

ontario hydro



GENERATING STATION SITE SELECTION PROGRAM  
NORTHWESTERN REGION  
REPORT ON EVALUATION OF SITING ALTERNATIVES

FEBRUARY 18, 1974

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## Results

The overall rating summary is given in Table 5.

### (a) Lignite-Fuelled Station

Bare Point is clearly the preferred site. It rates first in three parameters. McKellar, Red Rock and Nipigon rate second, third and fourth respectively.

The least favoured sites are Pine Bay, Little Trout, Wiley Point and East Thunder Bay.

### (b) Nuclear-Fuelled Station

Bare Point is again clearly the preferred site. It rates first in two parameters. McKellar and Red Rock again rate second and third respectively.

The least favoured sites are Pine Bay, Little Trout, Wiley Point and East Thunder Bay.

### (c) Energy Centre (Lignite + Nuclear)

Summation of totals in Table 2 and 3 gives the point values summarized in Table 4. Bare Point is, by far, the preferred site. McKellar, Red Rock and Nipigon rate second, third and fourth respectively.

The least preferred sites are Pine Bay, Little Trout, Wiley Point and East Thunder Bay.

## Conclusions

Based on the point values, the Bare Point site would have the least overall effect on the environment using either of the generating stations or the combination.

*How was public input weighted in the evaluations?*

APPENDIX A

Factors Influencing Ratings

AIR

Existing Quality	Influence of present and future land use developments in area on ambient air quality. Assumes high level of concern for a fossil-fuelled station in an undeveloped area.
Winds	Influence on area in prevailing wind direction. Assumes off-water wind frequency influences emissions over land. Considers directional frequency changes with season.
Atmospheric Conditions	Influence on diffusion of lake breeze effect, fumigation potential, atmospheric stability, inversion type and frequency, and local climatology.
Topography	Terrain influences on plume behaviour. Rate of land rise behind site and roughness of terrain influences point of impingement maxima for emissions.
Population	Distribution of population densities at distances from site. Consideration of more sensitive groups, including hospital and sanatorium locations.
Agriculture and Vegetation	Distribution of susceptible vegetation at distances from site. Includes tree plantations, greenhouses, woodlots, forests, commercial gardens and farming. Pasture land important for nuclear sites.
Farm Animals and Wildlife	Distribution and densities of animal life. Includes concerns for domestic animals, birds, waterfowl and rare or endangered species. Dairy cattle important for nuclear sites.



Property and  
Industry

Influences of plant emissions on soiling and corrosion. Influences of plant emissions on operation of sensitive industries.

Recreation

Influences of emissions on temporary population including cottages, overnight camping and other recreational areas.

WATER

Existing  
Quality

Influence of dissolved solids, nutrients, BOD, DO and turbidity on existing water quality. Considers changes in quality with depth. Added heat may influence dissolved oxygen levels where organic content is high. Assumes high level of concern for station in an undeveloped area.

Winds and  
Currents

Assessment of effective area of thermal discharge. Currents, influenced by off-lake winds, confine thermal discharge to shoreline. Influences on sensitive littoral zones and possibility of recirculation. Enclosed shoreline will contain emitted discharges.

Temperatures  
and Depth

Assessment of ability of water body to dissipate waste heat. Ambient temperatures influence discharge temperatures. Considers changes in water temperature with depth. Deep off-shore areas preferred.

Fishing and  
Spawning

Proximity to station of important spawning and fishing areas, and migration routes. Temperature sensitivity of native fish species.

Other  
Aquatic Life

Heat influences on benthos, bacteriology, plankton and aquatic plants. Proximity of water-fowl nesting areas. Entrainment effects dependent on density of plankton and other populations in area of intake. Deep intakes will reduce heat and entrainment effects.

Recreation                      Influence on increasing swimming and fishing potential due to warm water discharge. Includes concern for loss of ice cover for winter snowmobile travel.

Local Intakes                      Proximity of nearest water intakes which may be influenced by discharges. Radioactive releases of most concern.

Local Discharges                      Proximity of point source discharges from industrial, urban, agricultural activities, and drainage basins.

COMMUNITY AND LAND USE

Site:  
Land and Property                      Type and acreage of property occupied by energy centre site area. Number of farms and cottages. Streams blocked or diverted. Historical, recreational, unique and agricultural values.

Site:  
Population                      Approximate number of permanent and temporary residents displaced.

Impact Area:  
Industry                      Influence on existing land and off-shore use and plans for industrial development. Presence of station may increase potential for industrial expansion in area, with subsequent further shift away from existing land use.

Impact Area:  
Population                      Influence on existing land use and plans for population distribution. Assumes additional population increases environmental stress.

Impact Area:  
Agriculture and Forestry                      Influence on existing land use and plans for maintenance or development of agriculture and forestry. Compatibility with land capability for agriculture and forestry.



Impact Area:  
Recreational and  
Historical

Includes considerations of influence of or modifications to existing natural and historical uniqueness of area. Influence on existing land use and plans for maintenance or development of recreational facilities. Proximity of parks. Compatibility with land capability for outdoor recreation.

Aesthetics

Visual and noise influences. Includes sight of stack and stack plume from recreational areas. Visual compatibility of station, and ash and fuel storage facilities with natural surroundings.

Public  
Reaction

Individual and group view on project. Includes local population and more general environmentally conscious groups.

#### FUEL DELIVERY AND WASTE DISPOSAL

Fuel Delivery:  
Land Use

Includes distance of new fuel transport system, existence of utility corridors, and land use along route. Influence of construction on local ecology of various crossings along route including roads, railways, lakes and rivers.

Fuel Delivery:  
Aesthetics

Visual influence on permanent or temporary changes to environment including land scars and scenery. Includes noise and dust influences. Includes effect of new spur line and incremental effects along existing route. Considers number and density of people influenced along route.

Waste Disposal:  
Land Use

Considerations of existing land use of disposal site, immediate area and along route. Includes distance, type of waste transport system, and various crossings along route.

Waste Disposal:  
Aesthetics

Considers visual and noise influences. Includes compatibility of waste storage facilities with natural surrounding. Considers number and density of people along route and on site.

Note:

This parameter is applicable to fossil-fuelled stations only. The waste disposal system for nuclear stations is assumed common, and therefore not a factor producing differences in the comparative site selection process.

TRANSMISSION RIGHT OF WAY

Existing  
Land Use

This factor refers to the present day use to which the land is being put, be it for residential homes, industrial development or agriculture.

Proposed  
Land Use

This factor refers to the development pattern outlined in official plans and implemented by zoning by-laws. Includes provincial government and conservation authorities.

Natural  
Systems

Assessment of the presence and sensitivity of the natural biological systems. Includes influence and conflicts with unique biotic features, valley systems, wetlands, forest cover, wildlife habitats and erodible areas.

Natural  
Resources

Assessment of the economic values associated with resource based land units. Variables include recreation potential, mineral potential, forest resources and wildlife resources.

Visual

Assessment of the predicted disruption to the image of an area caused by the transmission corridor. Variables include landscape character, remedial capabilities and access for viewing the landscape.



Note:

Each of the five factors for Transmission was mapped and overlaid to form a composite of the Study Area showing areas of high, medium and low impact. Preliminary corridors were then selected from each site to Lakehead T.S. through the lower impact areas and evaluated with respect to each factor.

Examples of impact levels are:

- |                   |   |                 |
|-------------------|---|-----------------|
| Visual            | - designated landmarks                                    | - high impact   |
|                   | - parallel to existing transmission lines                 | - low impact    |
| Natural Systems   | - highly erodible soils plus excessive topographic relief | - high impact   |
|                   | - designated sensitive areas                              | - high impact   |
| Natural Resources | - designated wildlife habitat                             | - medium impact |
|                   | - speciality forest area                                  | - high impact   |

## APPENDIX B

### Public Opinion

The opinion of the public as expressed in its response to Ontario Hydro's request for information and comments is reflected in the environmental site comparison.

M The public specifically was requested to submit its view on the relative importance of the five main parameters. The opinions expressed in the responses are reflected in the actual percentages used in this comparison. In addition, a limited number of people completed the comparison matrix, and their concerns and judgement have been considered in the site comparison.

Most of the public response was limited to expressing a positive or negative view for a particular site or group of sites. These opinions have been included in the factor on "Public Reaction". Further comments were received on the relative merits of sites not included in the comparison.

\* One prime position expressed generally was in terms of a "non-degradation" policy. This view refers to limiting the location of a station site to an already developed area where some man-made environmental stress already exists. This viewpoint is reflected in the factors on air and water quality.

Actual information supplied by the public on specific environmental data was mainly limited to concerns for wildlife and fish in the Black Bay area, and the geological uniqueness of the area west of Thunder Bay.

Specific queries were received relating to the degree that Ontario Hydro was including considerations for waste disposal and historical uniqueness in the environmental factors. These concerns are reflected in the additional weights attached to these factors in the environmental site comparison.



#### REFERENCES

1. "Climatic Normals, Volume V, Winds", Department of Transport, 1968.
2. "Industrial Surveys of Ontario Municipalities", Ministry of Industry and Tourism, 1972.
3. Air Management Branch data, Ministry of Environment, March, 1973.
4. Munn, R.E. and Richards, T.L., "The Lake Breeze: A Survey of the Literature and Some Applications to the Great Lakes", Proceedings of Seventh Conference on Great Lakes Research, pp 253-266, 1964.
5. "Fort William Pasquill Stability Study", Ontario Hydro memo D. K. Gillies to W.R. Effer, Sept. 27, 1972.
6. Canadian Topographical Maps, 1:50,000 series, 1964.
7. "Design for Development, Northwestern Ontario Region", Phase 2: Policy Recommendations, Department of Treasury and Economics, October 13, 1970.
8. Department of Lands and Forests, Ontario, Annual Report, 1971.
9. Policy Research Branch data, Ministry of Natural Resources, January, 1973.
10. "Lakehead Region Conservation Report - Land and Forests", Conservation Authorities Branch, Dept. of Energy and Resources Management, 1966.
11. "Northern Shore of Lake Superior", Geology and Scenery, Ontario Department of Mines, December, 1969.
12. "Agricultural Statistics for Ontario, 1970, Ontario Department of Agriculture, Toronto.
13. Limnological Data Report No. 1, Lake Superior November 18 - December 6, 1969, Canada Centre for Inland Waters.
14. Canadian Hydrographic Service, Lake Superior Survey, Marine Sciences Branch, 1969.
15. Municipal Directory, 1972, Ontario Department of Municipal Affairs.

16. Wildland News, V5 n3, September, 1972.
17. Regional Biology Branch Analyses, Ministry of Environment, 1971.
18. Regional Water Quality Survey, Thunder Bay, Ministry of Environment, September, 1972.
19. ARDA, Present Land Use, 1:50,000, January 1968.
20. Economic Atlas of Ontario, Ontario Government, 1969.
21. Lands and Forests Data. Included in OWRC publication; "Great Lakes Contingency Plan for Spills of Oil and Other Hazardous Materials, 1971.
22. "Canadian Hospital Directory 1971", published by The Canadian Hospital Association.
23. ARDA, Land Capability for Wildlife - Waterfowl, 1968.
24. ARDA, Land Capability for Outdoor Recreation, 1968.
25. ARDA, Land Capability for Forestry, 1968.
26. ARDA, Land Capability for Agriculture, 1968.
27. Lakehead Official Plan, Lakehead Planning Board, November, 1971.
28. Policy Research Branch data, Ministry of Natural Resources, October, 1972.
29. Ontario Department of Lands and Forests, Lands and Surveys Branch, FRI maps, 1971.
30. Canadian Topographical Maps, 1:250,000 series, 1964.
31. Memo, August 21, 1973, G.A. Pearce, Ministry of the Environment to W.R. Effer, Ontario Hydro.
32. Canadian Hydrographic Service, 1965, Nipigon Bay and Approaches, Map #3212.
33. German, M. J. 1968, "Biological Survey of Nipigon Bay, 1966-1967, Ontario Water Resources Commission.
34. "Ontario Provincial Parks, "Department of Lands and Forests, 1972.



35. "Guide to Conservation Areas", Ontario Ministry of Natural Resources, 1972.
36. Preliminary Site Layout Study Drawings, Plant Development Section, January 1974.
37. Department of Lands and Forest, Ontario Forestry Resources Inventory, Aerial Photographs, 1962.
38. Memo, August 17, 1973, Q.F. Hess, Ministry of Natural Resources to W.R. Effer, Ontario Hydro.
39. Public Meetings, Generation Station Site Identification Program, Northwestern Region, Thunder Bay, October 2 and 3, 1973.
40. Public Meetings, Generation Station Site Identification Program, Northwestern Region, Thunder Bay, November 27 and 28, 1973.
41. "Proposed Fuel Delivery Routes for Potential Northwestern Region Sites", Plant Siting Section, December, 1972.
42. Progress Report on Public Participation, Generation Station Site Identification Program, Northwestern Region, January 24, 1974.
43. Canadian Topographical Maps, 1:250,000 series, 1964.
44. ARDA, Land Capability for Wildlife - Ungulates, 1968.
45. Personal Communication, R.J. Malvern, Ontario Hydro, and Conservation Authority Branch, Ministry of Natural Resources, January, 1974.
46. Personal communication, T.B. Reynolds, Ontario Hydro and Mining Lands Branch, Ministry of Natural Resources, December 1973.
47. Nipigon Official Plan, Nipigon Planning Board.
48. Red Rock Improvement District, Zoning By-Law.
49. Ministry of Treasury Economics and Intergovernmental Affairs Data, December, 1973.
50. Filing Memorandum, September 10, 1973, "Site Visits", W.R. Effer and R.J. Malvern, Concept Department.



TABLE 1. INDIVIDUAL SITE FACTORS

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDD POINT	BENT ISLAND
<b>AIR</b>								
1. EXISTING QUALITY	No industries Remote from urban areas Future mining & smelter operation @ 5 mi inland Good (46) (50) (2) (3) (7)	No industries Remote from urban areas Future mining & smelter operation @ 7 mi inland Good (46) (50) (2) (3) (7)	No industries Remote from urban areas Thunder Bay @ 12 mi Good (46) (50) (2) (3) (7)	Industrial area Thunder Bay city limits Average (50) (2) (3) (7)	No industries Remote from urban areas Located in resort area Good Lichen abundant and diverse (50) (2) (3) (7)	No industries Remote from urban areas Located in resort area Good (50) (2) (3) (7)	No industries Remote from urban areas Good (50) (2) (3) (7)	No industries Remote from urban areas Good (50) (2) (3) (7)
2. WINDS	ENE-WSW shoreline Landward 38% Prevailing - - March - July E - August - February W (1)	NE-SW shoreline Landward 39% Prevailing - - March - July E - August - February W (1)	ENE-WSW shoreline Landward 34% Prevailing - - March - July E - August - February W (1)	NE-SW shoreline Landward 39% Prevailing - - March - July E - August - February W (1)	ENE-WSW shoreline Landward 39% Prevailing - - March - July E - August - February W (1)	WSW-ESE shoreline Landward 79% Prevailing - - March - July E - August - February W (1)	SW-NNW shoreline Landward 41% Prevailing - - March - July E - August - February W (1)	NNE-SSW shoreline Landward 22% Prevailing - - March - July E - August - February W (1)
3. ATMOSPHERIC CONDITIONS	Lake breeze effect and fumigation Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Lake breeze effect and fumigation Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Lake breeze effect and fumigation Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Lake breeze effect and fumigation Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% Limited urban effect (4)(5)	Lake breeze effect and fumigation Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Reduced lake breeze effect Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Reduced lake breeze effect Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)	Reduced lake breeze effect Land based inversions 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect (4)(5)
4. TOPOGRAPHY	Immediate vicinity flat 2.5-5 mi-high ridges & deep valleys Site EL-600'/2mi-1,000'/5 mi-1,200' Exposed lakeshore location Heavily wooded (6)(11)	Site flat EL-650' Ridge @ rear of site - 1,100' 1-5 mi-high ridges and deep valleys Exposed lakeshore location Heavily wooded (6)(11)	Site flat EL-650' 2 mi-1,000'/5 mi-1,000' Ridges & valleys-W-S Hill (1,000'+) - W-N Exposed lakeshore location Heavily wooded (6)(11)	Lakeshore location Site rises EL-650' to 800' @ 1 mi/2 mi-1,000/5 mi-1,300' Exposed bay shoreline Medium woodland (6)(11)	Lakeshore location Site Flat EL-650'/2 mi-1,000'/4 mi-1,200 6 mi-1,500' Exposed bay shoreline Heavily wooded (6)(11)	Location @ end of bay Site rises EL-600' to 750' @ 1 mi/2 mi-1,000'/4 mi-1,100' 1,000 prime EL-2-5 mi Protected bay shoreline Heavily wooded (6)(11)	Sibley Peninsula on bay Site flat EL-600'+/2 mi-650'/5 mi-800' Limited protection-bay shoreline Heavily wooded (6)(11)	Located on large bay Site flat EL-600'+/rises to 800' @ 5 mi Protected bay shoreline Heavily wooded (6)(11)
5. POPULATION	No close population center Summer cottages and lodge across bay Cottages at west end Sparsely populated (29) (50) (15)	No close population center Cottages on Cloud Bay Sparsely populated (50) (15) (29)	No close population center Thunder Bay @ 12 mi Hunting/fishing camp across bay Sparsely populated Cottages on Sturgeon Bay (50) (15) (29)	Thunder Bay city limits Industrial area Residential area @ 1 1/2 mi 40,000 @ 5 mi 10,000 @ 10 mi Hospital & home for aged @ 2.5 mi Summer cottages east (50) (15) (29) (22)	No close population center Thunder Bay @ 10 mi Numerous summer cottages Homes along hwy to north Sparsely populated (50) (15) (29)	No close population center Summer cottages west Sparsely populated (50) (15) (29)	No close population center Summer cottages on Squaw Bay Sparsely populated (50) (15) (29)	No close population center Sparsely populated (50) (15) (29)
6. AGRICULTURE & VEGETATION	Minimal agricultural capability Mostly forest cover Aspen 74% White birch 10% Black spruce 11% (12) (50) (10) (26) (37)	Minimal agricultural capability Mostly forest cover Aspen 74% White birch 10% Black spruce 11% (12) (50) (37) (26) (10)	Yellow birch stand @ 7 mi - NE 94% of land forest Aspen 70% White birch 18% Black spruce 5% White pine 1% Low agricultural capacity Slate River Valley agricultural area (12) (50) (28) (10) (26) (9)	Timber reserve - 3 mi WNW Minimal agricultural capability Reduced forest cover Aspen 34% White birch 48% Black spruce 5% Balsam 5% Some white pine (12) (50) (10) (26) (37)	Minimal agricultural capability Mostly forest cover Aspen 34% White birch 48% Black spruce 5% Balsam 5% Some white pine, cedar and fir (12) (50) (10) (26) (37)	Minimal agricultural capability Mostly forest cover Aspen 50% White birch 12% Black spruce 35% Some white pine, cedar and red maple Sibley twp agricultural area adjacent (9) (12) (50) (10) (26) (37)	Limited agricultural capability Mostly forest cover Aspen 50% White birch 12% Black spruce 35% Some white pine Sibley twp agricultural area Few farms adjacent, mostly hay and pasture, some market gardening (9) (12) (50) (10) (26) (37)	Minimal agricultural capability Mostly forest cover Aspen 50% White birch 12% Black spruce 35% Some white pine Rough pasture land (12) (50) (10) (26) (37)

\*Note: Numbers in parentheses indicate references.



TABLE 1. INDIVIDUAL SITE FACTORS (continued)

	NIPIGON	RED ROCK	McKELLAR
<u>AIR</u>			
1. EXISTING QUALITY	Domtar pulp and paper across river @ 1.5 mi (SSW) noxious atmospheric emissions Town of Nipigon @ 4 miles north Average (7)(3)(2)(50)	Domtar pulp and paper @ 0.5 mi (NW) noxious atmospheric emissions Town of Nipigon @ 7 miles north Average (7)(3)(50)(2)	Industrial area, in Thunder Bay harbour Thunder Bay G.S. @ 1.5 mi south Average (50)(7)(3)(2)
2. WINDS	NNW-ENE shoreline Landward 72% Prevailing winds - March - July E - August - February W South 3% (1)	N-S shoreline Landward 50% Prevailing winds - March - July E - August - February W South 3% (1)	N-S shoreline Landward 30% Prevailing winds - March - July E - August - February W East 15%
3. ATMOSPHERIC CONDITIONS	Reduced lake breeze effect 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect Land based inversions (4) (5)	Reduced lake breeze effect 'C' stability 14% 'D' stability 50% 'F' stability 13% No urban effect Land based inversions (4) (5)	Lake breeze effect 'C' stability 14% 'D' stability 50% 'F' stability 13% Urban effects Land based inversions (4) (5)
4. TOPOGRAPHY	Located at river mouth on large bay Site EL - 600'/2 mi - 1,000' (W&SW)/ 3 mi - 1,250' (E) Protected by shoreline Heavy Wooded (11) (6)	Located on shoreline of large bay Site EL - 600'/2 mi - 1,050' (NW/3 mi - 650' (SW)) Open bay shoreline Heavy Wooded (11) (6)	Lakeshore location Site EL - 600'/4 mi - 1,250' (SW)/4 mi - 750' (NW, N&S) Exposed bay shoreline Urban area (11) (6)
5. POPULATION	Sparsely populated Red Rock @ 1.5 mi Nipigon @ 4.0 mi Population within 5 mi approx. 3,500 (29) (15) (50)	Sparsely populated Red Rock @ 2 mi Nipigon @ 7 mi Population within 5 mi approx. 2,500 (29) (15)	Thunder Bay harbour Industrial area 100,000 @ 5 mi (29) (15)
6. AGRICULTURE & VEGETATION	Minimal agricultural capability Mostly forest cover No restricted forest areas Aspen 75% White birch & spruce (12) (26) (50) (38)	Minimal agricultural capability Mostly forest cover No restricted forest areas Aspen 75% White birch & spruce (12) (38) (26)	Minimal agricultural capability Island in harbour Mainly urban area Slate River Valley agricultural area (12) (26)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDO POINT	BENT ISLAND
7. DOMESTIC ANIMALS & WILDLIFE	Milking herds insignificant Wildlife capability insignificant  (12) (23) (44)	Milking herds insignificant Wildlife capability insignificant  (12) (23) (44)	Milking herds insignificant Wildlife capability insignificant  (12) (23)	Milking herds insignificant Wildlife capability insignificant  (44) (12) (23)	Milking herds insignificant Wildlife capability insignificant Bird sanctuary on Gull Isle @ 2.5 mi Heron colony off Caribou I (9) (44) (55) (12) (23)	Milking herds insignificant Wildlife capability insignificant Heron colony off Caribou I (9) (44) (12) (23)	Milking herds insignificant Wildlife capability insignificant  (44) (12) (23)	Milking herds insignificant Wildlife capability insignificant Caribou refuge near by Eagles nest on Granite I (9) (12) (23) (44)
8. PROPERTY	No built-up areas  No industry @ present Future mining & smelter operation 5 mi NW  (2) (7)	No built-up areas  No industries Future mining & smelter operation 7 mi W  (2) (7)	No built-up areas  Loch Lomond water supply @ 3 mi NW Maple sugar industry around Loch Lomond Future mining & smelter operation 12 mi SW  (2) (7)	Thunder Bay residential commercial & industrialized area to west Population of 50,000 to the west - 5 mi Paper mill @ 0.5 mi Pulp & paper mill @ 1.5 mi Dry dock @ 2 mi Elevators @ 2.5 mi Industrialized shoreline 3 mi to west  (2) (7)	No significant built-up areas Cottages along shoreline No industries  (2) (7)	No significant built-up areas Cottages along shoreline No industries  (2) (7)	No significant built-up areas  No industries  (2) (7)	No significant built-up areas  No industries  (2) (7)
9. RECREATION	Middle Falls pp 4 mi-E-ONC High Falls pp 1 mi-E-ONC Camping D - Day Use Only PP - Provincial Park  (50) (34) (35)	Cottages across Cloud Bay Boat hire and repair on Cloud Bay Numerous boats in bay  (50) (34) (35)	Hunting & fishing camp across Sturgeon Bay New intensive cottage build-up around bay shoreline Ski resorts @ 6 & 8 mi NW  (50) (34) (35)	Ski resort 4 mi - N - D 2 parks @ 2 mi WSW - D 1 park @ 2 mi W - D 1 park @ 5 mi NW - D 1 park @ 5 mi NE - D View of sleeping giant Golf course @ 1 mi  (50) (34) (35)	Cottages along shoreline Very dense summer cottage area 1.5 mi east Cottages on MacKenzie Bay View of sleeping giant  (50) (34) (35)	Sibley pp adjacent-ONC Cottage to west Cottage development in the area Excellent sand beaches  (50) (34) (35)	Sibley pp - 1 mi E&S-ONC Proposed wilderness area 3 mi across Black Bay  (50) (16) (34) (35)	Granite Pt park (CA - 5 mi N Proposed wilderness area 3 mi across Black Bay  (9) (50) (16) (34) (35)
<u>WATER</u>								
10. EXISTING QUALITY: Biological	Good Good Sparse Cladophra Dense submerged aquatic growth  (50) (13) (17)	Good Good Cloud Bay overgrown with pond weed and rushes Suspended weed fragments  (50) (17)	Good Good   (17)	Poor Poor Extensive shoreline reclamation Some aquatic growth on rocks at shoreline  (50) (18) (36)	Good Good MacKenzie Bay has heavy weed growth and mainly marsh Mild Cladophra growth on rocks at lake shoreline  (50)	Good Good Some shoreline reclamation Weeds at end of bay  (50) (36)	Fair Fair Extensive shoreline reclamation Black bay, warm, turbid  (9) (17) (36)	Fair Fair Very extensive shoreline reclamation Black bay, warm, turbid  (9) (17) (36)
11. WINDS & CURRENTS	Partially closed shoreline ENE-WSW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 38% Offshore 51%  (1) (6)	Closed shore location NE-SW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 34% Offshore 55%  (1) (6)	Partially enclosed location ENE-WSW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 38% Offshore 51%  (1) (6)	Open shoreline NE-SW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 34% Offshore 55%  (1) (6)	Open shoreline ENE-WSW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 38% Offshore 51%  (1) (6)	Closed shoreline ESE-WSW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 46% Offshore 44%  (1) (6)	Open shoreline on bay NNW-SW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 34% Offshore 55%  (1) (6)	Open shoreline on bay NNE-SSW shoreline Prevailing spring, east Prevailing remainder, SW-W Offlake 32% Offshore 58%  (1) (6)
12. TEMPERATURES & DEPTHS	Depth(') Distance(') 30 150 40 300 60 450 Entrance to large bay 1.5 x 3.5 mi long Discharge into shoreline bays under certain wind conditions  (6) (14) (36)	Located on small sheltered bay-0.5 mi wide x 3 mi long max. depth-42' Bay not suitable for intake or discharge. Major engineering required for lake intake or discharge 40' depth @ 3,500'  (6) (14) (36)	Depth(') Distance(') E W 20 500 500 30 1000 800 40 2600 2300 60 5000 5000 CW intake and discharge on partially protected lake shoreline  (6) (14) (36)	Depth(') Distance(') 20 1250 30 1800 40 2100 60 3250 CW intake and discharge on open shoreline of large bay  (6) (14) (36)	Depth(') Distance(') E W 20 300 30 200 500 40 400 900 60 500 1100 CW intake and discharge on open shoreline of large bay  (6) (14) (36)	Depth(') Distance(') 30 700 40 1400 60 2600 CW intake and discharge at end of bay-2 mi wide Shallow rocky shoreline  (50) (6) (14) (36)	Depth(') Distance(') 20 2000 30 3200 40 3300 60 3700 On Black Bay, 3 mi wide Shallow, warm bay  (6) (14) (36)	Depth(') Distance(') 20 4000 30 4200 40 4700 60 5600 On Black Bay, 5 mi wide Shallow, warm bay  (6) (14) (36)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
7. DOMESTIC ANIMALS & WILDLIFE	Milking herds insignificant Wildlife capability Eagles nest at site  (9) (31) (44) (12) (23)	Milking herds insignificant Wildlife capability  (31) (44) (12) (23)	Milking herds insignificant Water-fowl habitat Wildlife (ungulates) Capability insignificant  (31) (12) (44) (23)
8. PROPERTY & INDUSTRY	Red Rock at 1.5 mi Nipigon at 4.0 mi Pulp and paper mill at 1.5 mi Plywood plant at 4.0 mi  (2) (7)	Red Rock at 2 mi Nipigon at 7 mi Pulp and paper mill at 1.0 mi  (2) (7)	Thunder Bay residential commercial and industrial area to west Population 100,000 @ 5 mi Industrialized shoreline, pulp and paper mills, dry dock, elevators, generating station  (2) (7)
9. RECREATION	Marina at Nipigon Outfitter at Hughes Pt. Limited development, good potential (50) (7) (33)	Marina at Nipigon Outfitter at Hughes Pt. Limited development, good potential (32) (7)	Industrial area McKellar I. reserved as open space  (27)
<u>WATER</u>			
10. EXISTING QUALITY: Biological	Poor Fair Very extensive shoreline reclamation  (33) (31)	Poor Fair  (33) (31)	Poor Poor  (33) (31)
11. WINDS & CURRENTS	Partially closed shoreline on bay at mouth of river NNW-ENE shoreline Prevailing spring-East Prevailing remainder - SW-W Offshore  (1) (6)	Open shoreline on bay  N-S shoreline Prevailing spring-East Prevailing remainder - SW-W Offshore 18%  (1) (6)	Open shoreline  N-S shoreline Prevailing spring-East Prevailing remainder - SW-W Offshore 70%  (1) (6)
12. TEMPERATURES & DEPTHS	Depth (ft) Distance (ft) 30 2,000 40 2,500 60 6,500 CW intake in river channel CW discharge into river flow through bay  (6) (36) (32)	Depth (ft) Distance (ft) 30 2,000 40 2,500 60 3,000 CW intake in river channel CW discharge into river flow through bay  (6) (36) (32)	Depth (ft) Distance (ft) 30 7,000 40 9,000 CW intake and discharge on open shoreline of large bay  (6) (14) (36)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDD POINT	BENT ISLAND
13. FISH & SPAWNING INTENSITY	Intensive fishing Offshore depths Limited spawning density Pine Bay - pike, no trout Main species lake trout, some salmon Rainbow spawning up creeks and rivers  (9) (50) (14) (21)	Intensive fishing Major lake trout spawning area offshore Major lake trout spawning in Big and Little Trout Bays Rainbow, salmon  (9) (50) (21)	Intensive fishing Shallow offshore areas with spawning capabilities Commercial Indian fishing area off shore - herring, whitefish and suckers Lake trout spawning area, selling restricted  (9) (50) (21)	Low fishing pressure and spawning capability   (9) (21) (18)	Intensive fishing Important spawning areas close to site Commercial fishing area Lake trout restricted  (9) (21)	Intensive fishing and spawning offshore Commercial fishing area Lake trout restricted  (9) (21)	Intensive sport and commercial fishing On major migratory route to lake Shallow bay  (9) (21)	Intensive sport and commercial fishing On major migratory route to lake Shallow bay  (9) (21)
14. OTHER AQUATIC LIFE	Waterfowl insignificant Phytoplankton-high diversity, low density Bottom fauna-average diversity & density Large numbers of worms  (23) (21) (17)	Waterfowl insignificant Phytoplankton-high diversity, average density Bottom fauna average diversity & density Large numbers of worms  (23) (21) (17)	Waterfowl insignificant Phytoplankton high diversity, average density Bottom fauna-average diversity & density  (23) (21) (17)	Low density of pollution tolerant organisms Waterfowl insignificant  (23) (18) (21)	Waterfowl insignificant   (23) (21)	Waterfowl insignificant   (21)	Waterfowl insignificant Bottom fauna-average diversity & density Large numbers of worms  (21) (17)	Waterfowl insignificant Bottom fauna-average diversity & density Large numbers of worms  (21) (17)
15. RECREATIONAL	Adjacent proposed provincial park - Finger Pt. Near main highway Very low population density Cottages across bay Intensive fishing  (50) (6) (15) (21)	Near main highway Very low population density Few cottages on bay Intensive fishing  (6) (50) (15) (21)	Bay shoreline development very active Remote from main highway Very low population density 1 fishing camp on bay Intensive fishing  (50) (6) (15) (21)	Main highway through site Near urban area Low fishing value  (6) (15) (21)	Main highway adjacent Cottages near site High recreational value East end of MacKenzie Bay dense development Intensive fishing  (50) (6) (21)	Near main highway Active shoreline use Very low population density Cottages near site Intensive fishing  (50) (6) (15) (21)	Remote from main highway Very low population density 1 mi from Sibley provincial park Intensive fishing  (6) (15) (21)	Remote from main highway Very low population density Intensive fishing  (6) (15) (21)
16. LOCAL INTAKES (IH - inner harbour)	Few cottages  (19) (29) (18) (50)	Few cottages  (19) (29) (18) (50)	Few cottages in bay  (19) (29) (50) (18)	Port Arthur @ site boundary & possible extension Abitibi Forest @ 0.5 mi Abitibi Paper @ 2 mi IH Northern Wood Ltd. @ 5 mi IH Canada Malting @ 5 mi IH  (19) (29) (18)	Cottages @ west and east site boundary  (19) (50) (18) (29)	Cottages @ west site boundary  (19) (50) (29)	None  (19) (37) (29)	None  (19) (29)
17. LOCAL DISCHARGES (IH-inner harbour)	Few cottages Pine River into Pine Bay Cottages on Pine and Little Pigeon bays  (50) (19) (18)	Few cottages Cloud River into Cloud Bay Cottages on Cloud Bay  (50) (19) (18)	Few cottages Cottages on Sturgeon Bay Mouth of Sturgeon Bay  (50) (18) (19)	Abitibi Forest @ 0.5 mi Abitibi Paper @ 2 mi IH Northern Wood @ 5 mi IH Canada Malting @ 5 mi IH McIntyre R. @ 6 mi IH Neebing R. @ 6.5 IH Kam R. @ 7 mi Ontario Hydro @ 8 mi  (18) (50) (19) (18) (29)	Cottages along lake shoreline  (19) (50) (29)	Cottages along lake shoreline Blende river discharge  (19) (29)	None  (29) (19)	None  (29) (19)
<b>COMMUNITY AND LAND USE</b>								
18. SITE: LAND & PROPERTY	1,290 acres Hwy #61 @ 1 mi north Underdeveloped Little Pine River through site 10% unproductive woodland 85% productive woodland Pine Bay east & Lake Superior south Lumbering on-site 4 owners - no buildings  (6) (19) (38)	1,335 acres Hwy #61 1 mi north Underdeveloped 2 stream 20% unproductive woodland 75% productive woodland Cloud Bay east & Little Trout Bay south 10 owners - no buildings Sub-division proposed  (6) (19) (38)	840 acres Underdeveloped Sub-division proposed 50% Crown land 100% productive woodland Sturgeon Bay west & Lake Superior south  (38) (6) (19)	720 acres Reclamation - 110 acres Off-site ash storage Trans Canada north boundary CN & CPR through site Cottages on site #11-17 hwy through site RDW through site 2 large gravel pits Mainly woodland 1 stream 8 owners  (6) (19) (38)	590 acres Rock quarry Off-site ash storage Cottages on site Mainly woodland Lake Superior south 12 owners Developed industrial site  (6) (19) (38)	1,050 acres Reclamation - 25 acres Scenic roads to lake-3 1 stream Cottages on site CNR boundary @ north Stream boundary @ east Lake Superior SW Recreational shoreline Mainly woodland 49 owners Sub-division lots for cottage development  (6) (19) (38)	1,120 acres Reclamation - 100 acres Sibley Peninsula on Black Bay 100% productive woodland Fill in bay waters req'd 27 owners Sub-division lots for cottage development No buildings  (6) (19) (38)	1,485 acres Reclamation - 370 acres On Black Bay 100% productive woodland 1 stream 4 owners No buildings  (6) (19)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
13. FISH & SPAWNING INTENSITY	<p>Reduced commercial fishing demand due to pollution in Nipigon Bay</p> <p>On migrating route to spawning beds in Nipigon River</p> <p>Spawning beds in Nipigon Bay</p> <p>Limited sport fishing in bay</p> <p>(38) (33)</p>	<p>Reduced commercial fishing demand due to pollution in Nipigon Bay</p> <p>On migrating route to spawning beds in Nipigon River</p> <p>Spawning beds in Nipigon Bay</p> <p>Limited sport fishing in bay</p> <p>(38) (33)</p>	<p>Low fishing pressure spawning capability</p> <p>(18) (21)</p>
14. OTHER AQUATIC	<p>Waterfowl insignificant</p> <p>Bottom fauna - pollution tolerant forms</p> <p>Sludgeworm population varies</p> <p>(23) (33)</p>	<p>Waterfowl insignificant</p> <p>Bottom fauna - pollution tolerant forms</p> <p>Sludgeworm population varies</p> <p>(23) (33)</p>	<p>Low density of pollution</p> <p>Tolerant organisms</p> <p>Waterfowl habitat</p> <p>(18) (21)</p>
15. RECREATIONAL	<p>Remote from main highway</p> <p>Low commercial fishing value due to pollution</p> <p>Low population density</p> <p>Undeveloped recreational potential</p> <p>(6) (15) (38) (33)</p>	<p>Remote from main highway</p> <p>Low commercial fishing value due to pollution</p> <p>Low population density</p> <p>Undeveloped recreational potential</p> <p>(6) (15) (33)</p>	<p>Industrial area</p> <p>Low fishing value</p> <p>(6) (18)</p>
16. LOCAL INTAKES	<p>Town of Red Rock at 1.5 miles</p> <p>Domtar Ltd. at 1.5 miles</p> <p>(33)</p>	<p>Town of Red Rock at 1.0 miles</p> <p>Domtar Ltd. at 1.0 miles</p> <p>(33)</p>	<p>Port Arthur WTP @ 5 mi</p> <p>Abitibi Forest Products @ 5 mi</p> <p>Abitibi Prov. Paper @ 4 mi</p> <p>Northern Wood Ltd. @ 2.5 mi</p> <p>Canada Malting @ 2.5 mi</p> <p>(18)</p>
17. LOCAL DISCHARGES	<p>Town of Red Rock</p> <p>Domtar Ltd.</p> <p>(33)</p>	<p>Town of Red Rock</p> <p>Domtar Ltd.</p> <p>(33)</p>	<p>Abitibi Forest Products @ 5 mi</p> <p>Abitibi Prov. Paper @ 5 mi</p> <p>Northern Wood @ 2.5 mi</p> <p>Canada Malting @ 2.5 mi</p> <p>McIntyre River @ 2 mi</p> <p>Neebing River @ 2 mi</p> <p>Kam River @ 0.5 mi</p> <p>Thunder Bay STP 1.0 mi</p> <p>McKellar River @ site</p> <p>Mission River @ 2.5 mi</p> <p>Thunder Bay G.S. 2 mi</p> <p>Abitibi Paper Co. 2.5 mi</p> <p>(18)</p>
<u>COMMUNITY AND LAND USE</u>			
18. SITE: LAND & PROPERTY	<p>1,680 acres</p> <p>Hwy #17 (Trans-Canada) 4 mi. north on Nipigon River and Nipigon Bay</p> <p>Across river mouth from Red Rock</p> <p>Heavily wooded with swamp area</p> <p>7 owners</p> <p>Underdeveloped</p> <p>(6)</p>	<p>1,145 acres</p> <p>Reclaimed 147 acres</p> <p>South of Red Rock on Nipigon Bay in remote heavily wooded with swamp area</p> <p>5 owners</p> <p>underdeveloped</p> <p>Industrial interests</p> <p>(6)</p>	<p>501 acres</p> <p>Industrial island area</p> <p>Numerous industrial owners</p> <p>Off-site ash storage</p> <p>(27)</p>



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDD POINT	BENT ISLAND
19. SITE: POPULATION	One house along river at site 1 farm @ north boundary (50) (6) (19) (37) (38)	3 cottages 1 farm Boat hire and repair (50) (6) (19) (37) (38)	No cottages (6) (19) (37) (38)	1 residence 27 cottages (50) (19) (37) (38)	5 cottages (6) (19) (38)	Farms 1 Cottages 20 (50) (19) (37) (38)	2 cottages (19) (37) (38)	No cottages 1 farm (19) (37) (38)
20. IMPACT AREA: INDUSTRY	No industry Future Mine & Smelter operation @ 5 mi. (2) (7) (20)	No industry Future Mine & Smelter operation @ 7 mi. (2) (7) (20)	No industry Indian commercial fishing area Thunder Bay @ 12 mi. Maple syrup industry around Loch Lomond (9) (2) (7) (20)	Industrialized (2) (7) (20)	No industry Limited commercial fishing in Thunder Bay (9) (2) (7) (20)	No industry Limited commercial fishing in Thunder Bay (9) (2) (7) (20)	Commercial fishing in Black Bay (9) (2) (7) (20)	Commercial fishing in Black Bay (9) (2) (7) (20)
21. IMPACT AREA: POPULATION	100 @ 5 mi 200 @ 10 mi 40% of buildings for summer recreation 15 cottages & lodge across bay 3 cottages @ 0.5 mi west School @ 3 mi (50) (29) (10) (15) (20)	100 @ 5 mi 200 @ 10 mi 40% of buildings for summer recreation 10 cottages @ 1 mi across bay 1 farm & boundary (50) (6) (15) (20) (27)	200 @ 5 mi 500 @ 10 mi Cottages across Sturgeon Bay along shore Cottage development becoming very active (50) (15) (20) (29)	40,000 @ 5 mi 100,000 @ 10 mi Cottage area along shoreline to east (50) (15) (20) (29)	200 @ 5 mi 2000 @ 10 mi Main cottage area along shoreline east & west 2 cottages on Lefebvre I. (50) (15) (20) (29)	100 @ 5 mi 300 @ 10 mi 4 farms adjacent Main cottage area @ west boundary, very dense development along shoreline (50) (15) (20) (29)	100 @ 5 mi 200 @ 10 mi Farm adjacent @ north 3 farms @ south 6 farms within 3 mi north of site (50) (15) (20) (29)	100 @ 5 mi 200 @ 10 mi No significant population No conflict 1 farm @ north boundary (50) (15) (20) (29)
22. IMPACT AREA: AGRICULTURE & FORESTRY	Little significance No capability 3% of land use mainly hay pasture No endangered tree species Moderate limitations (9)(10)(12)(25)(26)(37)	Little significance Capability limited to grazing 3% of land use mainly hay pasture No endangered tree species Moderate limitations (9)(10)(12)(25)(26)(37)	Some use - future mainly for urban development 6% of land use mainly hay pasture Very severe limitations No endangered tree species Moderately severe limitations (9)(10)(12)(25)(26)(37)	Little significance Very severe limitations 0.5% of land use unimproved grassland Very severe limitations No endangered tree species Moderately severe limitations (9)(10)(12)(25)(26)(37)	Little significance No capability 0.5% of land use unimproved grassland Very severe limitations No endangered tree species Severe limitations (9)(10)(12)(25)(26)(37)	Little significance No capability 1% of land use mainly hay pasture Very severe limitations No endangered tree species Severe limitations (9)(10)(12)(25)(26)(37)	10 farms within 3 mi Very severe limitations Mainly hay pasture Some market gardens Very severe limitations No endangered tree species Moderate limitations (9)(10)(12)(25)(26)(37)	Little significance Moderately severe limitations 1% of land use mainly hay pasture Very severe limitations No endangered tree species Moderately severe limitations (9)(10)(12)(25)(26)(37)
23. IMPACT AREA: RECREATIONAL & HISTORICAL	Middle Falls P.P. @ 4 mi - ONC Recreational park proposed @ High Falls @ 1 mi - ONC "-One of most picturesque bays on Lake Superior shoreline" Summer cottages on bay Boating Finger Pt. future Prov. Park Moderately high capability for outdoor recreation Significant influence on natural regime including historical geological uniqueness (6)(8)(10)(11)(24)(29)(50)	Middle Falls P.P. @ 5 mi - ONC Recreational park @ High Falls @ 2 mi - P.P. - ONC (proposed) Summer cottages on bay Summer cottages on Cloud Bay Boating and fishing Moderate capability for outdoor recreation Significant influence on natural regime including historical geological uniqueness (6)(8)(10)(11)(24)(29)(50)	Summer cottages on bay Lodge on bay Skiing & hiking @ 7 mi Boating and fishing Moderate capability for outdoor recreation Significant influence on natural regime including historical geological uniqueness (6)(8)(10)(11)(24)(29)(50)	5 parks within 5 mi 1 ski resort @ 4 mi Campers association @ 1/2 mi Golf course @ 1 mi Moderate capability for outdoor recreation Minimal influence on natural regime (8)(10)(11)(24)(29)(50)	Cottage area east and west Boating Bird sanctuary on Gull I @ 2.5 mi Moderate capability for outdoor recreation Moderate influence on natural regime (8)(10)(11)(24)(29)(50)	Sibley P.P. - adjacent (natural environment park) Cottage area Good beach area Moderate capability for outdoor recreation Significant influence on natural regime (8)(10)(11)(24)(29)(50)	Sibley P.P. @ 1 mi E (natural environment park) East shoreline Black Bay potential wilderness area Sports fishing Moderately high capability for outdoor recreation Significant influence on natural regime (8)(10)(11)(16)(24)(29)(50)	East shoreline Black Bay potential wilderness area Proposed Granite Pt. conservation area park @ 5 mi north Sports fishing Moderately high capability for outdoor recreation Significant influence on natural regime (8)(10)(11)(16)(24)(29)(50)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
19. SITE: POPULATION	No inhabitants	No inhabitants (50)	No inhabitants
20. IMPACT AREA: INDUSTRY	Domtar at Red Rock (2)	Domtar at Red Rock (2)	Industrialized (2)(20)
21. IMPACT AREA: POPULATION	3,500 at 5 mi 4,000 at 10 mi (15)(29)(50)	2,500 at 5 mi 4,000 at 10 mi (15)(29)(50)	100,000 at 5 mi (15)(29)
22. IMPACT AREA: AGRICULTURE & FORESTRY	Little significance No capability  Severe limitations No endangered tree species (9)(12)(25)(26)(50)	Little significance No capability  Severe limitations No endangered tree species (9)(12)(25)(26)(50)	Little significance Severe limitations Immediate area urban Severe limitations No endangered tree species (9)(12)(25)(26)
23. IMPACT AREA: RECREATIONAL & HISTORIC	Recreation not developed  Moderate capability for outdoor recreation  Moderate influence on natural regime (10)(11)(24)(29)(50) (33)	Recreation not developed  Moderate capability for outdoor recreation  Moderate influence on natural regime (10)(11)(24)(29) (33)	Industrial area  Low capability for outdoor recreation  Minimal influence on natural regime (10)(11)(24)(29)(18)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

*equal weighting for this factor*

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDD POINT	BENT ISLAND
24. AESTHETICS	Hwy #61 scenic route Resort area across bay Lignite ash disposal - 30% of site	Hwy #61 scenic route High ridge between Hwy Lignite ash disposal - 25% of site	Small resort area across bay Lignite ash storage - 40% of site	Industrial area View of sleeping giant over the site from Trans-Canada Hwy Off-site lignite ash storage- 300 acres required	Sibley P.P. 6 mi across bay Sleeping giant - 10 mi across bay On Trans-Canada Hwy Off-site lignite ash storage - 300 acres required Site location limits visibility from nearby cottage area	Sibley P.P. adjacent Lignite ash storage 15% site Possible Sibley expansion	Sibley P.P. @ 1 mi Extensive reclamation of off-shore area Lignite ash storage 40% site Possible Sibley expansion	Granite Pt. (CA - future) @ 5 mi Very extensive reclamation of off-shore area Lignite ash storage 20% of site Possible Sibley expansion
	(50)(36)(29)	(50)(36)(29)	(50)(36)(29)	(2)(50)(36)(29)	(50)(36)(29)	(36)(29)	(36)(29)	(36)(29)
25. PUBLIC REACTION	1 mile from United States boundary Opposition by cottagers 30% public response nega- tive	Opposition by cottagers 45% public response negative	Opposition by cottagers 45% public response negative	Moderate opposition 25% public response negative	Strong opposition Developed cottage area 75% public response negative	Strong opposition Developed cottage area Sibley P.P. adjacent Possible expansion of Sibley Park 100% public response negative	Sibley P.P. adjacent Possible expansion of Sibley Park Opposition by Conser- vation groups 80% public response negative	Proposed Sibley expansion could include site Opposition by Conservation groups 70% public response negative
<u>FUEL DELIVERY AND WASTE DISPOSAL</u>								
26. FUEL DELIVERY: LAND USE	New spur line 29 mi from CN mainline 17 mi common with west sites Numerous hills and valleys  No existing railway, pipe lines, transmission lines First 19 mi - 1 mi from highway  Mainly productive woodland some improved pasture Limited cropland Passes through main agricultural area at outskirts of Thunder Bay Cottage area near site  15 road crossings 11 river crossings 7 stream crossings No significant permanent conflicts	New spur line 25 mi from CN mainline 17 mi common with west sites Numerous hills and valleys  No existing railway, pipe lines, transmission lines First 19 mi - 1 mi from highway  Mainly productive woodland some improved pasture Limited cropland Passes through main agricultural area at outskirts of Thunder Bay Cottage area near site  14 road crossings 10 river crossings 5 stream crossings No significant permanent conflicts	New spur line 27 mi from CN mainline 17 mi common with west sites Numerous hills and valleys  No existing railway, pipe lines, transmission lines First 19 mi - 1 mi from highway  Mainly productive woodland some improved pasture Limited cropland Passes through main agricultural area at outskirts Cottage area near site  13 road crossings 9 river crossings 6 stream crossings No significant permanent conflicts	Existing CNR mainline through site No conflicts	Existing CNR mainline @ site boundary Cottage area	Existing CNR mainline @ site boundary Cottage area to west	5 mi from CNR mainline  Very flat land  Railway, Trans Canada Highway, pipe line, and transmission corridor @ 8 miles  Mainly productive woodland some non productive Limited pasture land  2 road crossings 5 stream crossings No significant permanent conflicts	3 mi from CNR mainline  Very flat land  Railway, Trans Canada Highway, pipe line, and transmission corridor @ 8 miles  All productive woodland  No road crossings 1 stream crossing No significant permanent conflicts
	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)	(6)(19)(29)(36)(41)(50)
27. FUEL DELIVERY: AESTHETICS	Passes through 5 townships Estimated population 75 2 villages Sparsely populated (15) (29)  Heavily wooded area High ridges provide screening Major ski area Hwy #61	Passes through 5 townships Estimated population 75 2 villages Sparsely populated (15) (29)  Heavily wooded area High ridges provide screening Major ski area Hwy # 61	Passes through 3 townships Estimated population 85 1 village Sparsely populated (15) (29)  Heavily wooded area Remoted from travelled routes Major ski area Nature reserve @ 1/2 mile	No conflicts	Cottage area  More noise and dust from increased rail traffic	Cottage area to west  More noise and dust from increased rail traffic	Passes through 1 township Estimated population 33 Sparsely populated (15) (29)  More noise and dust from increased rail traffic Heavily wooded area Good natural screening	Passes through 1 township Estimated population affected - 0 (15) (29)  More noise and dust from increased rail traffic Heavily wooded area Good natural screening
	(15) (29) (6) (19) (50)	(15) (29) (6) (19) (50)	(15) (29) (6) (50) (19)	(6) (50) (19) (15) (29)	(15) (6) (50) (19) (29)	(15) (29) (6) (19) (50)	(15) (29) (6) (19) (50)	(15) (29) (6) (19) (50)



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
24. AESTHETICS:	Industrial site and town across bay Undeveloped area	Industrial site and town north along shoreline Undeveloped area	Industrial area
	Lignite ash disposal -12% of site	Lignite ash disposal -30% of site	
	(2)(29)(36)(50)	(2)(29)(36)	(2)(29)(36)
25. PUBLIC REACTION	Minimal opposition 25% public response negative	Minimal opposition 30% public response negative	45% public response negative Site suggested by public
<u>FUEL DELIVERY AND WASTE DISPOSAL</u>			
26. FUEL DELIVERY: LAND USE	New spur line 2.5 mi from CPR mainline	4.0 mi from CPR and CNR mainlines	Existing CPR line @ site boundary
	No conflicts	No conflicts	No conflicts
	Route through low swamp area	Route along edge of low swamp area	
	(6)(41)	(6)(41)	(6)(41)
27. FUEL DELIVERY: AESTHETICS	No conflicts More noise and dust from increased road traffic	No conflicts More noise and dust from increased road traffic	No conflicts More noise and dust from increased road traffic
	(29)	(29)	(29)

TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
28. WASTE DISPOSAL: LAND USE	On site storage No conflicts	On site storage No conflicts	Off-site ash storage 300 acres required Storage site on existing railway line Unproductive land Distance - 40 mi
	(36)	(36)	(36)
29. WASTE DISPOSAL: AESTHETICS	On site storage No conflicts	On site storage No conflicts	Existing railway through City of Thunder Bay and along cottage area
	(36)	(36)	(36)
<u>TRANSMISSION</u>			
30. EXISTING LAND USE	Passes through in- dustrial land Diagonal severance crossing Hwy #17	Parallel existing line Passes through open un- developed land	Disruption during construction more severe Possible removal of buildings due to underground trans- mission through the City of Thunder Bay
31. PROPOSED LAND USE	Passes through proposed industrial and recreat- ional land Limits development at Hwy #17 May create artificial western boundary for any future expansion westward	No specific future develop- ment plans are affected	No future building permitted over underground lines Limits development northward from Hwy #130 May limit future redevelopment schemes



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	PINE BAY	LITTLE TROUT	WILEY POINT	BARE POINT	SILVER HARBOUR	E. THUNDER BAY	KIDD POINT	BENT ISLAND
32. NATURAL SYSTEMS	<p>Traverses 5.6 mi of highly erodible soil</p> <p>2 crossings of Kaministikwia River</p> <p>2 crossings of Current River</p> <p>8.8 mi of high constraint in the Current River area</p> <p>1.1 mi of excessive topography on the Slate River Valley wall</p> <p>Total mileage - 125</p> <p>- 25% high impact area</p> <p>- 35% medium impact area</p> <p>- 40% low impact area</p>	<p>4.0 mi of high constraint in Oliver Lake region</p> <p>1.1 mi of steep ridge on Slate R. valley wall</p> <p>2 crossings of Kaministikwia River</p> <p>2 crossings of Current River</p> <p>6.8 mi of highly erodible soil in Kaministikwia area</p> <p>8.8 mi of high constraint in Current River area</p> <p>Total mileage - 115</p> <p>- 20% high impact area</p> <p>- 40% medium impact area</p> <p>- 40% low impact area</p>	<p>3.0 mi highly erodible in Slate River valley area</p> <p>4.0 mi high constraint near Oliver Lake</p> <p>6.8 mi of highly erodible soil in Kaministikwia River area</p> <p>8.8 mi of high constraint in Current River area</p> <p>2 crossings of Kaministikwia River</p> <p>2 crossings of Current River</p> <p>Total mileage - 110</p> <p>- 25% high impact area</p> <p>- 40% medium impact area</p> <p>- 35% low impact area</p>	<p>0.5 miles of sensitive shoreline</p> <p>Total mileage - 3</p> <p>- 35% high impact area</p> <p>- 25% medium impact area</p> <p>- 40% low impact area</p>	<p>3 minor stream crossings</p> <p>Total mileage - 6</p> <p>- 5% high impact area</p> <p>- 95% medium impact area</p>	<p>15 mi of highly erodible soils</p> <p>Parallels and crosses tributary of MacKenzie River for 6.5 miles</p> <p>Total mileage - 40</p> <p>- 35% high impact area</p> <p>- 65% medium impact area</p>	<p>20.5 of highly erodible soils</p> <p>Total mileage - 55</p> <p>- 40% high impact area</p> <p>- 50% medium impact area</p> <p>- 10% low impact area</p>	<p>20.5 of highly erodible soils</p> <p>Total mileage - 55</p> <p>- 40% high impact area</p> <p>- 55% medium impact area</p> <p>- 5% low impact area</p>
33. NATURAL RESOURCES	<p>76 mi of productive or potentially productive forest</p> <p>Traverses Slate River Valley and Murillo agriculture areas</p> <p>Close to wildlife area in Hazelwood Lake-Ament River area</p> <p>Large portion of medium capability recreation land</p> <p>Total mileage - 125</p> <p>- 10% high impact area</p> <p>- 35% medium impact area</p> <p>- 55% low impact area</p>	<p>77 miles of productive or potentially productive forest</p> <p>Traverses Slate River Valley and Murillo agriculture areas</p> <p>Close to wildlife area in Hazelwood Lake-Ament River area</p> <p>Large portion of medium capability recreation land</p> <p>Total mileage - 115</p> <p>- 10% high impact area</p> <p>- 35% medium impact area</p> <p>- 55% low impact area</p>	<p>77 miles of productive or potentially productive forest</p> <p>Traverses Slate River Valley and Murillo agriculture areas</p> <p>Portions of medium capability recreation land</p> <p>Near Prince location, a high value forest and wildlife tract</p> <p>Total mileage - 110</p> <p>- 10% high impact area</p> <p>- 30% medium impact area</p> <p>- 60% low impact area</p>	<p>Medium to high recreational capability along nearby shoreline</p> <p>Total mileage - 3</p> <p>- 40% high impact area</p> <p>- 50% medium impact area</p> <p>- 10% low impact area</p>	<p>5 miles of potentially productive forest</p> <p>Total mileage - 6</p> <p>- 75% medium impact area</p> <p>- 25% low impact area</p>	<p>34 miles of potential and existing forest</p> <p>Medium recreation potential near MacKenzie River</p> <p>Known deer areas in the vicinity of route</p> <p>Total mileage - 40</p> <p>- 30% medium impact area</p> <p>- 70% low impact area</p>	<p>App.30% passes through Great Lakes Paper Limits</p> <p>Known deer areas in vicinity of route</p> <p>Medium recreation potential near MacKenzie River System</p> <p>Minor agriculture belt east of Pass Lake</p> <p>Total mileage - 55</p> <p>- 25% medium impact area</p> <p>- 75% low impact area</p>	<p>App.25% passes through Great Lakes Paper Limits</p> <p>Near 3 forest areas</p> <p>Known deer areas in vicinity of route</p> <p>Medium recreation potential near MacKenzie River System</p> <p>Minor agriculture belt east of Pass Lake</p> <p>Total mileage - 55</p> <p>- 25% medium impact area</p> <p>- 75% low impact area</p>
34. VISUAL	<p>3 crossings Hwy #61</p> <p>5 crossings Hwy #17,11</p> <p>5 crossings Passenger Rail Lines</p> <p>14 mi parallel Hwy #61</p> <p>20 mi across farm land</p> <p>Near existing lines</p> <p>Near Surprise Lake recreation area</p> <p>Parallel lines to Nickle Mine</p> <p>Total mileage - 125</p> <p>- 5% high impact area</p> <p>- 85% medium impact area</p> <p>- 10% low impact area</p>	<p>3 crossings Hwy #61</p> <p>3 crossings Hwy #17,11</p> <p>5 crossings Passenger Rail Lines</p> <p>14 mi. parallel Hwy #61</p> <p>20 mi. across farm land</p> <p>Near existing lines</p> <p>Near Surprise Lake recreation area</p> <p>Parallel lines to Nickle Mine</p> <p>2 more crossings Hwy #61</p> <p>Near Cloud Lake recreation area</p> <p>Total mileage - 115</p> <p>- 5% high impact area</p> <p>- 80% medium impact area</p> <p>- 15% low impact area</p>	<p>3 crossings Hwy #61</p> <p>3 crossings Hwy #17,11</p> <p>5 crossings Passenger Rail Lines</p> <p>14 mi. parallel Hwy #61</p> <p>20 mi. across farm land</p> <p>Near existing lines</p> <p>Near Surprise Lake recreation area</p> <p>Parallel lines to Nickle Mine</p> <p>1 crossing Hwy #61</p> <p>Total mileage - 110</p> <p>- 5% high impact area</p> <p>- 80% medium impact area</p> <p>- 15% low impact area</p>	<p>Parallels old Hwy #17</p> <p>Near cottage development area</p> <p>Near existing lines</p> <p>Interrupts scenic lookout to "Sleeping Giant"</p> <p>Total mileage - 3</p> <p>- 100% medium impact area</p>	<p>2 crossings of Hwy #17</p> <p>2 crossings of Passenger Rail Line</p> <p>Near cottage development area</p> <p>Total mileage - 6</p> <p>- 5% high impact area</p> <p>- 25% medium impact area</p> <p>- 70% low impact area</p>	<p>2 crossings of Hwy #17</p> <p>Near cottage area</p> <p>1 crossing of Passenger Rail Line</p> <p>Adjacent to Passenger Rail Line</p> <p>Adjacent to existing right-of-way</p> <p>Visible from Hwy #587 and historic site on route to Sibley P.P.</p> <p>Total mileage - 40</p> <p>- 5% high impact area</p> <p>- 80% medium impact area</p> <p>- 15% low impact area</p>	<p>3 crossings of Hwy #17</p> <p>1 crossing of Passenger Rail Line</p> <p>Crosses near Jct. of Hwy #17 &amp; Hwy #587</p> <p>Parallels existing right-of-way</p> <p>Parallels rail line</p> <p>Total mileage - 55</p> <p>- 90% medium impact area</p> <p>- 10% low impact area</p>	<p>3 crossings of Hwy #17</p> <p>1 crossing of Passenger Rail Line</p> <p>Crosses near Jct. of Hwy #17 &amp; Hwy #587</p> <p>Parallels existing right-of-way</p> <p>Parallels rail line</p> <p>Passes near recreation area</p> <p>Total mileage - 55</p> <p>- 90% medium impact area</p> <p>- 10% low impact area</p>



TABLE 1. INDIVIDUAL SITE FACTORS (Continued)

	NIPIGON	RED ROCK	McKELLAR
32. NATURAL SYSTEMS	<p>Large segment of high relief shield Close to Wolf Lake - Greenwich Lake complex Numerous river and stream crossings 2 crossings of Black Sturgeon River Black Sturgeon River crossings are more difficult Total mileage - 115 - 35% high impact area - 45% medium impact area - 20% low impact area</p>	<p>Lare segment of high relief shield Close to Wolf Lake - Greenwich Lake complex Numerous river and stream crossings 2 crossings of Black Sturgeon River Total mileage - 100 - 40% high impact area - 35% medium impact area - 20% low impact area</p>	<p>6.5 mi of highly erodible soil in Kivikoski area 2 crossings of Current River 8.8 mi of high constraint in Current River area Total mileage - 55 - 35% high impact area - 40% medium impact area - 25% low impact area</p>
33. NATURAL RESOURCES	<p>Medium recreation potential near Black Sturgeon River Near Wolf Lake, Wolf Pup Lake and Greenwich Lakes recreation complex Close to Loon Lake recreational potential Less agriculture capability Total mileage - 115 - 25% medium impact area - 75% low impact area</p>	<p>Medium recreation potential near Black Sturgeon River Near Wolf Lake, Wolf Pup Lake and Greenwich lakes recreation complex Close to Loon Lake recreational potential Total mileage - 100 - 25% medium impact area - 75% low impact area</p>	<p>37 miles of potentially productive forest Medium recreation potential in Current River area Total mileage - 55 - 20% medium impact area - 80% low impact area</p>
34. VISUAL	<p>1 crossing of Hwy #17 Parallels Hwy #17 for 3 miles Parallels existing right-of-way Near Ouimet Canyon Spans Nipigon River Total mileage - 115 - 5% high impact area - 65% medium impact area - 30% low impact area</p>	<p>1 crossing of Hwy #17 Parallels Hwy #17 for 3 miles Parallels existing right-of-way Near Ouimet Canyon Total mileage - 100 - 5% high impact area - 65% medium impact area - 30% low impact area</p>	<p>3 crossings Hwy #61 Near Surprise Lake recreation area Total mileage - 55 - 80% medium impact area - 20% low impact area</p>



Table 2  
ENVIRONMENTAL SITE COMPARISON - FOSSIL-FUELLED STATION

Parameter Factor	Weight	Level of Concern											Values										
		Pine Bay	Little Trout	Wiley Point	Bare Point	Silver Harbour	East Thunder Bay	Kidd Point	Bent Island	Nipigon	Red Rock	McKellar	Pine Bay	Little Trout	Wiley Point	Bare Point	Silver Harbour	East Thunder Bay	Kidd Point	Bent Island	Nipigon	Red Rock	McKellar
<b>AIR</b>																							
1. Existing Quality	6	3	3	3	1	3	3	3	3	2	2	1	18	18	18	6	18	18	18	18	12	12	6
2. Winds	7	2	2	2	2	2	3	2	1	3	2	2	14	14	14	14	14	21	14	7	21	14	14
3. Atmospheric conditions	4	2	2	2	3	2	2	1	1	1	1	3	8	8	8	12	8	4	4	4	4	4	12
4. Topography	6	3	3	3	2	2	3	1	1	2	2	3	18	18	18	12	12	18	6	6	12	12	18
5. Population	5	0	0	1	3	2	1	0	0	2	2	3	0	0	5	15	10	5	0	0	10	10	15
6. Agriculture & Vegetation	5	2	2	3	1	2	2	3	2	2	2	2	10	10	15	5	10	10	15	10	10	10	10
7. Farm Animals & Wildlife	1	1	1	1	1	2	2	1	2	2	1	1	1	1	1	1	2	2	1	2	2	1	1
8. Property & Industry	2	0	0	1	2	0	0	0	0	1	1	3	0	0	2	4	0	0	0	0	2	2	6
9. Recreation	2	3	3	3	3	3	3	2	2	2	2	0	6	6	6	6	6	6	4	4	4	4	0
Sub-total	38												75	75	87	75	80	84	62	51	77	69	82
<b>WATER</b>																							
10. Existing Quality	6	3	3	3	1	3	3	3	3	2	2	1	18	18	18	6	18	18	18	18	12	12	6
11. Winds & Currents	7	2	3	2	1	1	3	2	2	1	2	1	14	21	14	7	7	21	14	14	7	14	7
12. Temperature & Depths	7	2	4	2	1	1	3	3	3	2	1	3	14	28	14	7	7	21	21	21	14	7	21
13. Fish & Spawning	8	2	4	3	0	2	2	3	3	2	2	0	16	32	24	0	16	16	24	24	16	16	0
14. Other Aquatic Life	3	2	3	3	0	2	2	3	3	2	2	0	6	9	9	0	6	6	9	9	6	6	0
15. Recreation	3	1	1	2	3	3	3	1	1	2	2	3	3	3	6	9	9	9	3	3	6	6	9
16. Local Intakes	2	1	1	1	3	2	2	0	0	3	3	2	2	2	2	6	4	4	0	0	6	6	4
17. Local Discharges	2	1	1	1	3	2	2	0	0	2	2	3	2	2	2	6	4	4	0	0	4	4	6
Sub-total	38												75	115	89	41	71	99	89	89	71	71	53
<b>COMMUNITY &amp; LAND USE</b>																							
18. Site - Land & Property	5	3	3	2	1	2	3	3	4	2	2	1	15	15	10	5	10	15	15	20	10	10	5
19. - Population	4	1	2	0	2	1	3	0	1	0	0	0	4	8	0	8	4	12	0	4	0	0	0
20. Area - Industry	2	2	2	2	0	3	3	3	3	2	1	0	4	4	4	0	6	6	6	6	4	2	0
21. - Population	3	3	3	2	0	1	3	3	3	0	0	0	9	9	6	0	3	9	9	9	0	0	0
22. - Agriculture & Forestry	2	2	2	2	0	0	1	3	1	0	1	0	4	4	4	0	0	2	6	2	0	2	0
23. - Recreational & Historical	6	4	4	3	2	3	3	3	3	1	1	0	24	24	18	12	18	18	18	18	6	6	0
24. - Aesthetics	3	3	3	2	2	3	3	3	3	2	1	1	9	9	6	6	9	9	9	9	6	3	3
25. - Public Reaction	5	3	3	3	2	5	4	3	3	2	2	2	15	15	15	10	25	20	15	15	10	10	10
Sub-total	30												84	84	63	41	75	91	78	83	36	33	18
<b>FUEL DELIVERY &amp; WASTE DISPOSAL</b>																							
26. Fuel Delivery - Land Use	5	3	3	3	0	0	0	2	2	1	1	0	15	15	15	0	0	0	10	10	5	5	0
27. - Aesthetics	4	3	3	3	1	2	3	3	3	3	3	0	12	12	12	4	8	12	12	12	12	12	0
28. Waste Disposal - Land Use	3	0	0	0	1	1	0	0	0	0	0	2	0	0	0	3	3	0	0	0	0	0	6
29. - Aesthetics	2	0	0	0	2	2	0	0	0	0	0	3	0	0	0	4	4	0	0	0	0	0	6
Sub-total	14												27	27	27	11	15	12	22	22	17	17	12
<b>TRANSMISSION RIGHT OF WAY</b>																							
30. Existing Land Use	6	2	2	2	1	2	2	1	1	2	1	3	12	12	12	6	12	12	6	6	12	6	18
31. Proposed Land Use	6	1	2	2	2	2	2	1	1	2	1	3	6	12	12	12	12	12	6	6	12	6	18
32. Natural Systems	6	3	3	3	1	1	1	2	2	3	3	2	18	18	18	6	6	6	12	12	18	18	12
33. Natural Resources	6	2	2	2	1	1	1	1	1	2	2	1	12	12	12	6	6	6	6	6	12	12	6
34. Visual	6	3	3	3	2	1	3	3	3	2	2	2	18	18	18	12	6	18	18	18	12	12	12
Sub-total	30												66	72	72	42	42	54	48	48	66	54	66
<b>Totals</b>	<b>150</b>												<b>327</b>	<b>373</b>	<b>338</b>	<b>210</b>	<b>283</b>	<b>340</b>	<b>299</b>	<b>293</b>	<b>267</b>	<b>244</b>	<b>231</b>

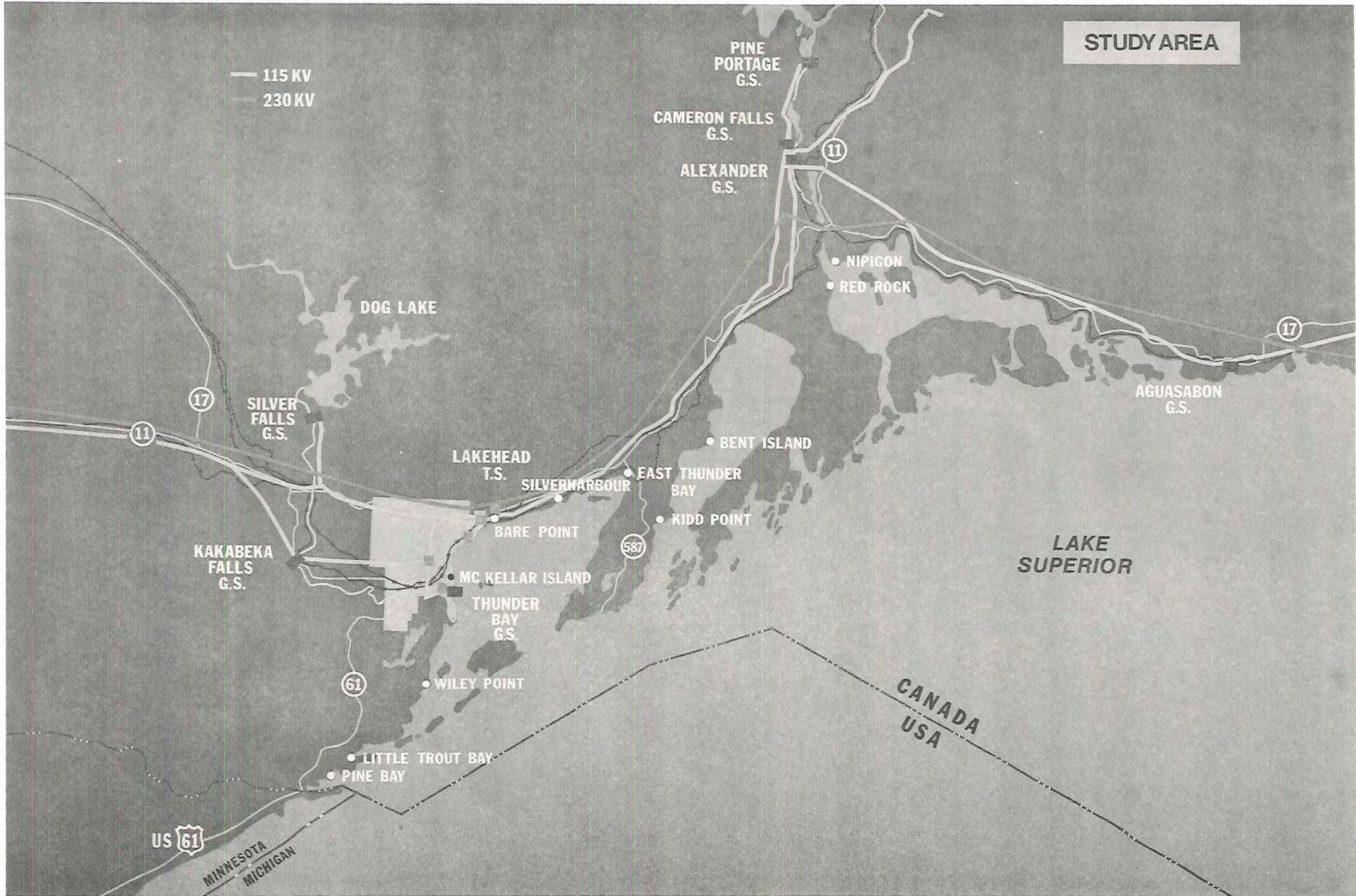




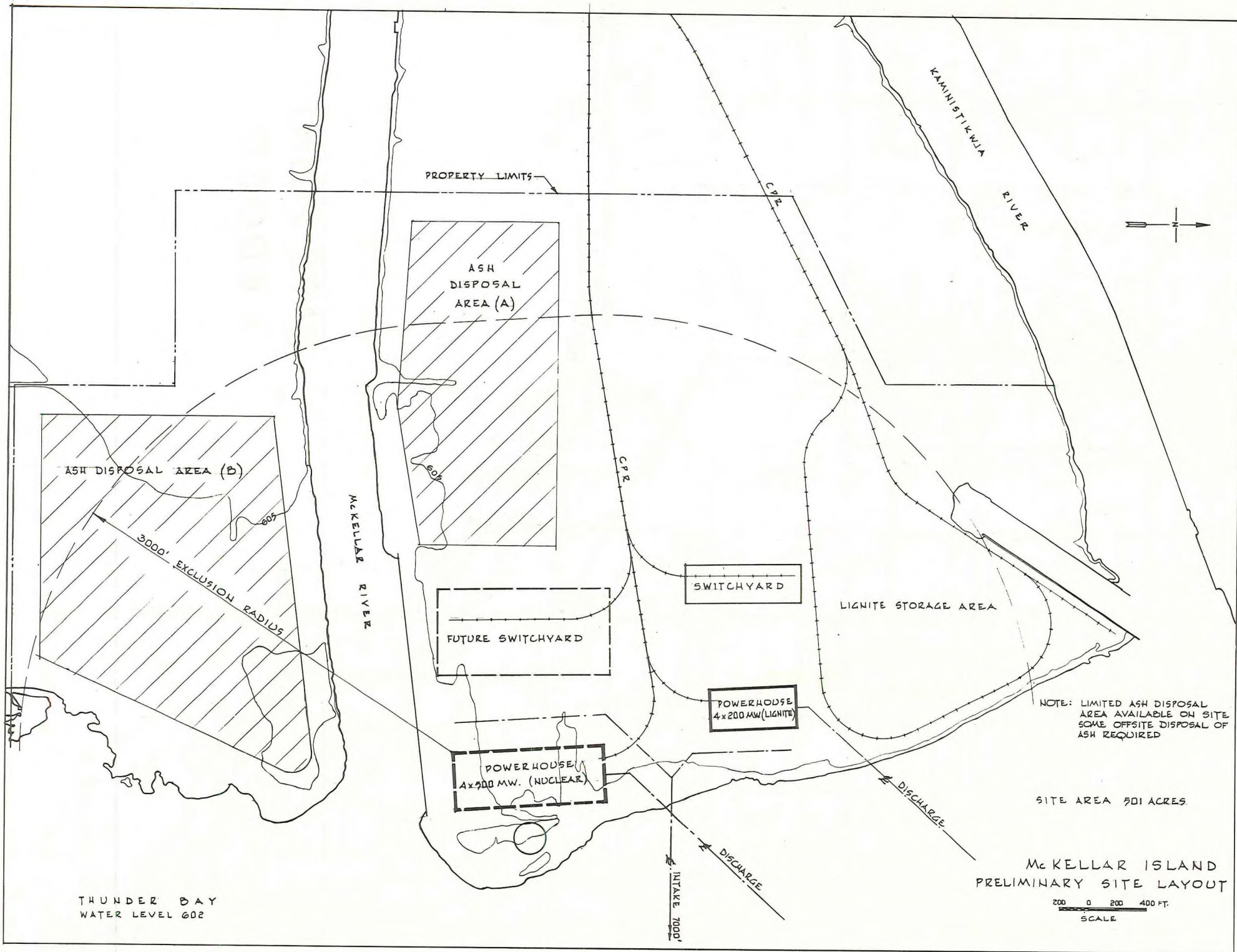


**STUDY AREA**

— 115 KV  
— 230 KV





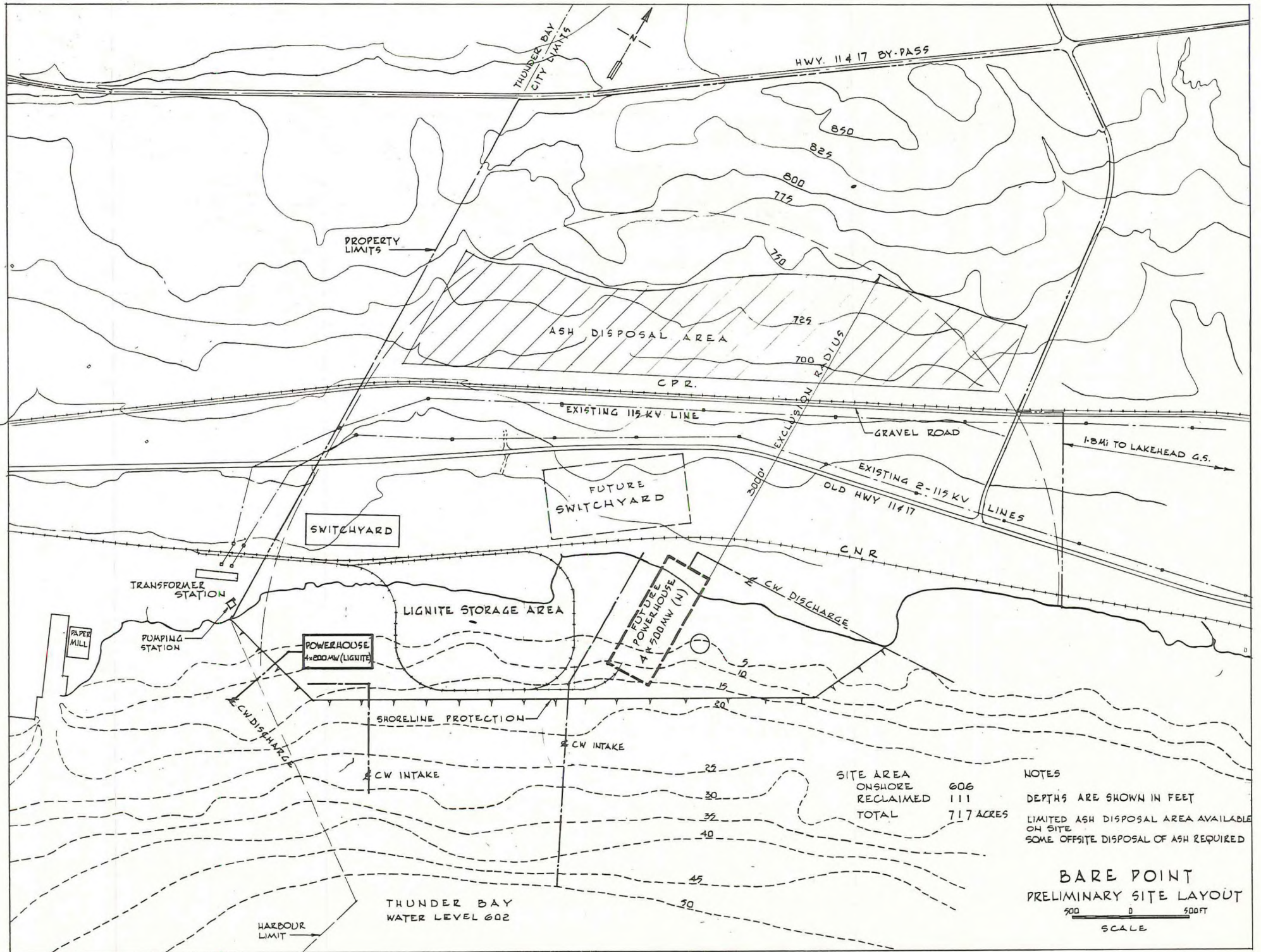


THUNDER BAY  
 WATER LEVEL 602

Mc KELLAR ISLAND  
 PRELIMINARY SITE LAYOUT

200 0 200 400 FT.  
 SCALE



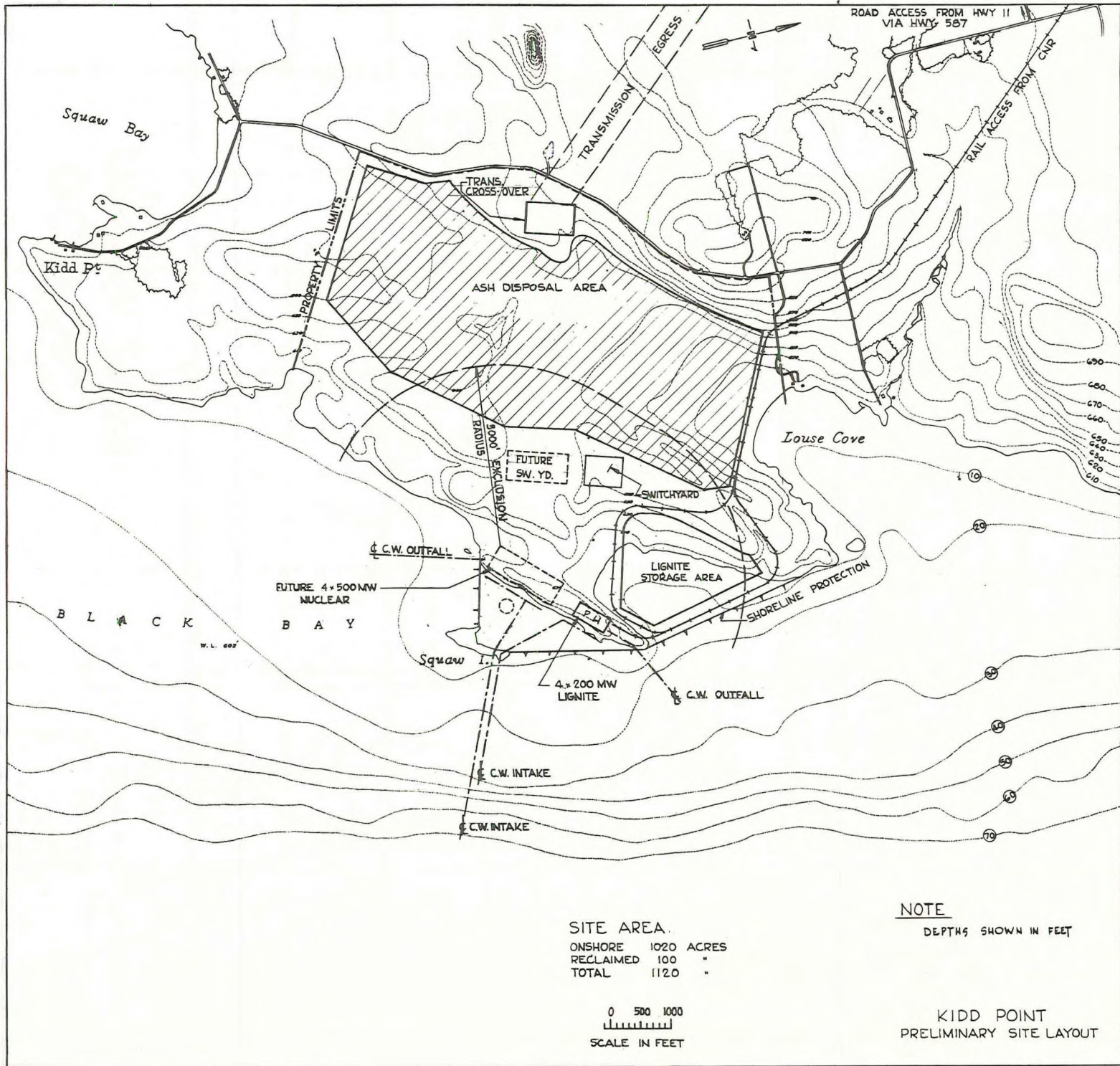


SITE AREA	606
ONSHORE RECLAIMED	111
TOTAL	717 ACRES

NOTES  
 DEPTHS ARE SHOWN IN FEET  
 LIMITED ASH DISPOSAL AREA AVAILABLE ON SITE  
 SOME OFFSITE DISPOSAL OF ASH REQUIRED

**BARE POINT**  
**PRELIMINARY SITE LAYOUT**  
 500 0 500 FT  
 SCALE





SITE AREA.

ONSHORE	1020	ACRES
RECLAIMED	100	"
TOTAL	1120	"

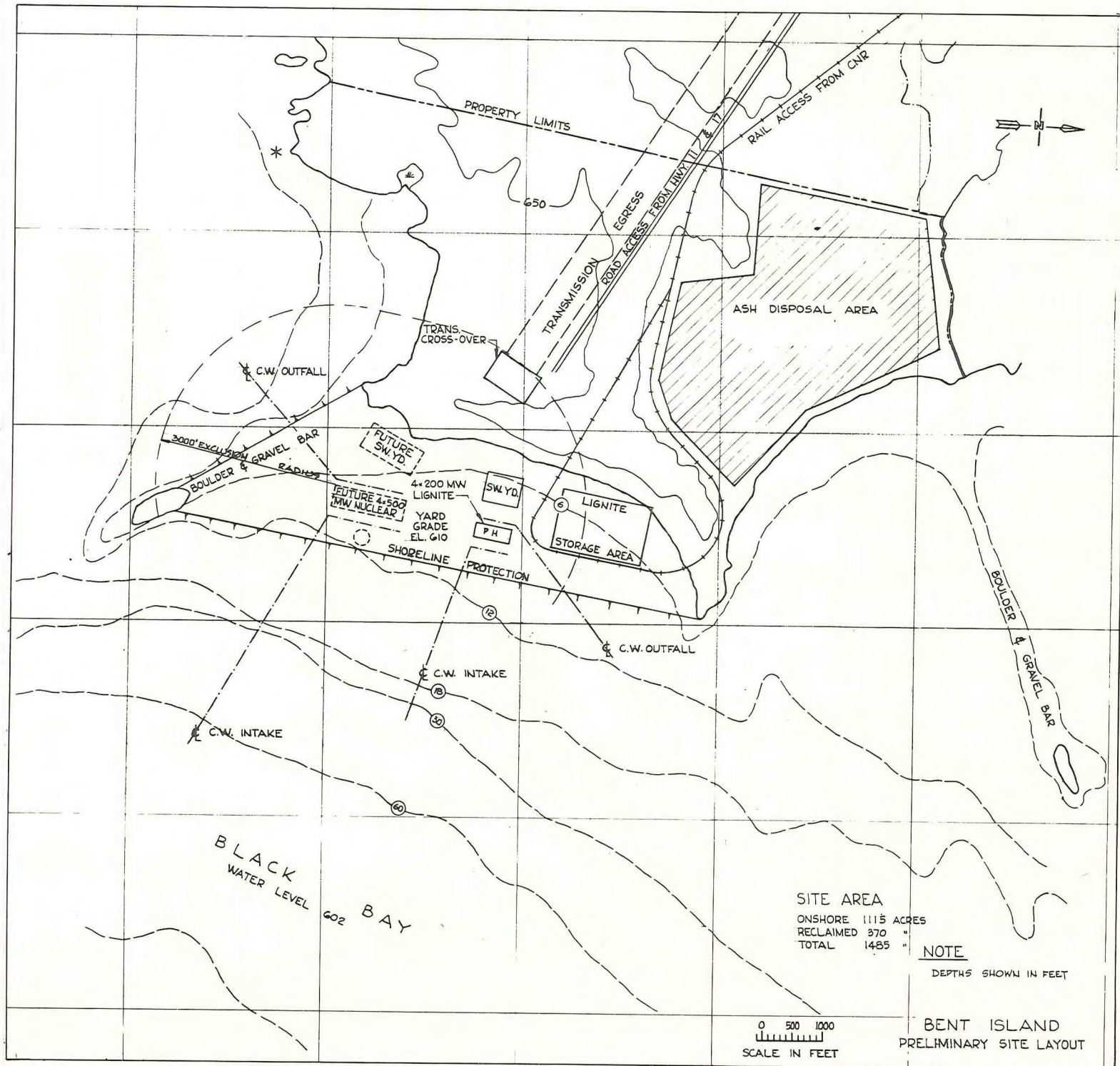
0 500 1000  
 SCALE IN FEET

NOTE

DEPTHS SHOWN IN FEET

KIDD POINT  
 PRELIMINARY SITE LAYOUT

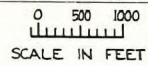




SITE AREA

ONSHORE	1115 ACRES
RECLAIMED	370 "
TOTAL	1485 "

**NOTE**  
 DEPTHS SHOWN IN FEET



BENT ISLAND  
 PRELIMINARY SITE LAYOUT



