EXECUTIVE SUMMARY

Ross Island Sand & Gravel Company (RIS&G) is proposing a Reclamation Plan for the island complex that is markedly different from – and much improved upon – the plan that has been in place for the last two decades. The product of 14 months of review by an independent advisory committee, the plan described in this document is based on better science, more thorough analysis and broader public input then the 1979 plan.

This Reclamation Plan is based on a more current and complete scientific understanding of the river, the island complex, and surrounding habitat. The strategies prepared in this updated plan reinforce existing public policies, using clean fill to achieve substantial reclamation and diverse habitat development on an accelerated basis.

This Reclamation Plan is more practicable than the 1979 plan. It is built upon an assessment of the economic, availability and logistics of reclamation fill. And while RIS&G's commitment to the plan will require a substantial investment in the reclamation of Ross Island to yield substantial public benefits, this updated plan will accommodate the continued operation of RIS&G's processing facility at the island. In this way the new strategy strikes a balance between preserving jobs and protecting the environment – public values shared by many of the region's citizens.

PLANNING PROCESS. This document is the culmination of a 14-month inclusive public process to review the existing 1979 Reclamation Plan for Ross Island. Ross Island is located about a mile upstream from downtown Portland at approximately river mile 15.0 of the Willamette River. Since the 1920s, the RIS&G has actively mined the island and the Ross Island lagoon for commercial aggregate. For the past two decades, RIS&G also has conducted reclamation activities at the island, in accordance with the provisions of a reclamation plan adopted in 1979. The Ross Island facility site includes Ross Island, Hardtack Island, and the Ross Island lagoon.

To assist in the review of the 1979 Plan, RIS&G convened a six member advisory committee (Ross Island Reclamation Plan Advisory Committee – [RIRPAC]). The purpose of the committee was to advise RIS&G regarding any revisions to the 1979 plan needed to reflect current knowledge about the natural and man-made environment of the lower Willamette River, to protect the long-term interest in reclamation of the island following mining, and to develop reclamation goals.

The RIRPAC met ten times between June 2001 and September 2002. All meetings were open to the public and the media. Two technical workshops, a hydrology study, and two public outreach meetings were also conducted to aid in preparing the Reclamation Plan. Additionally, RIS&G described operational issues/constraints related to reclamation and evaluated the costs associated with implementing reclamation activities with fill from different sources and of different quality to ensure that the reclamation plan could be practicably implemented. Geotechnical engineers, habitat restoration specialists, and other experts were retained to analyze options and develop detailed strategies for achieving desired reclamation outcomes.

Based on the results of the above activities, RIS&G proposes to revise the 1979 reclamation plan. RIS&G believes that better fish and wildlife habitat outcomes will be achieved under a revised plan than under the existing 1979 plan. Accordingly, RIS&G proposes that the 1979 plan be replaced by a new plan based on better science, current regulatory requirements and a changing role for Ross Island in the lower Willamette River.

RECLAMATION GOALS AND APPROACH. This final Reclamation Plan describes the proposed new approach to reclamation. The new approach supports the following reclamation goals established by RIRPAC:

- Protect and enhance the fish and wildlife values of the islands;
- Protect surface water and groundwater resources;
- Protect the structural integrity of the islands as needed to prevent catastrophic erosion and scouring events; and
- Preserve options for future public ownership and benefit.

The proposed 2002 reclamation plan will meet these goals. The 2002 plan is supported by sound science and based on current knowledge of river processes and habitat restoration. When fully implemented, the 2002 Plan will produce total habitat acreage comparable to the 1979 plan. It will result in the creation of a greater diversity of habitat types than the 1979 plan, including riparian, emergent wetland and shallow water habitat considered important to threatened fish species. Only "Class A" Fill, as defined by the Oregon Department of Environmental Quality (DEQ) will be used to accomplish reclamation goals. DEQ has determined that Class A fill does not pose an unacceptable risk to human health and the environment and is protective of surface water and groundwater resources. Placement of fill in selected areas to accomplish reclamation will protect the structural integrity of the islands. Diverse vegetation plantings and naturally established vegetation will create an aesthetically pleasing environment.

The proposed approach to reclamation compares favorably to both the condition of the island in 1979 and the projected conditions of the island assuming full implementation of the 1979 reclamation plan. Important benefits of the proposed approach compared to the 1979 plan include the following:

The proposed 2002 plan will result in development of 118 acres of upland forest, 22 acres of riparian/emergent wetland habitat on the south end of the lagoon and 14 acres of shallow water habitat at the north, west, and south portions of the lagoon (Figure 1). A far greater diversity of plants and animals can be established at Ross Island with these habitat types than with the predominantly upland habitat emphasized in the 1979 plan. The details regarding the development of these diverse habitats are contained in the Ross Island Wetland and Riparian Habitat Reclamation Plan (Appendix A).

The size of the lagoon (131 acres) will be approximately the same size as under the 1979 plan. The lagoon will have a variety of depths, including deep holes. Independent scientists have advised RIS&G that the deep holes created by mining do no ecological harm. Sediment from the Willamette River is projected to accumulate in the lagoon at the rate of 5 to 6 inches per year.

The plan proposes that the described habitat be developed over a 10-year period. This implementation timeline is significantly shorter than the reclamation period proposed in the 1979 plan, which allowed up to 20 years for full implementation.

The 1979 reclamation plan would have resulted in creation of approximately 135 acres of upland forest (approximately 10 more acres of forested upland than existed in the 1979 baseline condition of the island). No wetland habitat would have been created under the 1979 plan. The lagoon area, post reclamation, would have consisted of 138 acres of open water with a relatively uniform average depth of –20 feet (Figure 2). The lagoon would be less than ideal salmonid habitat due to temperature and predator concerns.

In addition to these benefits, the proposed plan contains clear reclamation goals and strategies (the 1979 plan contains no state goals) and a detailed monitoring program (the 1979 plan does not include a monitoring program).

For purposes of comparison, the 1979 island (which consisted of 132 acres of forest habitat) is shown on Figure 3. The variety of depths in the lagoon ranged from –130 to a small amount of shallow water habitat (depth undefined).

The proposed approach also varies from the 1979 plan with respect to the quality and amount of fill to be placed in support of reclamation goals. It is estimated that full implementation of the 1979 plan would require importing approximately 20 million yd^3 of fill. The 1979 Plan contains no specific direction regarding the source or quality of reclamation fill; however, when the 1979 Plan was developed the adequate and acceptable sources of fill were believed to be available. At that time, the sources and quality of material used as reclamation fill were subject to far less regulatory scrutiny than is the case today. Standards for fill quality did not exist, other than in a broad and qualitative sense.

Since 1979, far more stringent and specific standards for fill quality have been developed. These more stringent standards limit the quantity of clean fill available in the Portland metropolitan area thus creating greater competition for the limited volume available. In this context, the 1979 plan could not be implemented in a cost-effective manner or within a reasonable time frame. The proposed 2002 reclamation plan will involve placement of less total fill (approximately 4.0 to 4.6 million yd^3) than would have been placed if the 1979 reclamation plan had been fully implemented. The new plan proposes that all of this fill meet DEQ "Class A" fill standards. The plan also identifies prospective sources of the fill material. Using clean fill preserves options for future public ownership and benefit.

The 2002 reclamation plan represents an approach that can be implemented to reclaim Ross Island. A diversity of habitats is proposed for creation in a 10-year period. The plan as proposed will create the highest quality habitat in the fastest feasible timeframe.

PROPOSED HABITAT TYPES

SHALLOW WATER HABITAT

RIPARIAN/EMERGENT WETLAND

UPLAND FOREST

DEEP WATER AREAS
(greater than and equal to -100 feet RID)

EAGLE NEST

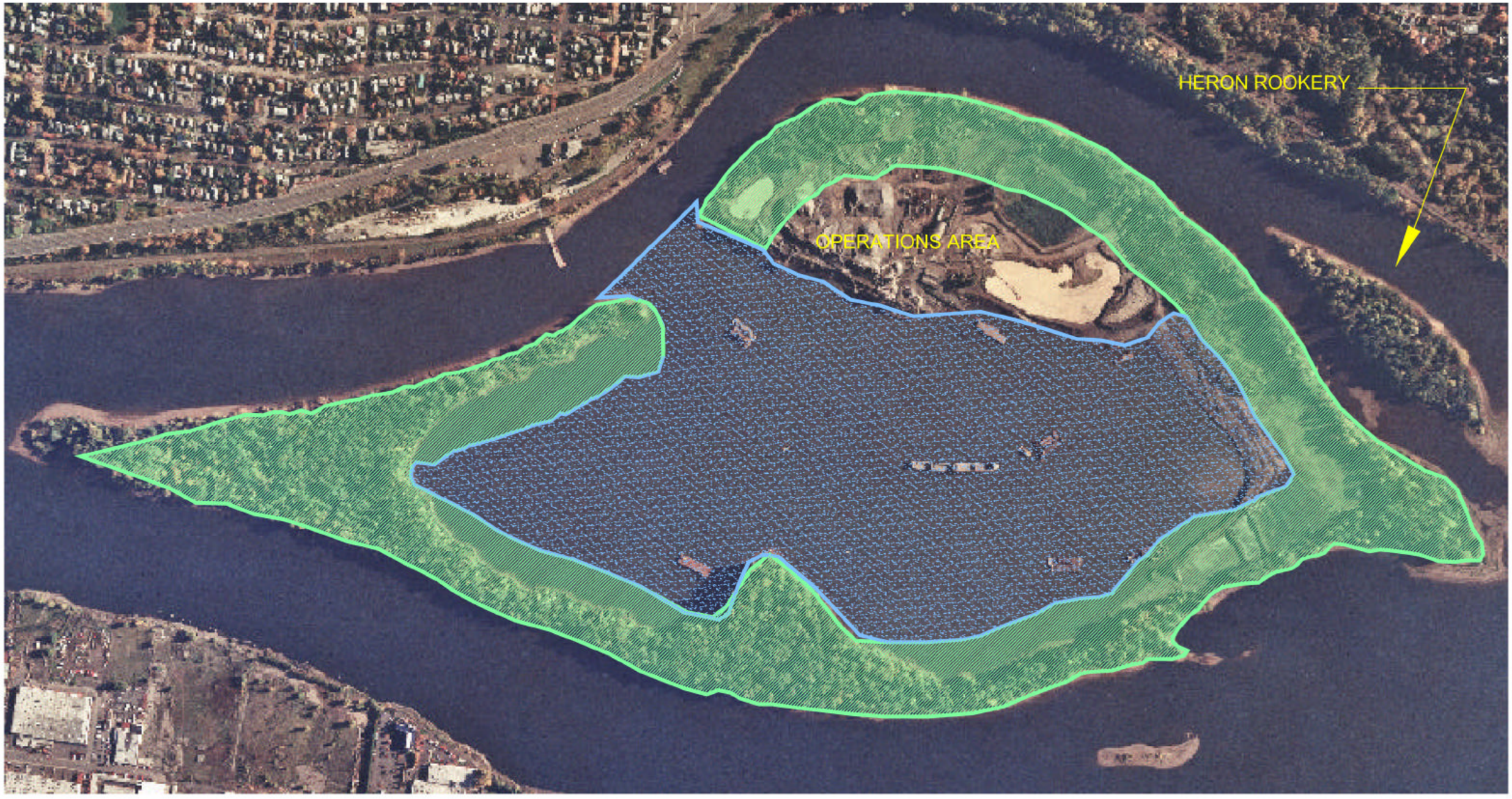
N

0 250 500 1000

SCALE IN FEET

ROSS ISLAND
2002 PROPOSED RECLAMATION

FIGURE 1



UPLAND FOREST

LAGOON (average depth -20 ft.)

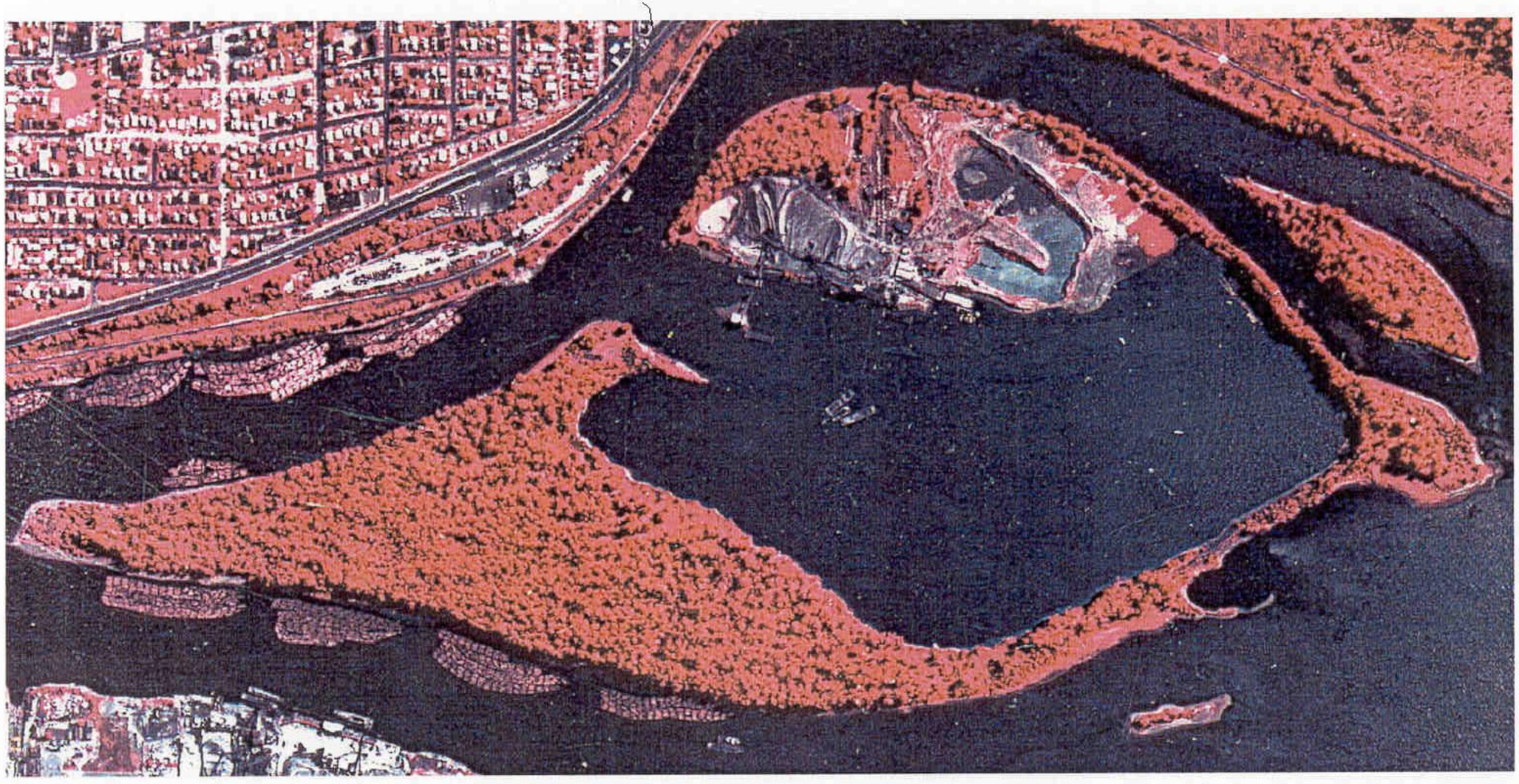
ROSS ISLAND
1979 PROPOSED RECLAMATION PLAN
AS REQUIRED BY THE DIVISION OF STATE LANDS

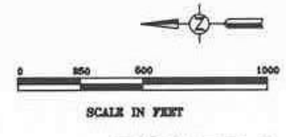
N

0 250 500 1000

SCALE IN FEET

FIGURE 2





ROSS ISLAND 1979

FIGURE 3