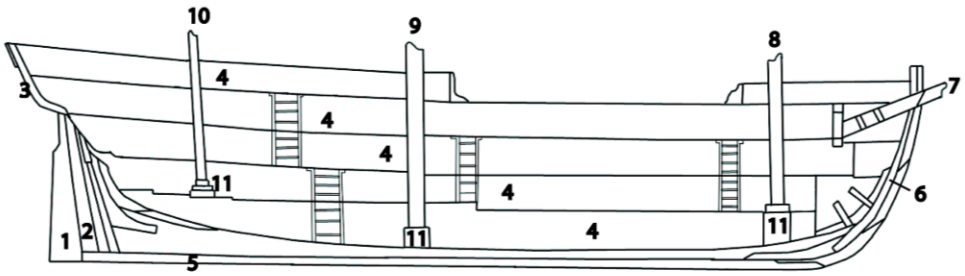
CITiZAN Timber-Hulled Vessel / Fragment Record Guidance

Site code: Input the site code your group has assigned	**Feature number:** Input the feature code your group has assigned, include the HER or NRHE number
Location: Record the NGR or coordinates and how this was obtained (GPS, paper map etc.)	**CITiZAN number:** If the feature is present on CITiZAN's Coast Map input the CITiZAN Number

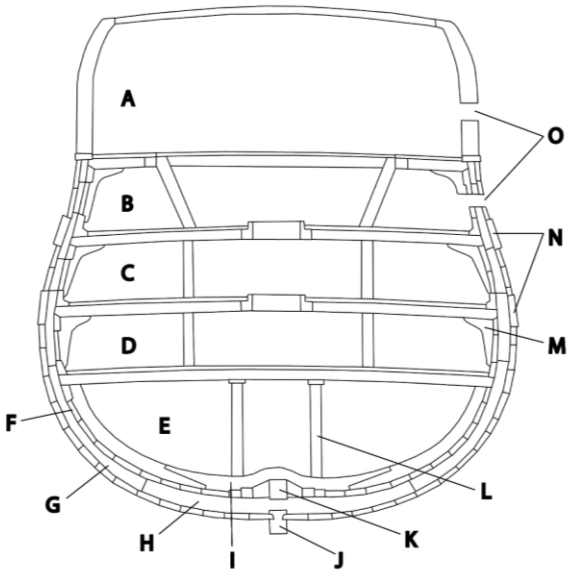
Typical Layout

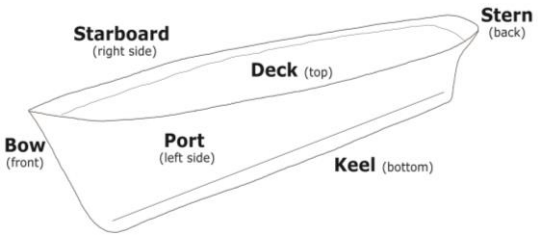


1 Rudder
2 Sternpost
3 Transom
4 Cargo holds / stores / cabins
5 Keel
6 Stempost
7 Bowsprit
8 Foremast
9 Mainmast
10 Mizzenmast
11 Mast step

Internal Layout

A Quarter deck
B Upper deck
C Gun deck
D Orlop deck
E Hold
F Ceiling planking
G Futtock
H Floor timber
I Rider
J Keel
K Keelson
L Pillar
M Knee
N Wale
O Gun Port





CITiZAN Survey Rapid Record

Site conditions

Make a note of site conditions such as access / egress, foreshore stability, and weather.

Visible dimensions

Record the length, width (beam), and visible height of the vessel in metres and indicate whether these are measured or estimated dimensions by circling the appropriate category.

Size class (circle)

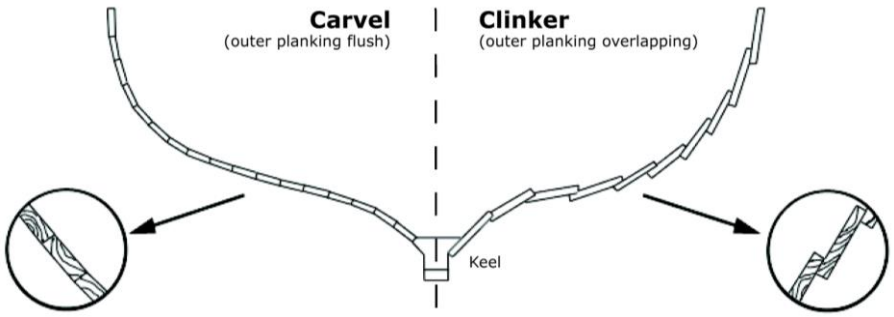
Indicate the size of the vessel by circling the appropriate category.

- A **barge** is a flat-bottomed vessel designed for inland and coastal waters, and can be of any size, though usually in excess of 10 m.
- To the navy a seagoing **boat** is a vessel small enough to be carried on a ship, or a submarine. Large boats can, however, be found on inland waterways, while fishing and tug boats can also be of significant size. In general terms the distinction between ship and boat is in function, the size distinction being rather blurry. For our purposes we can utilise an arbitrary dividing line at 18 m (59 feet) based on the supposed lengths of the Blackfriars 1 Romano-Celtic ***Ship*** (18.5 m) and the New Guy's House ***Boat*** (16 m).
- A **ship** is a seagoing vessel of limitless size, but usually in excess of 18-25 m.

Construction (circle)

Indicate the construction of the vessel by circling the appropriate category.

- **Carvel** is a technique where the frames of the vessel are built first, the planks then being fastened on and joined edge to edge.
- **Clinker**, also known as lapstrake, is a technique where the hull comprising overlapping planks is constructed first, before frame elements are inserted for stiffening. The frames have distinctive rebates known as joggles to accommodate the overlap of the planking.
- **Double-diagonal** is a technique commonly employed for small craft during the 20th century comprising two layers of thin mahogany, teak or larch planking laid at right angles to each other over light timber framing.
- **Dug-out** involves the hollowing out of logs by fire or hand tool to create simple or more complex forms of log-boat.



Propulsion (circle)

Indicate the propulsion of the vessel by circling the appropriate category (can include more than one!).

- **Manpower (oar; pole; paddle):** are there rowlocks (for holding an oar, on top of uppermost plank) or oarports (hole in an upper plank); is it punt-ended?
- **Towed:** is there evidence of a towing point in the bow?
- **Sail:** is there evidence of a mast, mast step or chain plates (plates on side of hull attached to rigging)?
- **Paddle wheel:** is there one (at stern) or two (midships) vertical wheels or their shafts/attachments?
- **Screw:** is there any evidence of a propeller or its associated **stern gear** (see definition below)?

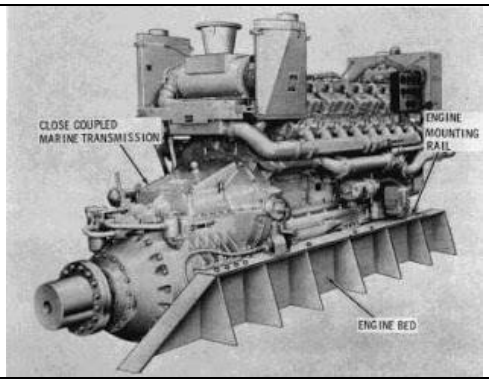
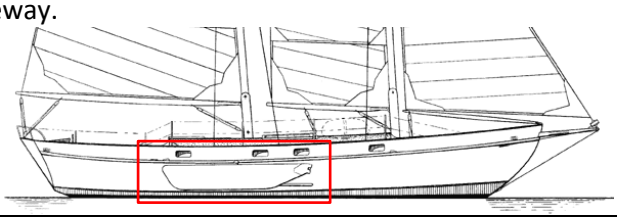
Comments / identification marks

Any further comments; note any name / number / port of registration etc.

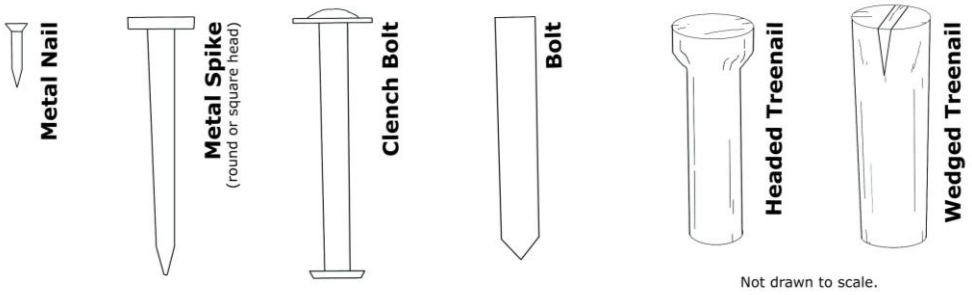
Date range

Indicate possible date of vessel / fragment.

CITiZAN Survey Detailed Record

Visible Elements (letters / numbers in parentheses refer to the figures on page 1)
Indicate which sections of the vessel (**Bow**, **Midships**, **Stern**) are visible by circling the appropriate category.
Indicate which *structural features* are visible by circling the appropriate category and indicate the **scantling** (length x height x width in metres) of those features where the information is requested.
External planks: Outboard (outer) planking.
Floor timbers (H): Frame timbers that cross the keel, spanning the bottom of the vessel, the central piece of a compound frame. Sometimes referred to as floors.
Internal planks (F): Inboard (inner) planking, sometimes known as ceiling planking.
Keel (5, J): The main longitudinal timber or line of timbers, upon which the frames are mounted; the backbone of the hull. On carvel-built ships they may have a 'wine glass' shape caused by the rebate or 'rabbet' (a groove / cut where a timber fits into another timber to make a tight joint) for the hull planking.
Keelson (K): An internal longitudinal timber or line of timbers lying on top the frames and floors along the centre line of the vessel, providing additional strength; an internal keel.
Knees (M): Angular pieces of timber or iron used to reinforce the junction of two surfaces of different planes (e.g. a floor timber to a frame timber). Timber knees were preferably grown for extra strength.
Side frames (I): Transverse timbers, or assemblies of timbers, to which the internal and external planking is attached. Internal frames or **riders** are positioned inboard of internal planking for extra stiffening. Some frame elements on timber vessels may be metal.
Stem post (6): A vertical or upward curving timber or assembly of timbers, scarfed (joined) to the keel at its lower end, into which the two sides of the bow were fitted.
Stern post (2): A vertical or upward curving timber or assembly of timbers stepped into or scarfed to the after end of the keel.
Deck (A-D): Is there any evidence of decks?
Deck structures (4): Is there any evidence of a cabin or wheelhouse?
Engine mountings: Linear paired structures comprising the engine bed and mounting rails or bearers. 
Engine remains: Are any parts of an engine or gearbox visible?
Frame spacing centre-to-centre: If frames are present measure the distance between the centres of them.
Lee-board: A large plate, or assembly of timbers, mounted on the side of a vessel and lowered when sailing off the wind to increase lateral resistance and reduce leeway. 
Mast / spars / rig (8-10): Is there evidence of masts, spars (poles that support rigging), wires or ropes?
Mooring gear: Is there evidence of a windlass (horizontal cylinder use to haul anchors), capstan (spool-shaped vertical cylinder used for hauling anchors), cables or hawsers (strong rope used to tie up / tow a vessel), or anchor?

Rudder (1): Is the rudder visible, if so what height is it?			
Stern gear: Is there any evidence of a *propeller* (a device with two or more blades that turns quickly propelling a ship), *propeller shaft*, *stern gland* (protective box around the propeller shaft that prevents water from getting inside the hull) or *skeg* (a longitudinal element joining the keel to the rudder)?			
Other: Do you see anything else that you think is notable?			
Fastenings	**Copper-alloy**: Metal alloys that have copper as their principal component, including bronze (copper + tin) and brass (copper + zinc). Generally green or bronze in colour	**Iron**: Nail, bolt, spike. Generally orange if corroded	**Trenail**: Wooden pegs (wedged or headed)



Seam Waterproofing	Waterproofing the seam between planks is essential for ship / boats and these techniques have changed over time. They can include: hair, moss, textiles and tar. *Caulking* is material driven between planks, usually in carvel-built vessels, and *luting* is material laid between planks in clinker-built vessels. Note whether caulking or luting is used and what is the material.
Toolmarks	Record the general presence of marks left by tools, and describe them if possible.
Surface Treatment	Has the vessel been tarred or painted? If so, note the colour and thickness of the treatment and annotate these on your drawings.
Contents	Are there any finds present in the hull of the vessel? Often these provide clues as to the date, function and possible origin of the craft. Make a note of these and complete a CITiZAN *Small Finds Recording Form* if necessary.
Image nos	These options are available to ensure easy cross-referencing. Please fill in if you have taken **photos**, or created **plans**, **elevations** or **profiles**, or taken **samples** / recorded any **finds**.
Date and Name	Please fill in your name and the date you completed this form.
Checked	This will be completed by a CITiZAN archaeologist.

Further definitions
Bowsprit (7): Spar that extends beyond the bow
Futtock (G): Side frame timber forming the side of a ship
Gun deck (C): used for mounting cannon
Hold (E): space for carrying cargo
Mast Step (11): Timber that supports the base of the mast
Orlop deck (D): lowest deck
Quarter deck (A): Raised deck behind main mast
Transom (3): Timber that runs perpendicular to keel that shapes and strengthens stern
Upper deck (B): highest internal deck
Wale (N): A thick strake (line of planks) of planking located on side of vessel that girds the outer hull