

**ENVIRONMENTAL REGISTRATION
FOR A
PROPOSED ROCK FILL BREAKWATER
AT
CLARENVILLE, NL**



Submitted By:

Clarenville Yacht Club Inc.

April 2010

NAME OF UNDERTAKING:

Proposed Rock Fill Breakwater, Clarenville, NL

PROPONENT:

- (i) Name of Corporate Body: Clarenville Yacht Club Inc. (CYC)
- (ii) Address: P.O. Box 9137, Clarenville, NL A5A 2C2
- (iii) Chief Executive Officer
- Name: Mr. Boyd Brown
- Official Title: Commodore
- Address: 259 Marine Drive, Clarenville, NL, A5A 1M9
- Telephone No.: 709-466-7055
- (iv) Principal Contact Person
- Name: Mr. Keith Rodway
- Official Title: Past-Commodore
- Address: 58G, Manitoba Drive, Clarenville, NL, A5A 1K5
- Telephone No.: 709-466-2374

THE UNDERTAKING:

- (i) Nature of the Undertaking:
- This undertaking proposes to construct a permanent 122m (400') rock fill breakwater in the waters of Dark Hole, Clarenville, NL, integral to the existing Clarenville Marina.
- (ii) Purpose/Rationale/Need for the Undertaking:
- Clarenville Marina was completed 2003, and primarily consisted of the reshaping the shoreline of Dark Hole and the installation of a floating dock marina (see Appendices A and B). The marina is protected on three (3) sides by the adjacent shoreline, but is completely exposed to the waters of Random Sound on the East. Consequently, it is unprotected from easterly winds, and particularly vulnerable to north-east winds and winter ice. These winds and ice have a destructive effect on the floating docks and boats, and have caused significant

damage over the years. Since its inception upwards of \$20,000 in damage has been incurred to the floating docks alone, and has the potential of making the operation financially unsustainable. Furthermore, without immediate protection from a breakwater, the life of the existing floating docks will be substantially decreased and boat damage will persist.

The primary purpose of the proposed rock fill breakwater is to preserve and protect the existing marina infrastructure and boats, with a secondary objective of facilitating marina expansion via reconfiguration of the existing floating docks and addition of new infrastructure.

A permanent rock fill breakwater is the preferred method of protection. An alternate proposed solution consisting of a floating timber breakwater was primarily rejected on the basis of the Owner's present experience and knowledge with maintenance and sustainability associated the existing floating docks.

DESCRIPTION OF THE UNDERTAKING:

(i) Geographical Location:

The proposed site for the rock fill breakwater is the waters of Dark Hole, Smith Sound, near the Town of Clarenville, NL, per Crown Land Lease No. 110768, and Water Lot Boundary No. LTO 117576 (see Appendix C).

Access to the proposed breakwater will be achieved by infilling the shoreline from the end of the existing marina parking lot. The northing and easting start point coordinates for the breakwater is approximately: N5336135, E233329. The endpoint for the breakwater will be determined as part of detailed engineering design, which will include a sounding program to support the selection of the most economical and technically viable solution. In addition to the breakwater, the Owner is proposing to reconfigure the existing marina (see Appendix D).

(ii) Physical Features:

The proposed undertaking consists of the construction of a permanent 122m (400') rock fill breakwater as conceptually presented in Appendix E. The proposed breakwater has a bottom width of 15m and a top width of 3m, and consists of a rock fill core overlain with armour stone. Ultimately, the composition, cross-section and length of the breakwater will be subject to a

sounding survey, site-specific conditions, detailed engineering, and budget limitations. The access road along the shoreline will be constructed of similar materials.

The site of the proposed access and breakwater presently consists of a rock/cliff shoreline parallel to Marine Drive, and a shoal projecting from the north-east point that delineates the waters of Dark Hole. The breakwater will be within close proximity of the existing marina, being approximately 100m from the end of the existing developed land. The shoreline and site of the proposed breakwater is in its natural state with no developed land use, other than Marine Drive, within approximately 150m. The land between the proposed works and Marine Drive, approximately 30m, is vegetated with spruce, fir, birch, alder and low brush and undeveloped; this area will not be disturbed. The location of the breakwater is expected to possess a rock bottom.

To the proponent's best knowledge, the area does not contain any fish habitat or breeding grounds. There are no natural fresh water streams within 150m. No adverse effects are anticipated.

(iii) Construction:

It is expected that construction of the proposed access road and breakwater would take about three (3) weeks, with a tentative start date in the Fall of 2010, which will permit sufficient time to secure funding, carry out detailed design, acquire permits and approvals, and tender the project.

Adverse effects during construction are expected to be limited to siltation, which will be mitigated through the use of a floating boom silt screen. No potential resource conflicts are expected.

(iv) Operation:

Operation of the undertaking is non-existent. Once construction is completed no further operational or maintenance activities will occur and the infrastructure will remain in place permanently. As such, potential sources of pollutants or resource conflicts are non-existent.

(v) Occupations:

Construction of the undertaking will be completed via a publicly tendered contract, with activities consisting of aggregate and armour stone production at

an off-site quarry(s), as well as haulage and placement to the site of the proposed work using dump trucks, tractors, and excavators. The manpower requirements can be expected to vary based on the size of the successful contractor, but at a minimum would be on the order of 10 – 15 persons, primarily heavy equipment operators and flag-persons.

(vi) Project-Related Documents:

- Crown Lands Lease No. 110768 (Appendix C)
- Water Lot Boundary No. LTO 117576 (Appendix C)

APPROVAL OF THE UNDERTAKING:

The following are a list of potential permits and/or departmental approvals for the undertaking, and will be completed/submitted in conjunction with detailed engineering design:

- Dredging Harbours and Ocean Dumping: Department of Fisheries and Oceans, Canada;
- Fish Habitat: Department of Fisheries and Oceans, Canada;
- Municipal Approval: Town of Clarenville;
- Water Resources; Department of Environment and Conservation, Government of Newfoundland and Labrador;
- Canadian Coast Guard as it pertains to navigation

Other permits, such as that relating to flag-persons and quarries would be the responsibility of the contractor.

SCHEDULE

To successfully complete the project in 2010, the proponent is proposing a start date no earlier than September 1st, and no later than November 1st. These dates are consistent with the expected amount of time required for design, approval, and tendering of the undertaking; are compatible with existing marina activity; and ensures sufficient time to

complete the project prior to the winter season (in an effort to minimize additional damage to existing infrastructure).

FUNDING

The estimated cost of the undertaking is \$230,000. An approximate distribution of funding sources is as follows:

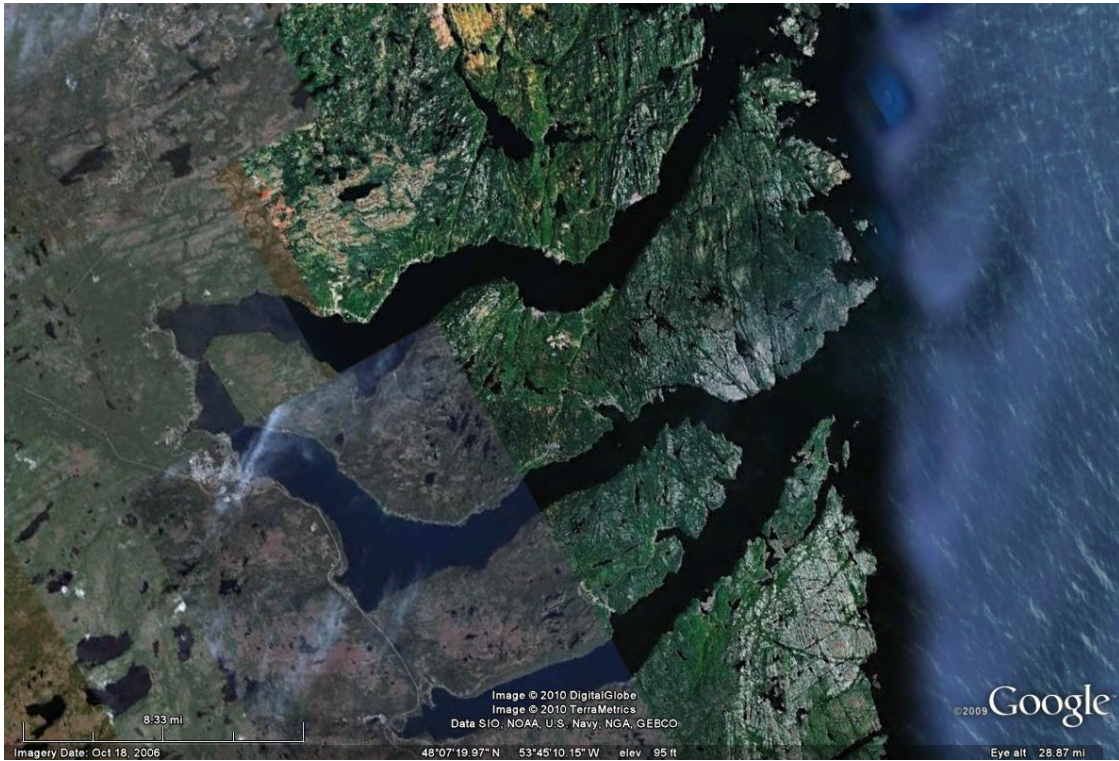
- Atlantic Canada Opportunities Agency \$46,000
- Industry Trade Rural Development \$58,000
- Clarenville Yacht Club \$126,000

Date

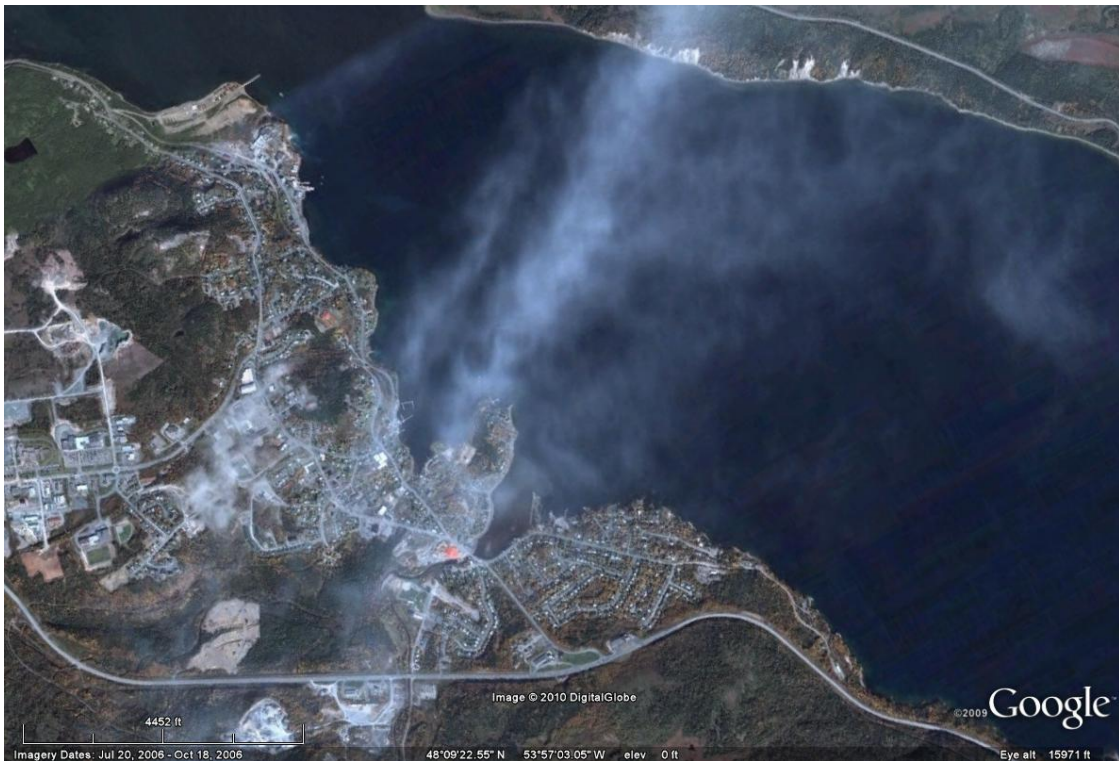
Signature of Chief Executive Officer

APPENDIX A

OVERVIEW OF EXISTING CLARENVILLE MARINA



Overview of Random Island, Random Sound and Clarenville.



Overview of Clarenville.



Overview of Dark Hole and existing Clarenville Marina.



Existing Clarenville Marina.

APPENDIX B

PHOTOS OF EXISTING CLARENVILLE MARINA



Photo No. 1: Overview of existing marina.



Photo No. 2: "North" dock.



Photo No. 3: “North” dock in foreground; “South” dock in background.



Photo No. 4: Location of proposed access road and breakwater.



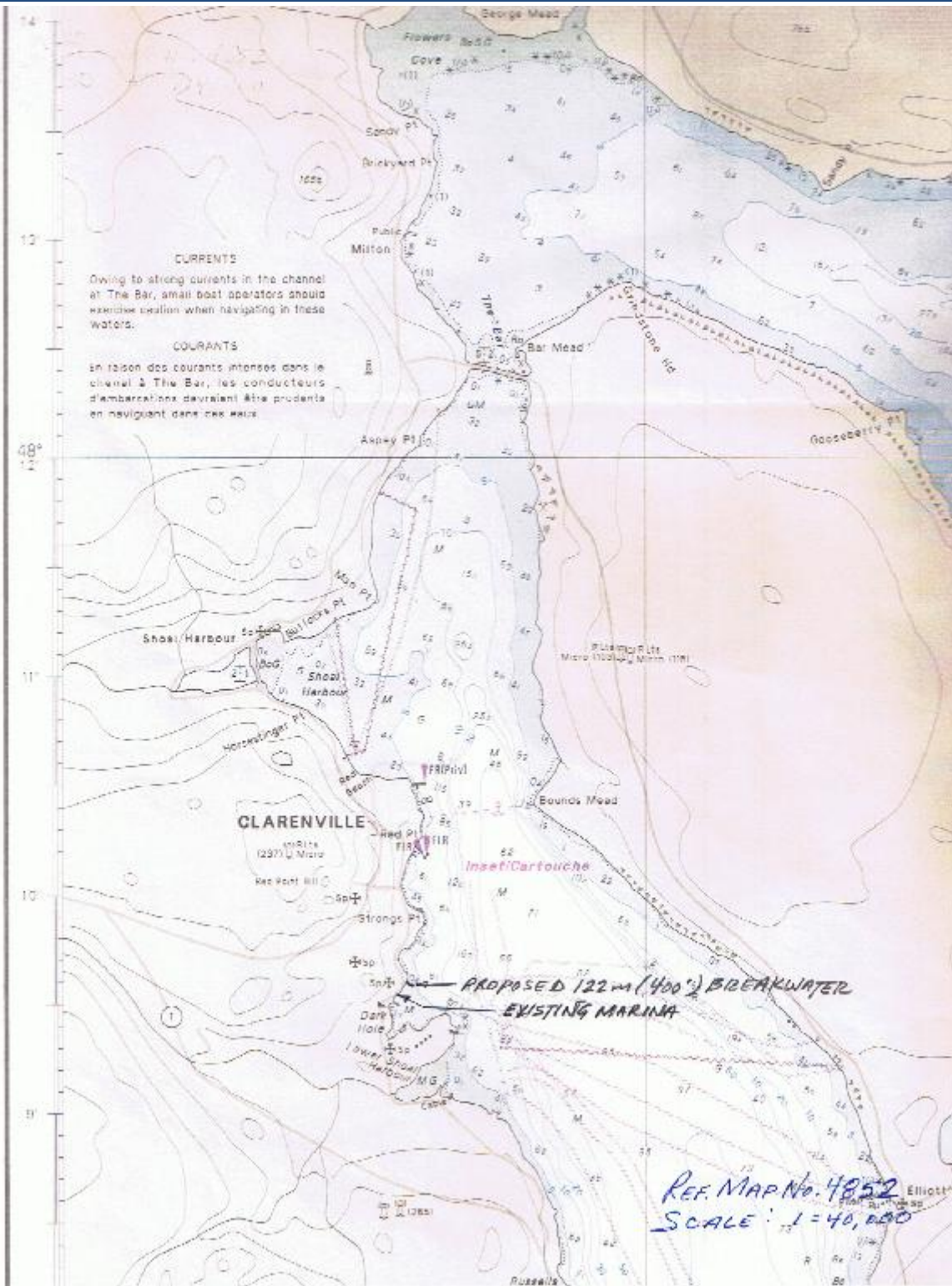
Photo No. 5: View along Marine drive above proposed access road and breakwater.

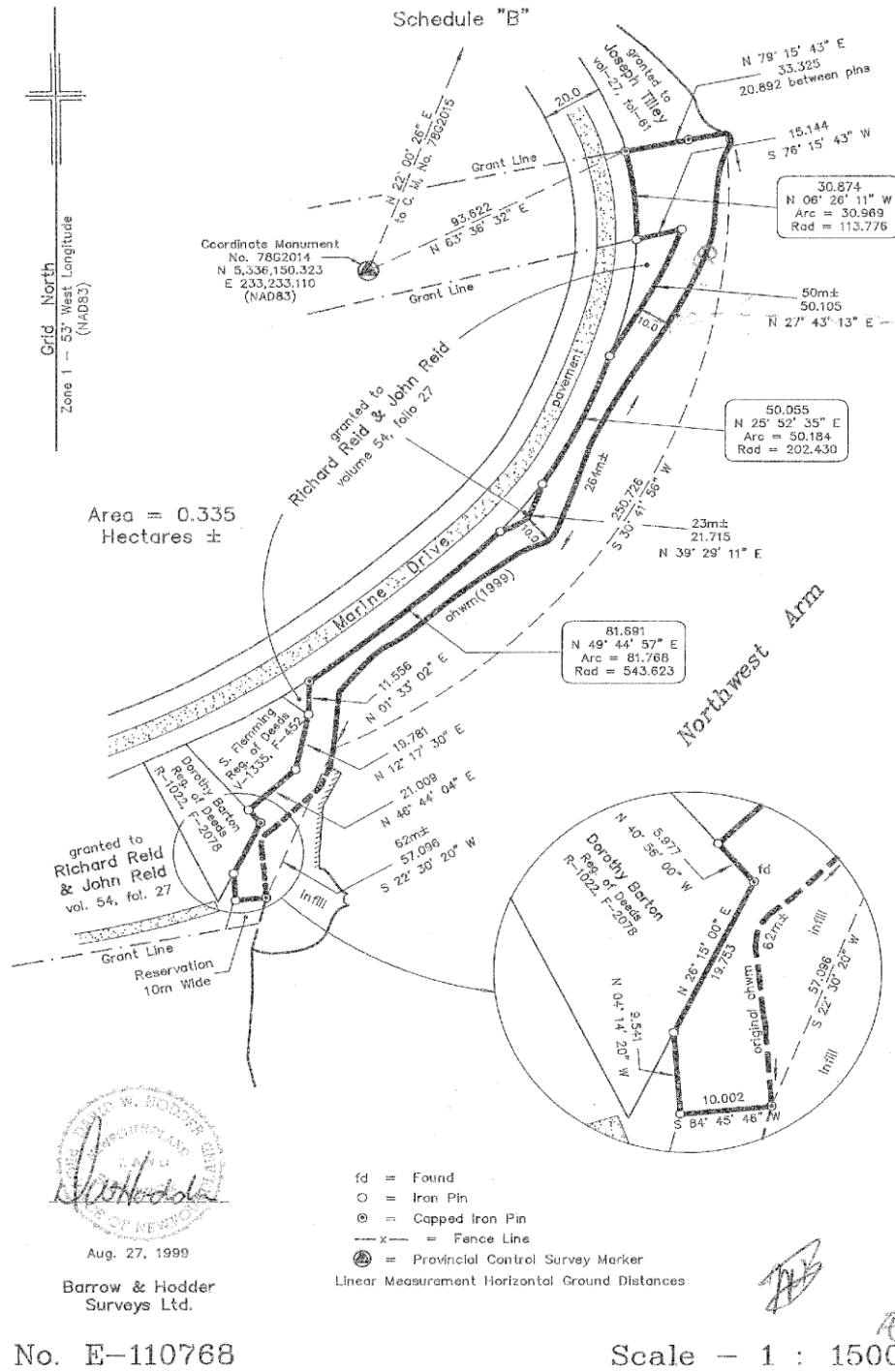


Photo No. 6: Partial view of "South" dock and original rock infilling of cove.

APPENDIX C

Topographic Map, Legal Survey & Water Rights Boundary

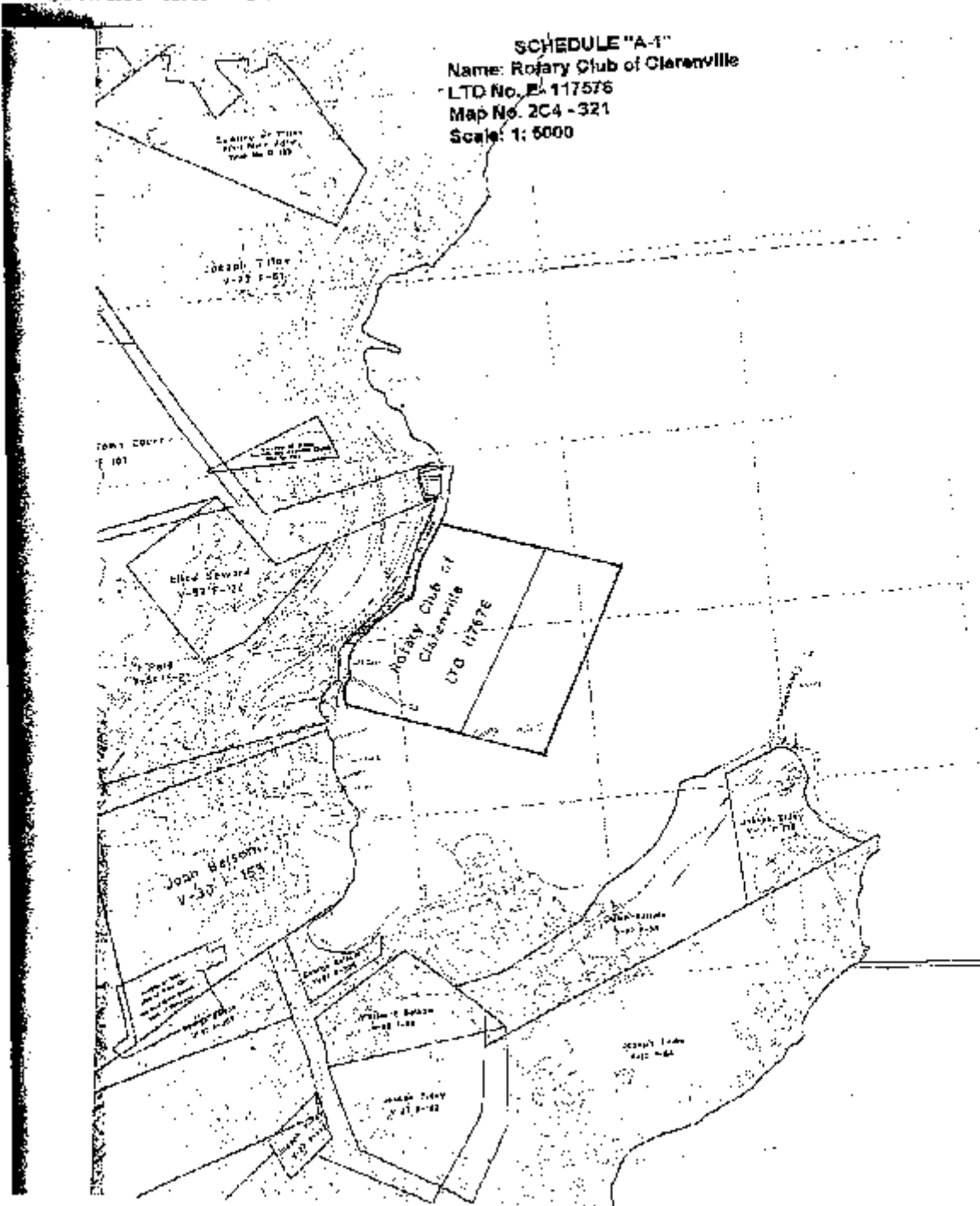




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APPENDIX D

Proposed New Marina Layout with Breakwater



APPENDIX E

Proposed Breakwater Cross-Section

