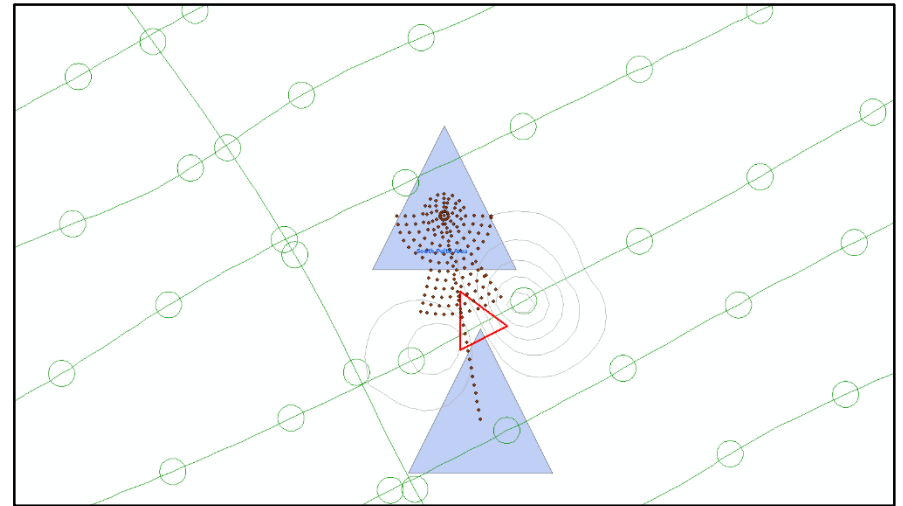
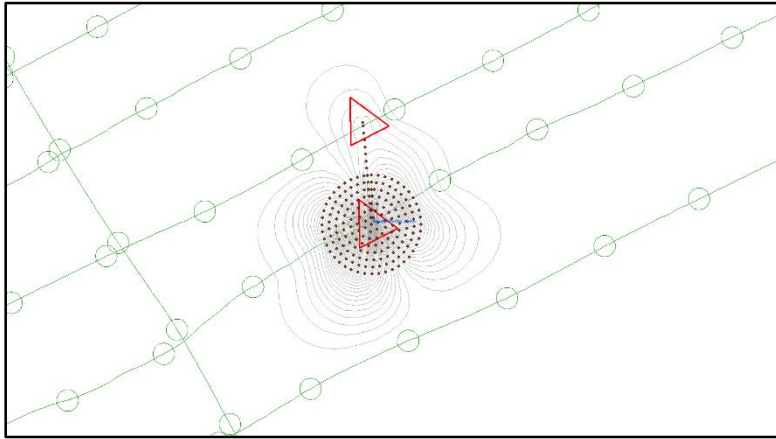


Additional Reporting Recommendations



Target Ground-Truthing Investigations

Caminada Headland anomalies



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