

P-5800-000

BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR EXEMPTION
OF
SMALL HYDROELECTRIC POWER PROJECT
FROM LICENSING

ORIGINAL

FILED SECRETARIAL
OFFICE OF THE SECRETARY
1981 DEC 21 PM 1:46
FEDERAL ENERGY REGULATORY COMMISSION
REGULATORY COMMISSION

CARTHAGE MILL
HYDROELECTRIC GENERATION EXPANSION PROJECT
CROWN ZELLERBACH CORPORATION
CARTHAGE, NEW YORK

FEDERAL ENERGY REGULATORY COMMISSION
DOCKETED

DEC 21 1981

DOCKET SECTION

DECEMBER 22, 1981

CEO FILE 1764

BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR EXEMPTION
OF
SMALL HYDROELECTRIC POWER PROJECT
FROM LICENSING

ORIGINAL

FILED SECRETARY
OFFICE OF THE SECRETARY
1981 DEC 21 PM 1:46
FEDERAL ENERGY
REGULATORY COMMISSION

CARTHAGE MILL
HYDROELECTRIC GENERATION EXPANSION PROJECT
CROWN ZELLERBACH CORPORATION
CARTHAGE, NEW YORK

DECEMBER 22, 1981

CEO FILE 1764

CARTHAGE MILL HYDROELECTRIC
GENERATION EXPANSION PROJECT
APPLICATION FOR EXEMPTION FROM LICENSING

TABLE OF CONTENTS

INTRODUCTORY STATEMENT
EXHIBIT A - PROJECT DESCRIPTION
EXHIBIT B - MAP AND LOCATION DRAWING
EXHIBIT E - ENVIRONMENTAL REPORT
EXHIBIT G - POWER PLANT DRAWINGS
APPENDIX I - EVIDENCE OF REAL PROPERTY INTEREST
APPENDIX II - GOVERNMENT AGENCY MAILING LIST
APPENDIX III- LETTERS TO GOVERNMENT AGENCIES
APPENDIX IV - REPLIES FROM GOVERNMENT AGENCIES
APPENDIX V - U.S. GEOLOGICAL SURVEY MAPS

CARTHAGE
DEFERIET
COPENHAGEN

APPENDIX VI - CHANNEL IMPROVEMENT DETAILS

CHANNEL IMPROVEMENTS - SK-1764-3
CHANNEL CROSS SECTIONS- SK-1764-4

P-5800-000

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR EXEMPTION
OF
SMALL HYDROELECTRIC POWER PROJECT
FROM LICENSING

1. Crown Zellerbach Corporation applies to the Federal Energy Regulatory Commission for an exemption for the Carthage Mill Hydroelectric Generation Expansion Project, a small hydroelectric power project that is proposed to have an installed capacity of 5 megawatts or less. Crown Zellerbach seeks exemption from licensing under Part I of the Federal Power Act, 16 U.S.C. Section 791 et seq., as authorized under Section 408 of the Energy Security Act of 1980, 16 U.S.C. Sections 2705 and 2708, as amended, and in accordance with 18 C.F.R. Section 4.101 et seq.

2. The location of the project is:

State: New York
County: Jefferson
Township: Carthage
Stream: Black River

3. The exact name and business address of the Applicant is:

CROWN ZELLERBACH CORPORATION
One Bush Street
San Francisco, California 94104

4. The exact name and business address of the authorized agents for the Applicant in this application are:

R. L. WITTER, P.E.
6363 Airport Way South
Seattle, Washington 98108

and

PETER R. KOHN, ESQ.
CROWN ZELLERBACH CORPORATION
One Bush Street, Suite 1606
San Francisco, California 94104

5. Crown Zellerbach is a domestic corporation, incorporated under the laws of the State of Nevada, with its principal place of business:

One Bush Street
San Francisco, California 94104

Crown Zellerbach Corporation is authorized to do business in all fifty states of the United States except: Arkansas, Connecticut, Kansas, Maine, Nebraska, New Hampshire, North Dakota, Rhode Island, South Dakota, Vermont, and West Virginia.

CROWN ZELLERBACH CORPORATION

By: S.B. Weldon
pk S.B. Weldon,
Senior Vice President

VERIFICATION

STATE OF CALIFORNIA }
CITY AND COUNTY OF SAN FRANCISCO } ss.

The undersigned, Scott B. Weldon, being first duly sworn according to law does hereby depose and state that he is a Senior Vice President of Crown Zellerbach Corporation, applicant in the foregoing Application for Exemption; that he has read said Application for Exemption and knows the contents hereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information and belief.

Subscribed and sworn to
before me this 18th day
of December, 1961.

Madeline Cassette
Notary Public

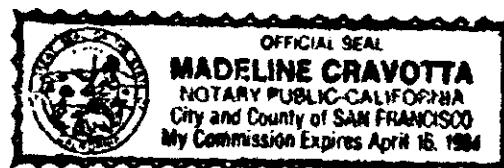


EXHIBIT A

PROJECT DESCRIPTION

CARTHAGE MILL

HYDROELECTRIC GENERATION

EXPANSION PROJECT

EXHIBIT A

This project proposes to replace the existing hydraulic turbines and electric generators presently installed at the northern end of the West End Dam on the Crown Zellerbach Carthage mill site. New generating equipment would consist of two horizontal tubular turbine/generator units similar to Allis-Chalmers Model 3000 mm. The project will be located entirely on land owned by Crown Zellerbach Corporation. Additional electrical energy will be generated because the new units will be more efficient than the existing equipment and they will have a larger capacity allowing utilization of water that is presently spilled over West End Dam.

1. At the present time, three twin turbines installed in the early 1900's are in operation and are located in a large open topped water box. (See Exhibit G, Drawing 5) Water enters the box through a steel trash rack and seven head gates. The box tapers inward for about half its length and is approximately 46 feet wide at its downstream end. The walls are of poured concrete construction and the floor is cypress wood supported by steel beams and steel columns. The existing turbines are double ended axial flow units with draft tubes extending through the wooden floor of the water box. Nos. 6 and 8 turbines have wicket gates at both ends. No. 5 turbine has a sleeve method of water flow control. The approximate annual output of the existing units is 2800 MWH. Nos. 3 and 4 turbine casings are in place with the water ends sealed over and are not used. The water supply to the turbines comes from the existing pond created behind the West End Dam. (See Exhibit G, Drawings 8, 9, and 10) The turbine tailwater discharges into a pond created by Herring's Dam, owned and operated by Mohawk Power Corporation. Tailrace water elevation is governed by pond elevation behind Herring's Dam.

2. The following table presents existing and proposed project statistics.

TABLE I

DAM

Height - Max. - 18.0 Feet
- Min. - 1.5 Feet
Length - - 1260 Feet
Thickness - Base - 13.5 Feet
- Top - 3.0 Feet
Material - Concrete
Design - Buttress

IMPOUNDMENT

Crest Elevation - 702.0 Feet
Storage - Gross (Unknown) Acre-Feet
- Net 53 Acre-Feet (Estimate)
Surface Area 13.15 Acres
Tailrace Water Elevation - 680.5 Feet (Nominal)

POWER PLANT

EXISTING

	<u>UNIT 5</u>	<u>UNIT 6</u>	<u>UNIT 8</u>
Rating	450 H.P.	550 H.P.	550 H.P.
Operating Head (Gross)	21 Ft.	21 Ft.	21 Ft.
Turbine Type	Double Ended, Axial Flow	Double Ended, Axial Flow	Double Ended, Axial Flow

TABLE I (Cont'd.)

POWERPLANT

	<u>PROPOSED</u>	<u>UNIT 1</u>	<u>UNIT 2</u>
Rating		2.25 MW	2.25 MW
Manufacture		Allis-Chalmers Size 3000 mm Horizontal Tubular Turbine	
Average Generating Head	20.7 Ft. (6.3m)	20.7 Ft. (6.3m)	
Design Generating Head	22.0 Ft. (6.7m)	22.0 Ft. (6.7m)	
Hydraulic Capacity		1600 cfs	1600 cfs
Average Annual Energy Production (Both Units)			25,100 MWH

The project includes demolition of the existing powerhouse building and the water box floor; and removal of the existing turbines and generators. The head gates and walls of the water box will remain. The head gates will be refurbished and new tailrace gates will be installed. A new powerhouse building will be constructed around the new turbine generator unit. This building will be a watertight structure with roof access panels located at an elevation above the 200 year flood stage.

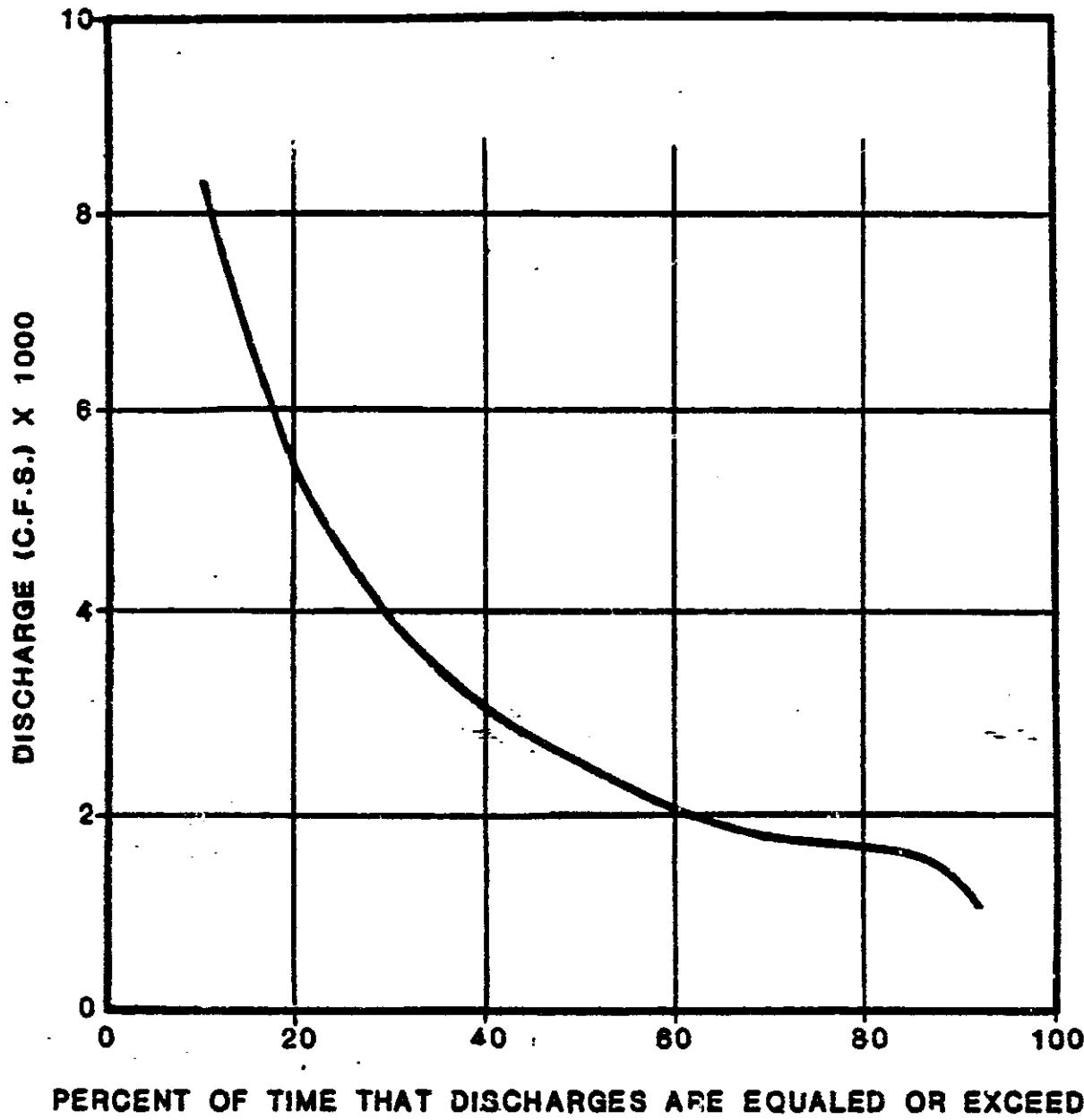
3. Total design capacity of the proposed plant is 4.5 MW developed by two new hydraulic turbine generators. (See Exhibit G, Drawing 7) Each hydraulic turbine will be a horizontal unit equivalent to an Allis-Chalmers size 3000 mm with fixed wheel intake gate, 3000 mm four blade adjustable runner, and speed increaser.

The power will be generated at 4160 volts by two 2250 kilowatt synchronous generators. These will feed through two 4160 volt circuit breakers to a new 4160 volt bus. A 5000 KVA, 4160 to 23,000 volt generator step up transformer with one 23,000 volt circuit breaker will tie the generators to the existing 23,000 volt mill bus. Power transmission facilities between the proposed hydroelectric generators and the existing mill bus will all be inside the existing mill buildings. No provisions will be provided for future units.

4. The proposed power plant will be operated as a run-of-the-river facility.
5. A flow duration curve is included and is labeled Figure 1.
6. Operating parameters for the proposed facility are listed on Table I.
7. Installation of this project is currently planned to start in the fourth quarter of 1983 and be completed by the end of the second quarter of 1985.
8. Repair, reconstruction or other modification of a dam is not included as part of this project. The surface area and surface elevation of the existing impoundment will be the same before, during and after construction.
9. Excavation of the tailrace as shown in Figures 3 and 4 (Appendix VI) and the installation of a retaining wall on both sides is required to fully utilize the capability of the proposed new units. A portion of the material to be removed is not natural to the river, having collected for many years. The condition of the river will be greatly improved by the removal of this foreign material.
10. Evidence of real property interest is contained in Appendix I.
11. To the best of our knowledge this project does not conflict with any other project, proposed or contemplated, by any of the other water right and/or property owners in the Carthage vicinity.

FIGURE 1

THIS DRAWING IS A PART OF
THE APPLICATION FOR EXEMPTION
FROM LICENSING.



FLOW DURATION CURVE

BLACK RIVER AT CARTHAGE, NEW YORK



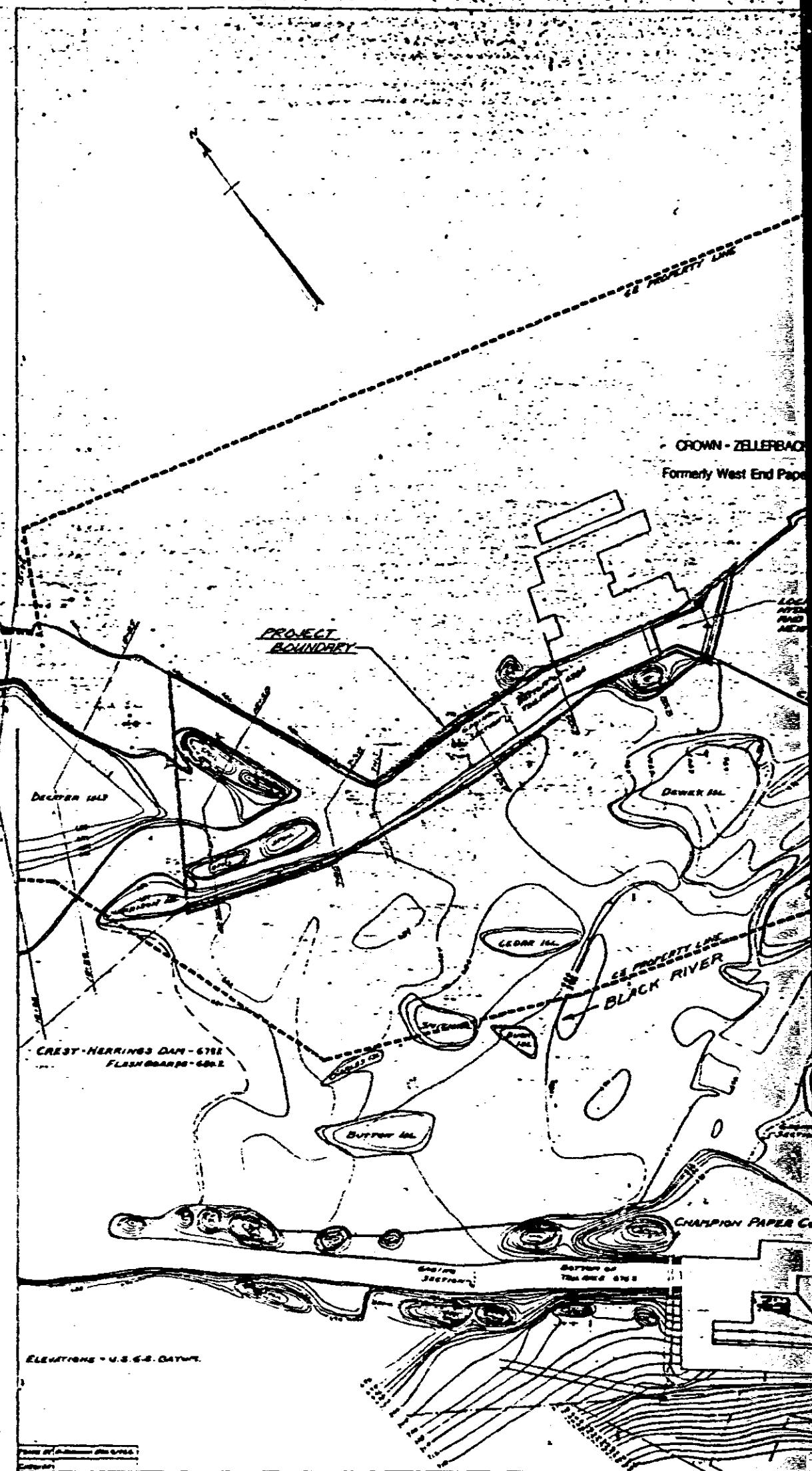
EXHIBIT B

MAP

AND

LOCATION DRAWING

A full size reproduction **of** drawing SK-1764-2 -
PLAN VIEW OF PROJECT AREA is contained in the drawing
packet which accompanies **this** document.



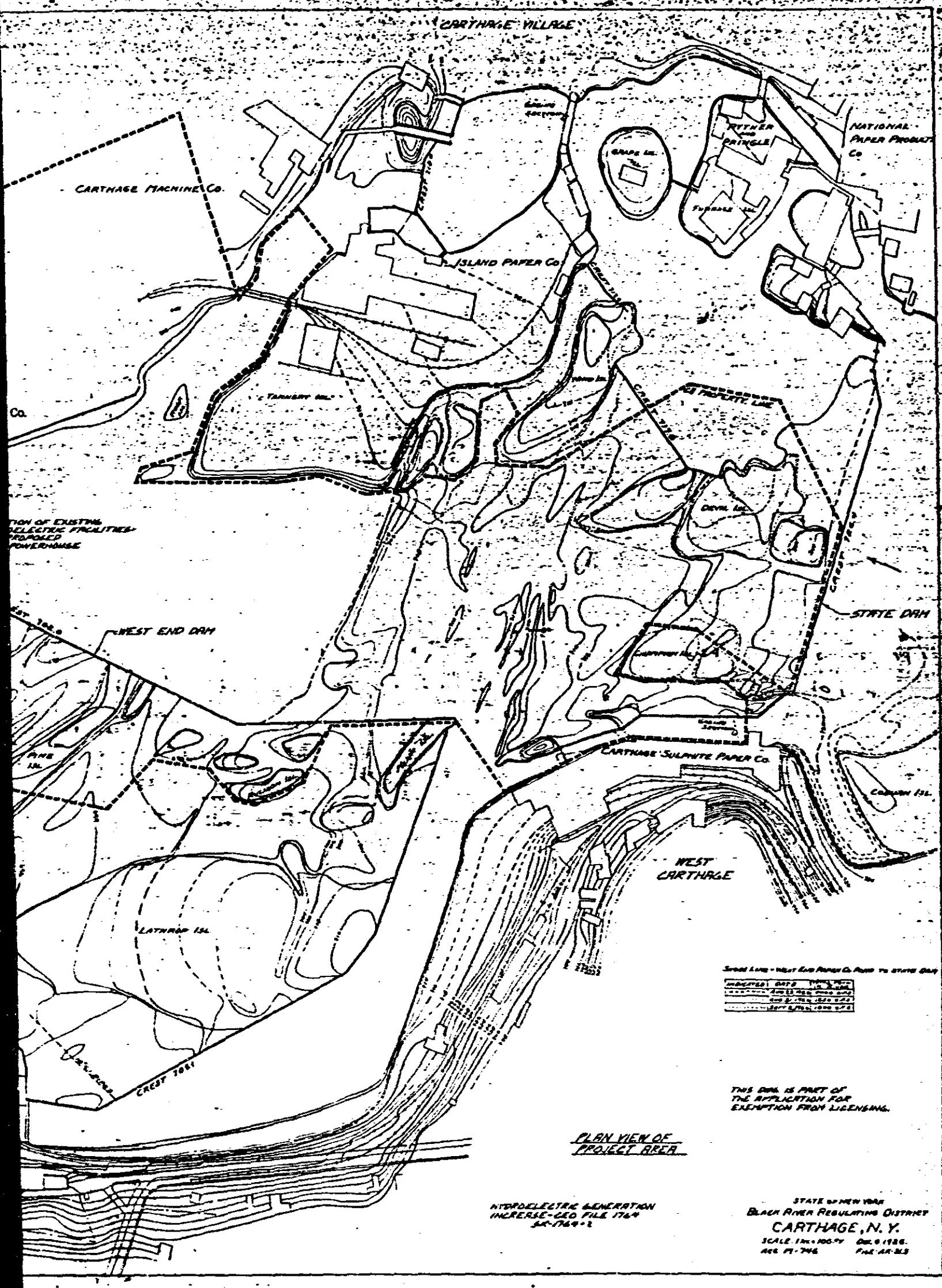


EXHIBIT E

ENVIRONMENTAL REPORT

I. DESCRIPTION OF EXISTING ENVIRONMENT

The Black River and its two major tributaries, the Moose and Beaver Rivers drain an area of approximately 1807 square miles upstream of Carthage. The rivers flow through towns and farmlands and provide some recreational uses. This project will have no effect on any usage of the river upstream from Carthage. (See U.S. Geological maps in Appendix V)

A. Vegetative Cover

Within the project boundary there is very little vegetative growth. A small amount of inbank growth, consisting of grass and underbrush exists on the sides of the tailrace channel. The sides of the tailrace are steep and for the most part, barren rock. A variety of grasses, sedges, and wildflowers are found near the project location. Trees found in the general vicinity include maple, poplar, ash, and willow.

B. Fish and Wildlife Resources

Fish and wildlife populations are not currently exploited commercially within the project area. There is no consumptive or non-consumptive utilization of fish and wildlife within the project area. The project will have no affect on public utilization of fish and wildlife resources. Public access to the waterway for recreational purposes is not recommended due to dangerous conditions in the tailrace.

Fish

A number of fish species are commonly found in the Black River, including walleye, yellow perch, tessellated darter, northern pike, brown bullhead, smallmouth bass, rock bass, pumpkinseed, white sucker, mud minnow, carp, blacknose dace, and numerous species of shiners. Species found rarely in the Black River include chain pickerel, largemouth bass, bluegill sunfish, ling, banded killifish, and northern hog sucker.

The New York State Department of Environmental Conservation has introduced Pacific Salmon in the Black River approximately 25 miles downstream from the proposed project area. Dams on the Black River prevent salmon from moving farther upstream. NYSDEC reports that no plans exist at this time to extend salmon migration. Crown Zellerbach will fully cooperate with any future NYSDEC management plans concerning upstream migration of salmon.

The National Marine Fisheries Service has stated that no marine resources of concern to their department would be impacted by this project.

NYSDEC conducted Biological Surveys and a Cooperative Angler Census of the Black River in 1976-1977. Data from these studies indicated that angling opportunities were good for smallmouth bass from the Carthage dam downstream to Dexter. Angling opportunities from the Carthage dam upstream to Dadville were also reported as good for walleye, northern pike, brown bullhead, and rock bass.

There are no endangered fish species in the Black River.

Access for fishing in the immediate vicinity of the project is poor due to existing land use. Access points do exist both upstream and downstream from the area of the project. There is no tailrace fishery at the project site.

There are no facilities currently in place in the project area for the purpose of allowing movement of fish upstream or downstream. Existing dams prevent movement of fish upstream. A few species probably move downstream when they are washed over the dam. The proposed project will not change the present ability of resident fish species to move in the river.

The proposed project will operate as a run-of-the-river facility. Inflow to the impoundment will equal outflow at all times, with flows in excess of turbine capacity flowing over the dam. The Applicant anticipates no adverse impacts on fish resources as a result of the project. Crown Zellerbach will exercise every precaution during construction and operation of the project to protect existing fish population.

Wildlife

A limited number of small mammals such as squirrels, chipmunk and rabbit inhabit the land area adjacent to the project site. Other species found in the general area surrounding Carthage include white-tailed deer, raccoon, red and gray fox, and skunk.

Birdlife indigenous to this area of New York State are observed at the project site. These species include sparrows, black birds, robins, crows, grackles, blue jays, starlings, and swallows. Migrating waterfowl and songbirds are seasonally observed near the project site.

Hunting activity is severely limited in the immediate area of the project.

C. Water Quality and Quantity

Water Quality

The New York State Department of Environmental Conservation has classified this section of the Black River as Class "C" water: "Best usage of waters - suitable for fishing and all other uses except as a source of water supply for drinking, culinary, or food processing purposes and primary contact recreation."

NYSDEC quality standards for Class "C" waters state that the minimum daily average dissolved oxygen concentration be not less than 5.0 mg/l, and at no time shall dissolved oxygen concentration be less than 4.0 mg/l. The proposed project may have some minor affect on dissolved oxygen levels in the river. The Applicant is prepared to monitor the dissolved oxygen levels downstream of the proposed facility and to adjust operation of the hydroelectric generating equipment as necessary to maintain minimum dissolved oxygen concentrations.

Waste treatment and pollution abatement efforts at various locations along the Black River have resulted in generally improved water quality. The proposed project will have no impact on these pollution control measures, or the waste assimilative capacity of the river.

Consultation with NYSDEC indicates that a reclassification of the Black River to Class "B" by 1983 in accordance with the Clean Water Act is uncertain at this time.

The Applicant will request a 401 Water Quality Permit from NYSDEC and a U.S. Army Corps of Engineers 404 Dredge and Fill Permit to undertake the project.

Water Quantity

The average flow rate of the Black River at Carthage is 2500 cubic feet per second. Monthly river flow data based on 25 year records is shown in Table 2. Crown Zellerbach's usage will not exceed 3200 cubic feet per second and will be such that there will be no interference with the water needs of other riparian owners or with the water flow

requirements of the river. That flow shown in the "Remaining Water Flow" column will be available to the other user located across the river and will be available for river flow requirements. Any additional river flow requirements will be satisfied by reducing the Crown Zellerbach tailrace flow.

Since the project will operate as a run-of-the-river facility there will be insignificant variations in impoundment surface elevation. Water will not be stored behind the dam for peaking power production. Operation of the proposed facility will have no effect on the impoundment behind the dam and consequently will not impact fish and wildlife habitat within the impoundment.

There will be no modifications to the dam for any purpose as part of this project.

TABLE 2
MONTHLY FLOW CHART

<u>Month</u>	<u>Average Flow cfs</u>	<u>CZ Tailrace cfs</u>		<u>Remaining Water Flow cfs</u>	
		<u>Min</u>	<u>Max</u>	<u>Min</u>	<u>Max</u>
January	4486	2990	3200	1286	1496
February	3898	2600	2925	973	1298
March	6250	3200	3200	3050	3050
April	9229	3200	3200	6029	6029
May	8188	3200	3200	4988	4988
June	3570	2380	2680	890	1190
July	2598	1730	1950	648	868
August	1827	1220	1370	457	607
September	2107	1405	1580	527	702
October	2354	1570	1765	589	784
November	4246	2830	3185	1061	1416
December	5361	3200	3200	2161	2161

D. Land and Water Uses

The project boundary is bordered on the north by an industrial facility and on the south by the Black River. Operating hydroelectric power generating facilities exist both upstream and downstream of the proposed project.

At the present time there are hydroelectric redevelopment and expansion plans at three sites near the Crown Zellerbach facility on the Black River: (1) the abandoned former Island Paper Company facility (Tannery Island), (2) the abandoned former Champion Paper Company facility, and (3) the Climax Manufacturing Company facility. Climax Manufacturing is currently operating with 800 kw of installed hydroelectric capacity. Historically, all of these facilities generated hydroelectric power by using separate impoundments and run-of-the-river mode of operation.

Redevelopment and expansion of all four hydro-power sites, including the proposed Crown Zellerbach project, will not affect or alter the independent character of each site. The operating mode at each site will be run-of-the-river, and each will be designed to utilize the maximum practical power generating potential at that site.

Water for use by the Crown Zellerbach mill is drawn from the impoundment behind West End Dam. Treated effluent from the mill is returned to the river near Decatur Island, outside the project boundaries, via a mill owned primary treatment plant and a municipally owned secondary treatment plant.

The Applicant has been informed by the U.S. Army Corps of Engineers that this project will have no affect on the navigability of the river in accordance with Section 10 of the River and Harbor Act of 1899.

Land bordering the proposed project is owned by Crown Zellerbach and is used for manufacturing purposes. Usage of this land, or any adjacent parcels will not be affected or altered by the project.

E. Recreational Uses

There are no recreational uses of the area within the project boundaries. At the request of the New York State Parks and Recreation Agency the Applicant will consider the feasibility of providing small boat access and parking. Inaccessibility, except across private property, and the hazardous condition of the river in this location reduce the potential for developing recreational facilities. (Refer to correspondence, Appendix IV)

F. Historical and Archeological Resources

The Applicant has contacted the U.S. Department of the Interior, Heritage Conservation and Recreation Service; and the New York State Department of Parks and Recreation, State Historic Preservation Officer. These offices have been asked if the proposed project in Carthage will have any effect upon cultural resources included in or eligible for inclusion in the National Register of Historic Places. A representative of the State Historic Preservation Office has stated that they have no archeological concerns. Their office is presently reviewing photographs of the area before preparing written comments about the project.

G. Scenic and Aesthetic Resources

Due to the inaccessibility of the project site, its value as a scenic resource is questionable. The only new construction visible after the project is completed will be the new powerhouse. Removal of the existing equipment and replacement with a new, completely enclosed concrete powerhouse will improve the appearance of the location.

H. Endangered or Threatened Species

The Applicant has contacted the New York State, Department of Environmental Conservation, Division of Fish and Wildlife; and the U.S. Department of the Interior, Fish and Wildlife Service. Both these offices were asked if the proposed project would impact any endangered or threatened species or any critical habitat. The U.S. Fish and Wildlife Office in Harrisburg, Pennsylvania has stated that no federally listed or proposed threatened or endangered species under their jurisdiction are known to exist in the project impact area. (Refer to correspondence, Appendix IV)

II. ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

A. General

No adverse environmental affects from the proposed project have been identified. Various government offices have expressed concerns about certain aspects of the project. These concerns are currently being investigated and will be resolved to the satisfaction of all agencies having jurisdiction. These concerns and possible solutions are discussed in the following paragraphs.

B. Construction

Some minor impact, of a non-permanent nature, will occur during construction as described below. Most of the construction activities are expected to take place in the summer and fall of 1984.

1) Vegetative Cover

No vegetative cover exists around the location of the new powerhouse where the majority of the construction activity will take place. A small amount of vegetative cover along the bank of the tailrace will be disturbed when excavation of the tailrace takes place. Disturbed areas will be restored through replantings and landscaping. No long term impact on the environment will result from this work.

2) Fish and Wildlife

Some temporary displacement of local bird and animal life will occur during project construction. This impact will be short term in nature and should not adversely affect existing long-term resident populations. Some increase in turbidity will be caused during construction especially due to the work involved in improving the tailrace channel. Some loss of fish life is expected to occur when water is removed from the tailrace. Such losses will be minimal and long-term effects to local fish populations within the immediate area are not expected to occur.

3) Water Quality and Quantity

Some minor water quality impact will occur due to the increased turbidity resulting from the proposed improvements to the tailrace. This turbidity is expected to quickly settle out in Herring's Pond causing no long-term impact. Prior to any excavation in the existing tailrace, samples will be taken of the material to be removed. If this sampling shows that toxic substances are present, Crown Zellerbach will take whatever action is deemed appropriate by the New York State Department of Environmental Conservation to prevent river contamination. It may be necessary to install cofferdams to allow dewatering of the area around the spoil piles prior to excavation. If the exemption is granted, the Applicant will take the necessary steps to secure the appropriate Corps of Engineer permits required by Section 404 of the Clean Water Act of 1972.

During construction, all water will spill over the dam. This condition occurs now, periodically, whenever the intake gates to the existing powerhouse are closed for maintenance. This will have no abnormal impact on the environment. Water pumped from the areas of excavation will be passed through a filter medium before discharge into the river. Every effort will be made to avoid water contamination from construction activities such as dirt and debris falling in the water, or fuel spills from vehicles and equipment. To insure this objective is achieved the contractor will be required to remove debris and other excess material from locations where they could possibly fall into the river. In addition, refueling of vehicles will take place away from the river.

4) Air Quality

Limited and insignificant increases of dust and vehicular emissions will be evident during the construction period. They will be confined to the immediate project area and are expected to have no impact on local air quality.

5) Land and Water Uses

No change to current land and water usage in the vicinity of the project boundaries will occur as a direct result of this project.

6) Recreational Uses

Construction of the project will not affect recreational usage of the river. Boating and fishing activities upstream or downstream from the project site will not be disturbed.

C. Post Construction and Operation

After construction of the proposed project there will be an extended period each year during which no water will spill over West End Dam. Concern has been expressed about the possible impact this will have on fish resources. We are presently studying what affect will result from altering the present flow regime over the dam. If an adverse impact is identified, Crown Zellerbach will take whatever action is deemed necessary by the U.S. Fish and Wildlife Service and the New York State Department of Environmental Conservation. It may be that such action, if deemed necessary, would take the form of a minimum flow over the dam during critical time periods.

Routine maintenance will not require drawdowns of any areas other than the inlet waterbox. The tailrace channel will remain flooded and thus no impact on fish and wildlife resources is expected.

Operation of the project will have no impact on recreational usage of the river.

D. Mitigation of Adverse Environmental Impacts

The Applicant will take the following steps to mitigate potential adverse environmental impacts resulting during construction and operation of the project:

- Construction of the project will take place during periods of low flow, thereby minimizing effects of sediment and erosion on water quality.
- Water pumped from the areas of excavation will be passed through a filter medium before discharge into the river.
- Tests will be performed on material to be dredged. If toxic substances are found on the site they will be removed and deposited in a designated landfill or burial site.

- Precautions will be taken during construction to prevent spillage of substances and materials into the river.
- Warning signs will be placed near the project intake area to alert recreational users of the river to existing hazards.
- The Applicant will comply with requirements established by NYSDEC for minimum flow releases over the dam during construction and operation to preserve the existing water quality of the river.

E. Alternate Power Source

If this project is not approved, the additional power generated by the proposed installation would be generated from fossil fuel. This amounts to between 22,300 and 19,800 MWH per year, or between 30,000 and 26,700 barrels of oil.

F. Government Agency Comments

Appendix II lists names and addresses of all State and Federal offices who were sent inquiries about this project. A copy of the cover letter that accompanied each of these initial packets of information as well as subsequent correspondence originated by Crown Zellerbach is included as Appendix III. Appendix IV contains copies of written replies we have received up to the date of submittal of this application.

6. Summary of Agency Comments

Offices numbered 1-13 below received our initial inquiry on 10-28-81, and numbers 14-16 on 11-3-81.

<u>Office</u>	<u>Date</u>	<u>Type</u>	<u>Summary</u>
1) Corps of Engineers Buffalo, N.Y.	11-21-81	Telephone	Since the barge canal from Carthage to Hawkinsville is not operational there is no navigability question regarding the proposed project.
	11-17-81	Letter	No effect on navigability and no conflict with existing or proposed C of E projects. Any construction affecting waters or wetlands will require a Department of the Army permit. NYSDEC is the only regulating agency that has total control over the permitting process. They will coordinate the review process from all agencies. Written confirmation that this review process has commenced will be provided.
2) NYSDEC-Fish & Wildlife Div. Albany, N.Y.	11-5-81 11-12-81	Telephone	Requested that letter from NYSDEC be sent. I was told that information from the Fish and Wildlife Division would be sent soon and that a site visit was being considered.
	12-2-81	Telephone	I was told letter not sent yet. NYSDEC agreed to send a letter very soon confirming they were working on reviewing our project. NYSDEC confirmed receiving final draft of our application, and that a person was assigned to work out details of site visit. No date set.
	12-10-81	Telephone	
	12-15-81	Telephone	They have received some comments on our project from regions 12-14-81. One of the other Applicants met with NYSDEC on concerns raised by the N.Y. State Regions. Discussed effect of projects on waste assumable facilities to be provided. No date set for site visit. DEC assured them that Crown Zellerbach is prepared to work out the details of minimum water flow and recreational facilities.
	12-17-81	Telephone	Requested that DEC comment letter be given to our representative from Triton Power Co. when he visits DEC office on 12-18-81. I was told that it was doubtful that the letter would be ready.

<u>Office</u>	<u>Date</u>	<u>Type</u>	<u>Summary</u>
3) Regional Director U.S. Fish & Wildlife Newton Corner, Mass.	11-12-81	Telephone	Forwarded our inquiry letter to Area Office in Harrisburg. Regional Office will not be involved in review or comment unless requested by Harrisburg or Cortland Offices.
4) N.Y. State Parks & Recreation Historic Preservation Albany, N.Y.	11-12-81 11-17-81 11-23-81	Telephone	Department archeologist has no concerns. Requested photographs of the existing power generation facilities and overall site (Photos mailed 11-19-81) Additional photo requested on 11-23-81. (Sent 12-1-81)
	12-14-81	Telephone	They have received copy of final draft. No additional concerns have been raised. They will try to send out a letter response before Christmas.
5) U.S. Fish & Wildlife Cortland, N.Y.	11-12-81 11-13-81	Telephone	Their office does not provide any information. The content of our Exhibit E must come from the state agencies. Suggested that we send them a draft of our Exhibit E for their review. (Sent 11-13-81)
	11-13-81	Letter	Lists their major concerns regarding hydroelectric development in general. (This letter sent before they received our draft of Exhibit E).
	11-20-81	Meeting (Cortland)	Reviewed their 11-13-81 letter. They also expressed concern about the impact of changes to the frequency, volume, and duration of water flow over West End Dam caused by operation of our proposed facility. They are also concerned about the impact of removing spots from the tailrace channel.
	12-14-81	Telephone	Confirmed that they received copy of draft. Asked them to call me with their comments after reviewing draft of our application.
6) N.Y. State Depart. of Public Service Albany, N.Y.	11-2-81 11-6-81	Telephone	As long as we use all power generated or sell it to the local utility they have no concerns about our project.
	11-6-81	Letter	Confirms information discussed earlier by telephone.
7) N.Y. State Recreation Agency Director Albany, N.Y.	11-13-81	Telephone	They are in the process of reviewing the information we sent. They anticipate that there would be little justification for asking that recreational facilities be included as part of our project.
	11-16-81	Letter	There is a need for facilities to accommodate cross-country skiing. They request that we consider providing small boat and canoe access with suitable parking.

<u>Office</u>	<u>Date</u>	<u>Type</u>	<u>Summary</u>
7) N.Y. State Recreation(Cont.)	12-14-81	Telephone	They have received copy of final draft. Do not expect to attend site visit. I suggested they contact Lenore Kunlik to see photographs we provided. They suggested that we review recreational possibilities with state representatives that do attend site visit and include any agreements reached in site visit report. If we send them a copy of site visit report they will respond by letter.
8) U.S. Dept. of Interior Heritage Conservation and Recreation Service Philadelphia, Pa.	11-12-81	Telephone	The Regional National Park Service Office and the H.C. & R.S. have been merged. They have jurisdiction over projects as to their affect on National Parks as well as general cultural and recreational effects. The Black River from Carthage to Lyons Falls is a potential candidate for designation as a Wild and Scenic River. The H.C. & R.S./National Park Service will comment on this aspect as well as recreational and cultural effects of our project by letter. They could provide no estimate as to when this letter would be written.
	12-17-81	Telephone	They have reviewed our final draft. Written comments will be mailed tomorrow. They agree with NYSDEC in that we should consider providing access to the public for fishing in the impoundment above the dam and in the tailrace. Comments on cultural aspects will be deferred to the N.Y. State Historic Preservation Office. We should be aware of potential Wild and Scenic River designation of the Black River up river from Carthage. This fact has no impact on our current application.
9) U.S. EPA Regional Admin. Region II N.Y., N.Y.	11-12-81 11-23-81	Telephone	They are concerned about the effects of removing material in the tailrace, where the material would be deposited and how the project will affect water flow over the dam. EPA will be satisfied if we satisfy the NYSDEC. A letter reply is forthcoming.
	11-23-81	Letter	Letter repeats items reviewed orally by telephone and summarized above.
10) Great Lakes Basin Commission Ann Arbor, Mich.		No reply	The office dissolved on 10-29-81.
11) N.Y. State Dept. of Environmental Conservation Albany, N.Y.	11-5-81 11-12-81	Telephone	Same comments as (2) above.

<u>Office</u>	<u>Date</u>	<u>Type</u>	<u>Summary</u>
12) National Marine Fisheries Service, NOAA Gloucester, Mass.	11-13-81	Telephone	They have been unable to respond to my letter due to higher priority work. There are no marine resources in the Black River at Carthage that are of concern to the NMFS that would be impacted by our project. They will respond by letter in a few weeks.
	12-10-81	Letter	Proposed project will not significantly affect resources for which the NMFS is responsible.
13) U.S. Dept. of the Interior, Regional Environmental Officer Boston, Mass.	10-28-81	Letter	Provided names and addresses of additional offices that we should contact.
	11-17-81	Letter	No need to send them a separate copy of our final report. They will receive a copy directly from FERC.
14) U.S. Fish & Wildlife Service Harrisburg, Pa.	11-12-81	Telephone	This is an area office. They only comment on effect of project on endangered species. Impact on existing fish, wildlife, and wetlands is handled by U.S. Fish & Wildlife office in Cortland. A letter has been sent.
	11-9-81	Letter	No federally listed or proposed threatened or endangered species under their jurisdiction are known to exist in the project impact area.
15) National Park Service Regional Director Philadelphia, Pa.		No reply	National Park Service and Heritage Conservation and Recreation Service have merged. Only one response will be received. See (8) above.
16) U.S. Geological Survey-Albany, N.Y.	11-12-81	Telephone	Based on the information they received they can foresee no effect on anything that the USGS is concerned with.
	11-13-81	Letter	The proposed project presents no additional problems for the USGS in carrying out their basic responsibility of measuring stream flow.
17) N.Y.S.D.E.C. Fish & Wildlife Office Watertown, N.Y.	11-13-81	Telephone	Fish and wildlife officer provided information on fish species found in the Black River. Presently a salmon run exists in the river from Dexter (river mouth) to Watertown. They do not expect that any attempt will be made to expand this run up river by installing fish ladders because the ladders would also allow sea lamprey to go up the river.

EXHIBIT G

POWER PLANT DRAWINGS

Full size reproductions of drawings:

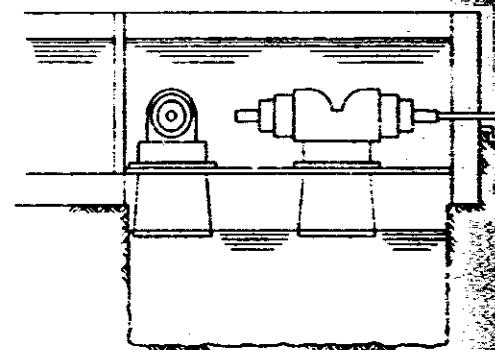
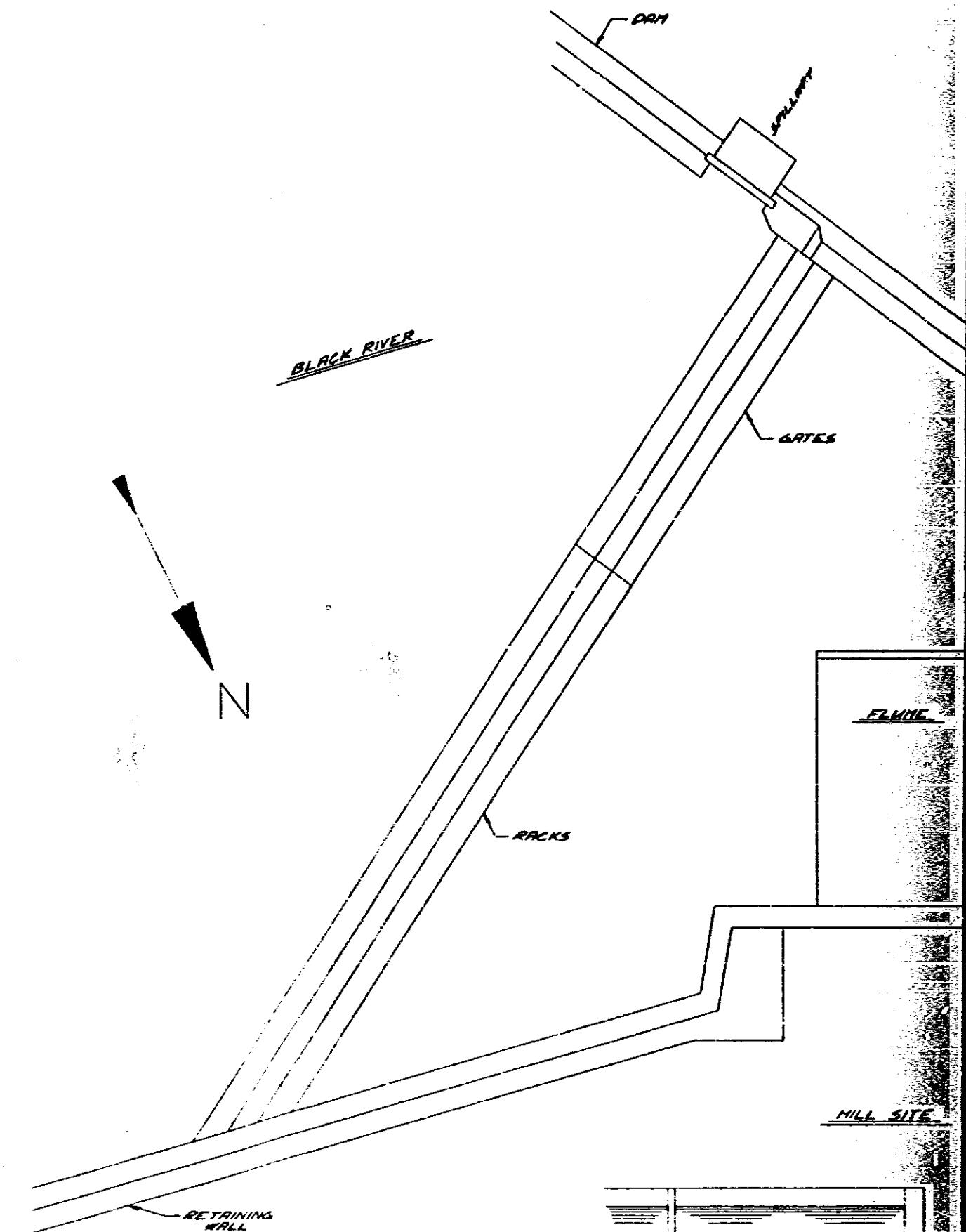
SK-1764-5 EXISTING POWER PLANT FACILITY

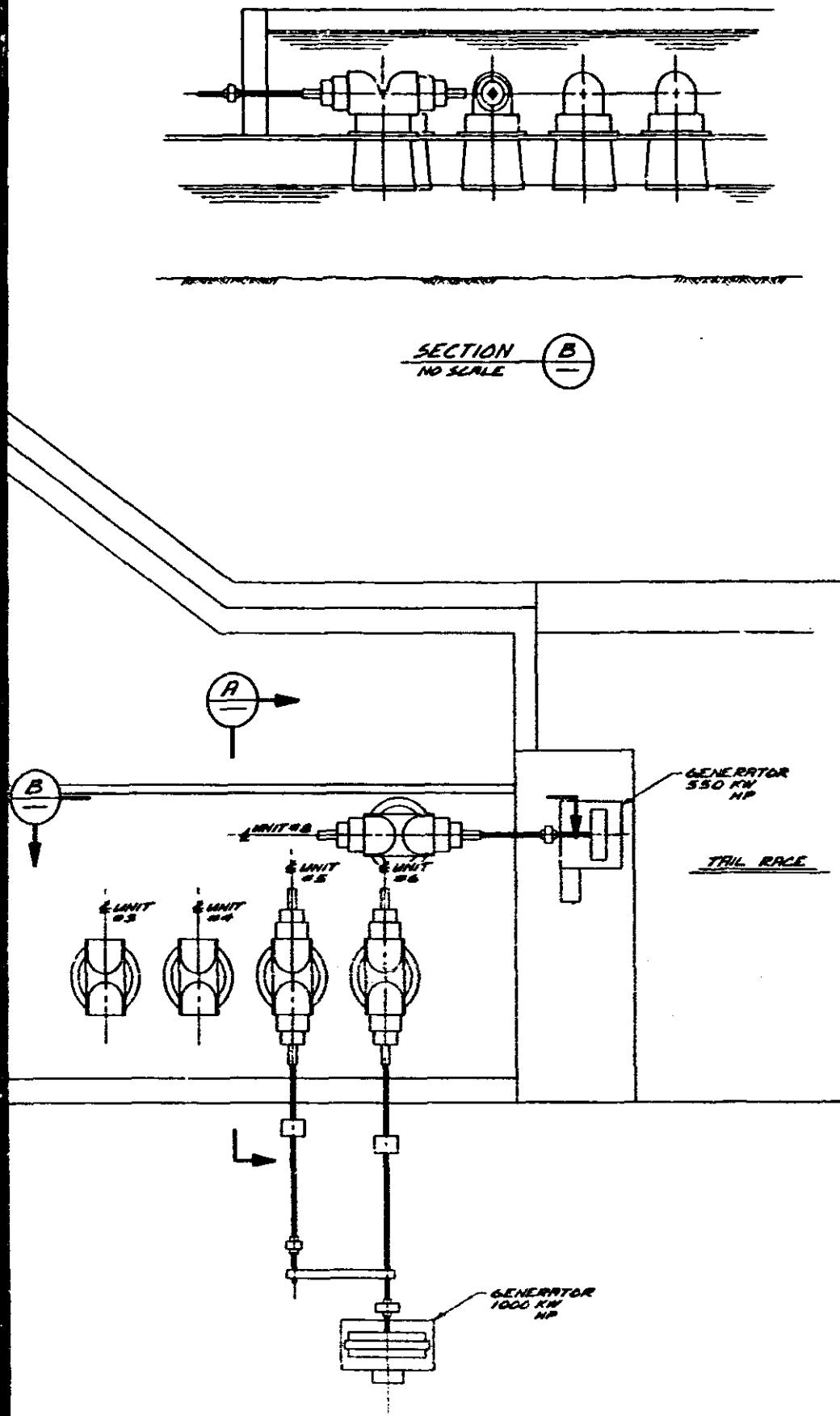
SK-1764-7 PROPOSED FACILITY

SK-1764-8 & 9 DAM - PLAN & ELEVATION SHTS. 1 & 2

SK-1764-10 CROSS SECTION OF MAIN DAM

are contained in the drawing packet which accompanies
this document.





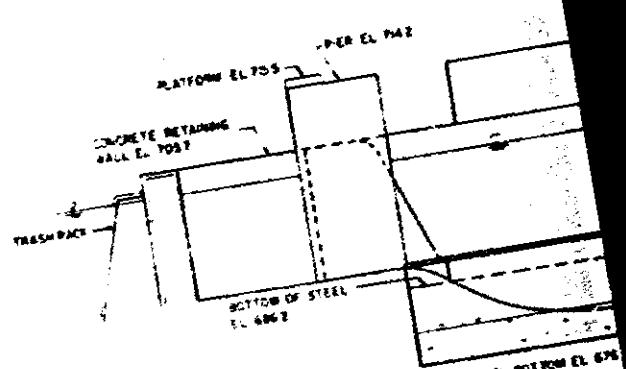
Drawing Title: EXISTING POWER PLANT FACILITY - PLAN & SECTIONS

Drawing No.:

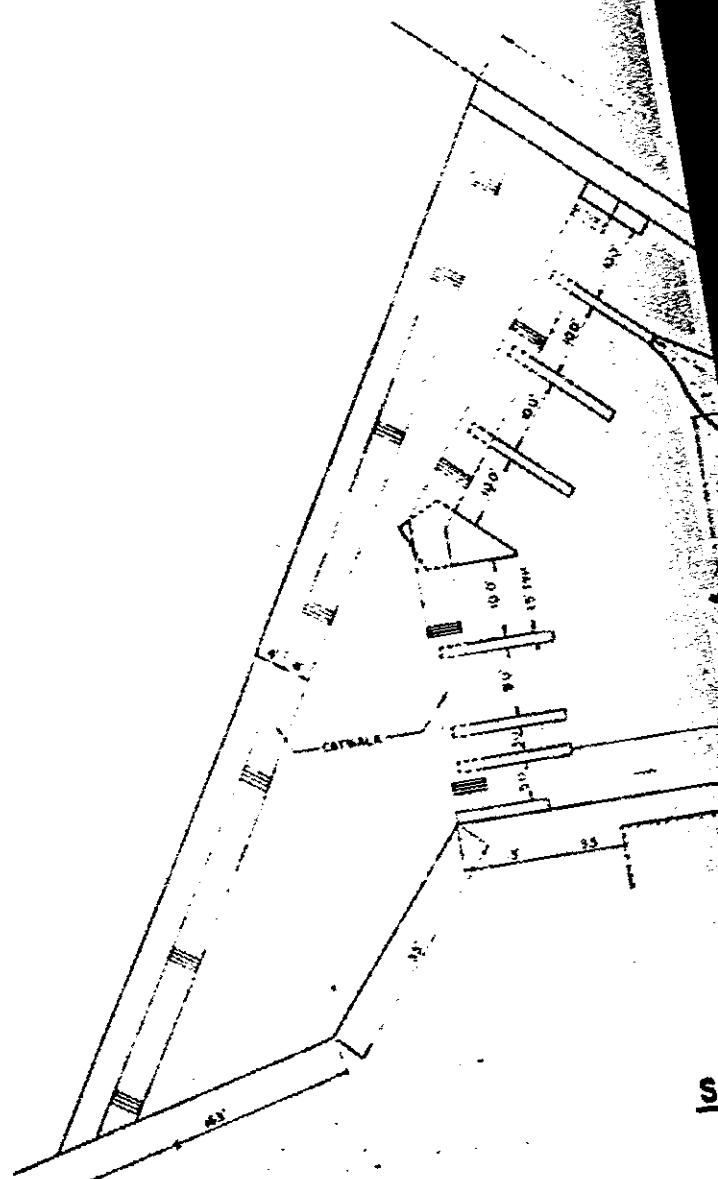
Revisions:

Rev.	Description	Sp.	Rev.

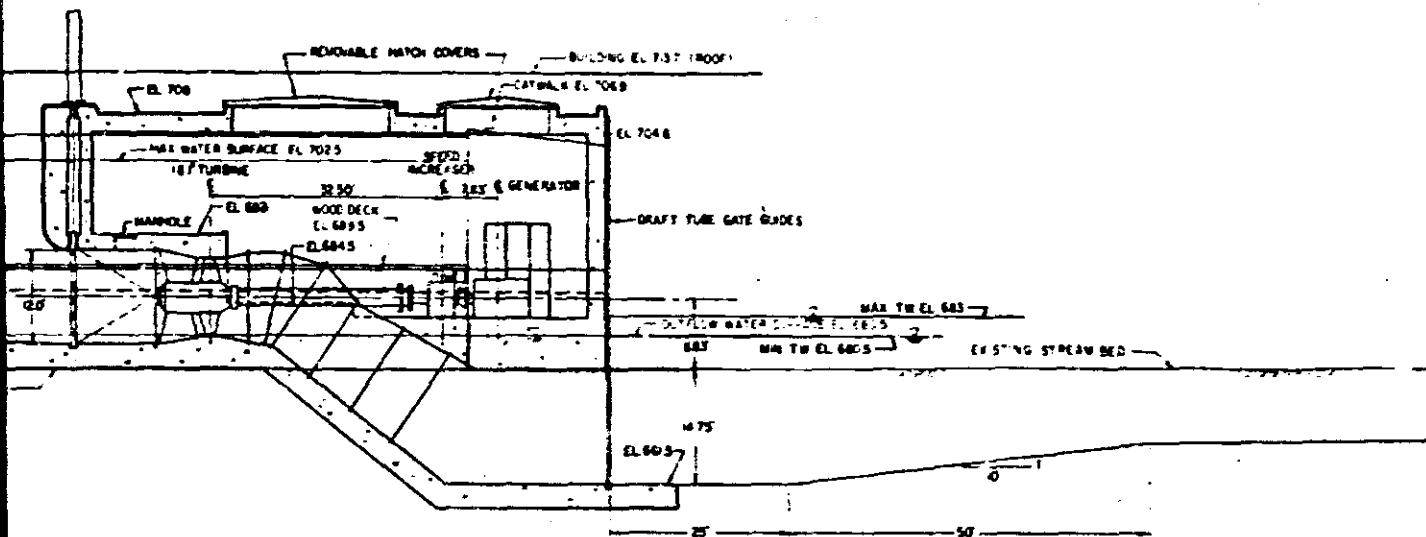
 **CrownZellerbach**
 Central Engineering Seattle
CARTHAGE, NY.
 Drawing No. 1764
 Job No. SK-1764-5
 HYDROELECTRIC
 GENERATION INCREASE
 Drawing Date 11-30-81
 Checked by [Signature] Approved by [Signature]
 Date 11-30-81



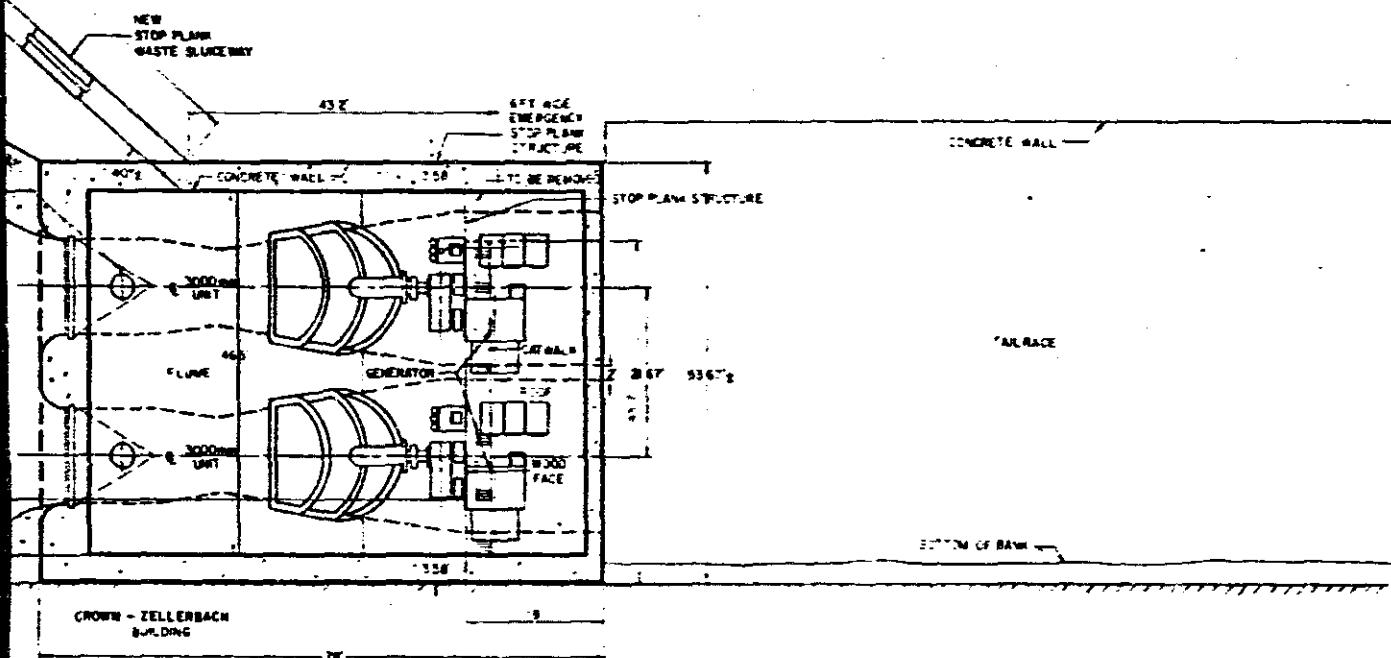
ELEV



S



OPTIONAL VIEW AT C UNIT



THIS FORM IS PART OF
THE APPLICATION FOR
EXEMPTION FROM LICENSING.

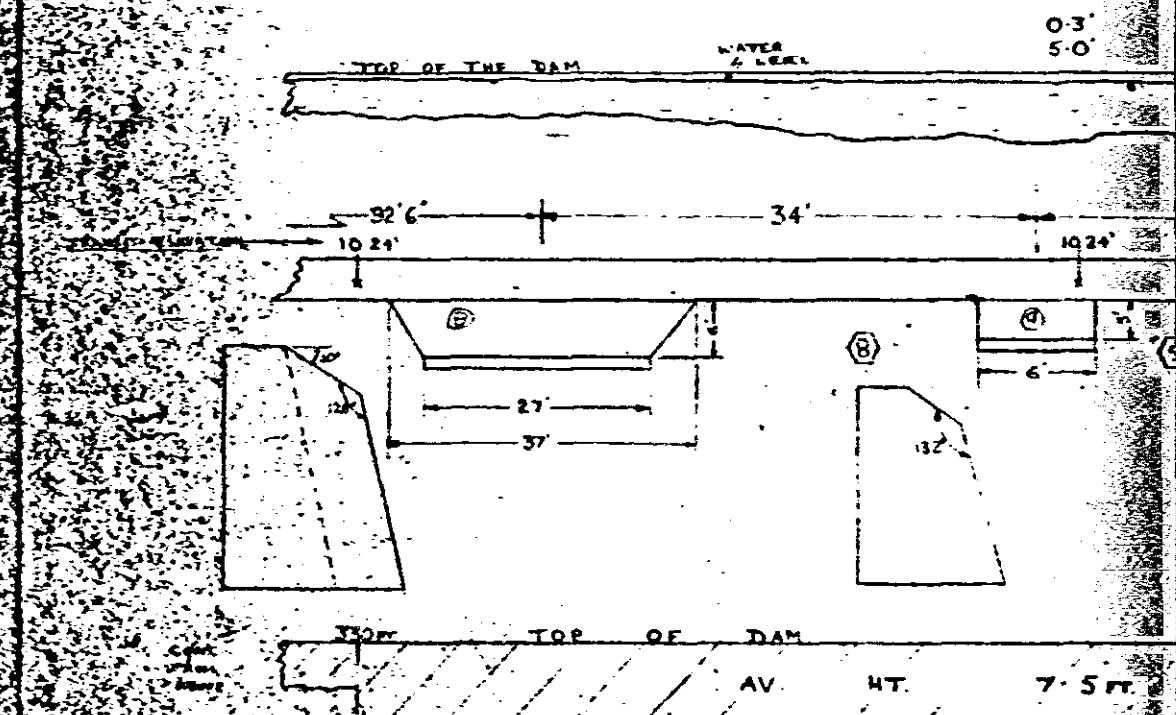
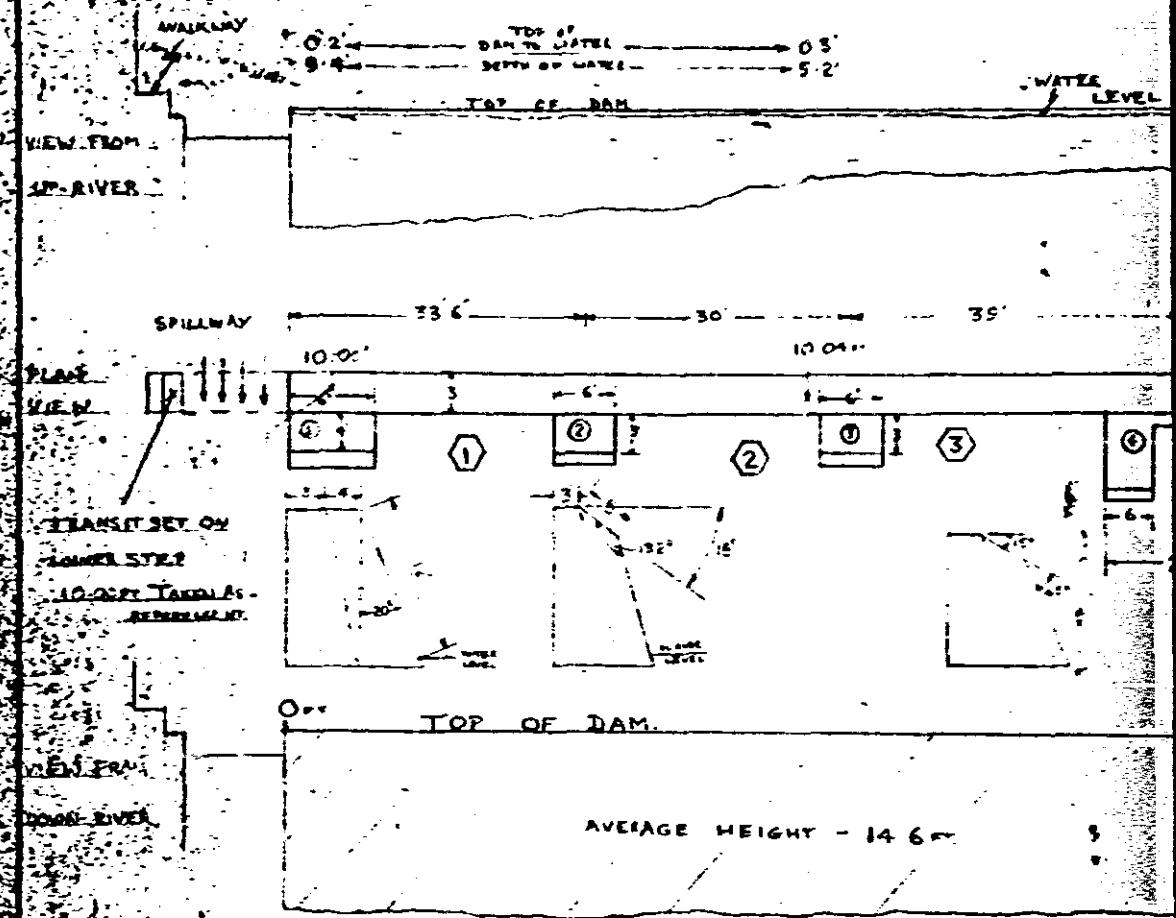
AL PLAN ABOVE TURBINE FLOOR

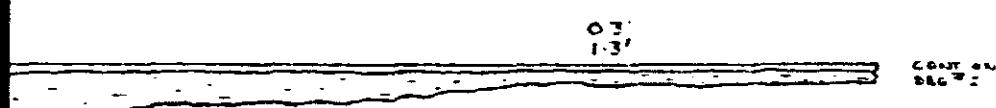
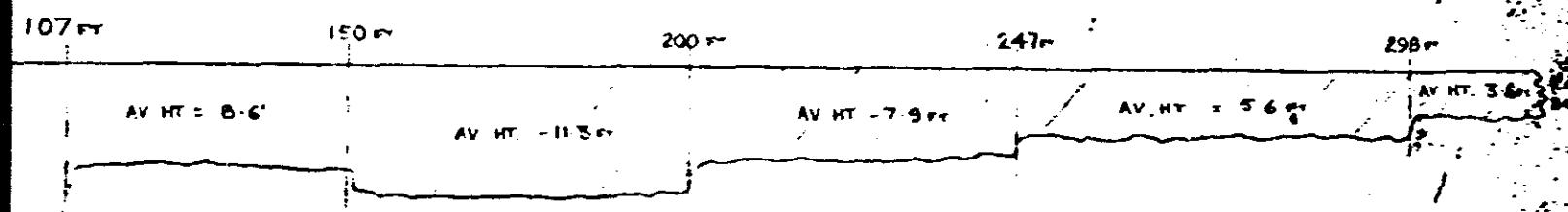
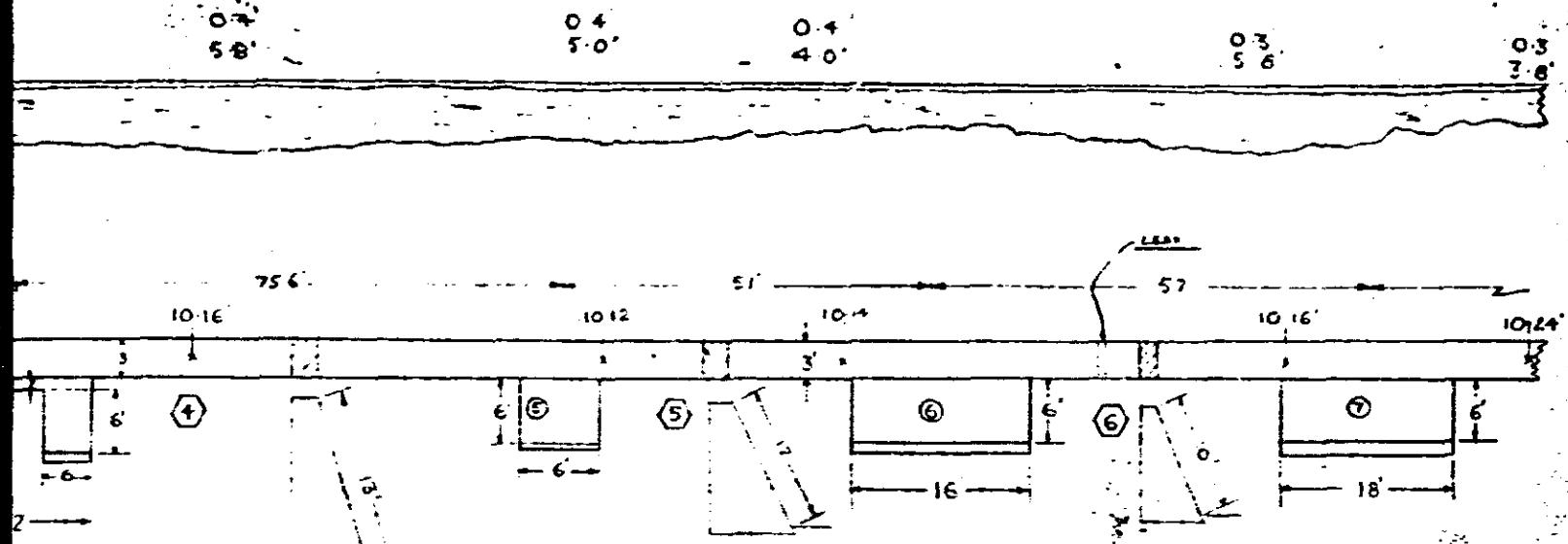
PROPOSED FACILITY

HYDROELECTRIC GENERATION
INCREASE - CEO FILE 1764
SX-1764-7

**CROWN - ZELLERBACH
HYDROPOWER FEASIBILITY STUDY
CARTHAGE, NEW YORK**

EL E V A T I O N
& P L A N
V I E W S O F
P O W E R H O U S E



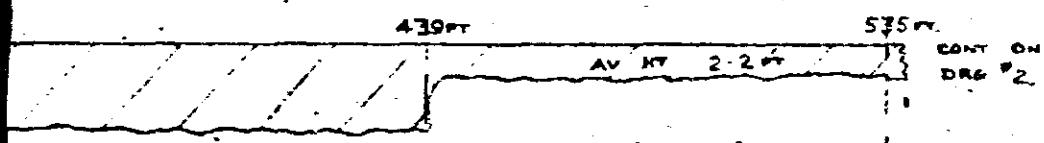


THIS DWG. IS PART OF
THE APPLICATION FOR
EXEMPTION FROM LICENSING

CONT'D ON
DRAWING #2

□ BAYS
○ ABUTMENTS

BAY NO'S 1, 2, 3, 5, AND 6 ARE BADLY
SPALLED. BAY #4 QUESTIONABLE.
BAY #6 SHOULD BE CURVED ON BOTH SIDES.
BAY #7 NEEDS FACING ON BACKSIDE.
BAY #6 HAS SMALL LEAK.



HYDROELECTRIC GENERATION
CRESCENT-CEO FILE 1764
SK-1764-B

ADDITIONS		
DATE	DESCRIPTION	BY WHOM
7/16/62	VIEWS OF DAM FROM UP-RIVER AND DOWN-RIVER ADDED	D. BELL-JONES

CROWN ZELLERBACH CORPORATION
CARTHAGE, N. Y.

DESCRIPTION

DAM

DR. BY	CHD. BY	RECORDED BY
D. HATHWAY		
SCALE	DATE	RECORDED BY
NONE	6/29/62	

TOP OF DAM
TO WATER → 1.1'
DEPTH OF WATER → 3.3'

17.
1.8

576' TRANSIT
ELEVATION → 10.04
ELEVATION AT REFERENCE
POINT BY STAFFING - 10 FT

LEAD LINE

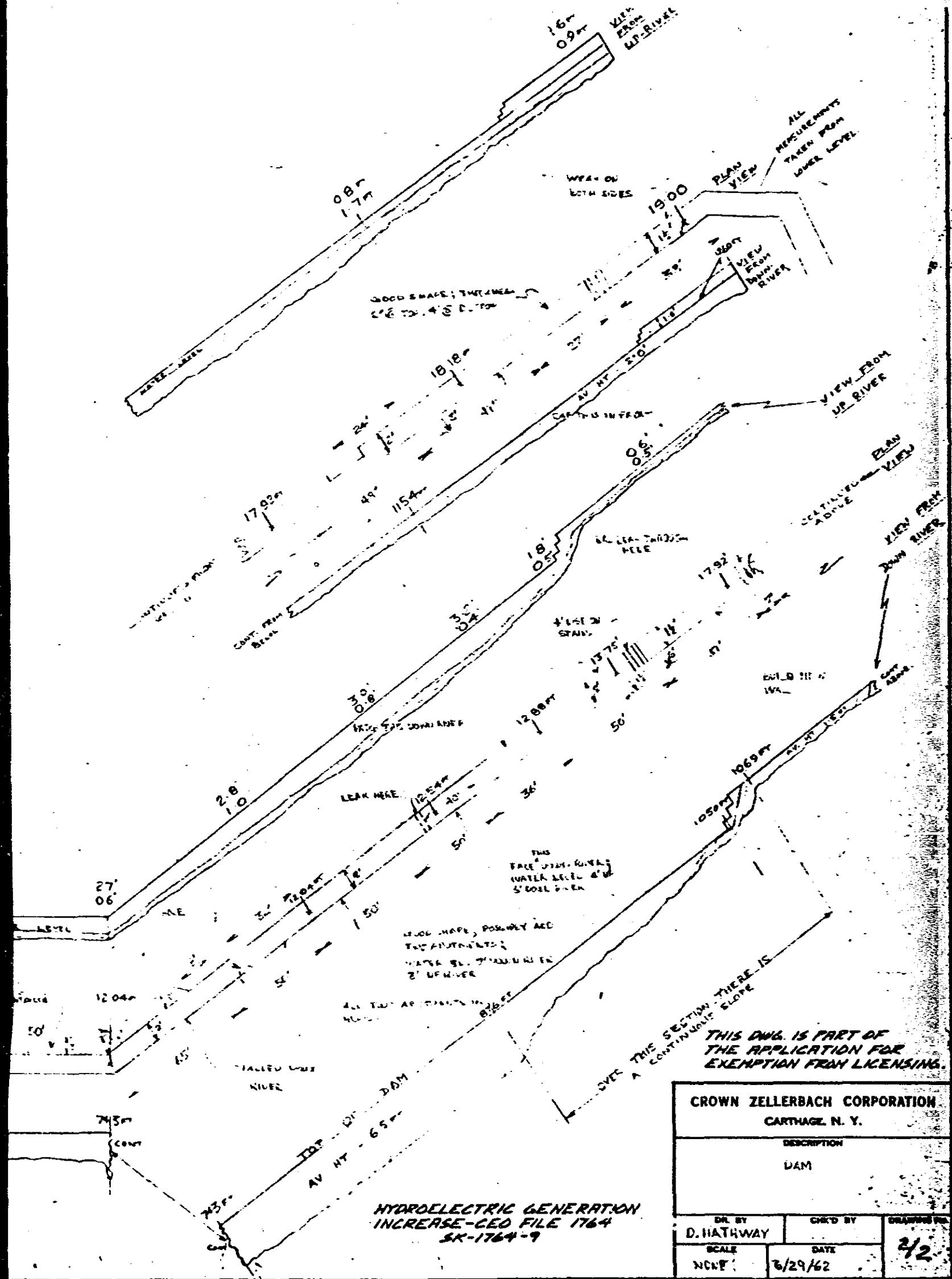
1120F

CONT
ECON
SEG #1

TOP OF DAM
AV. HT. 5.0'

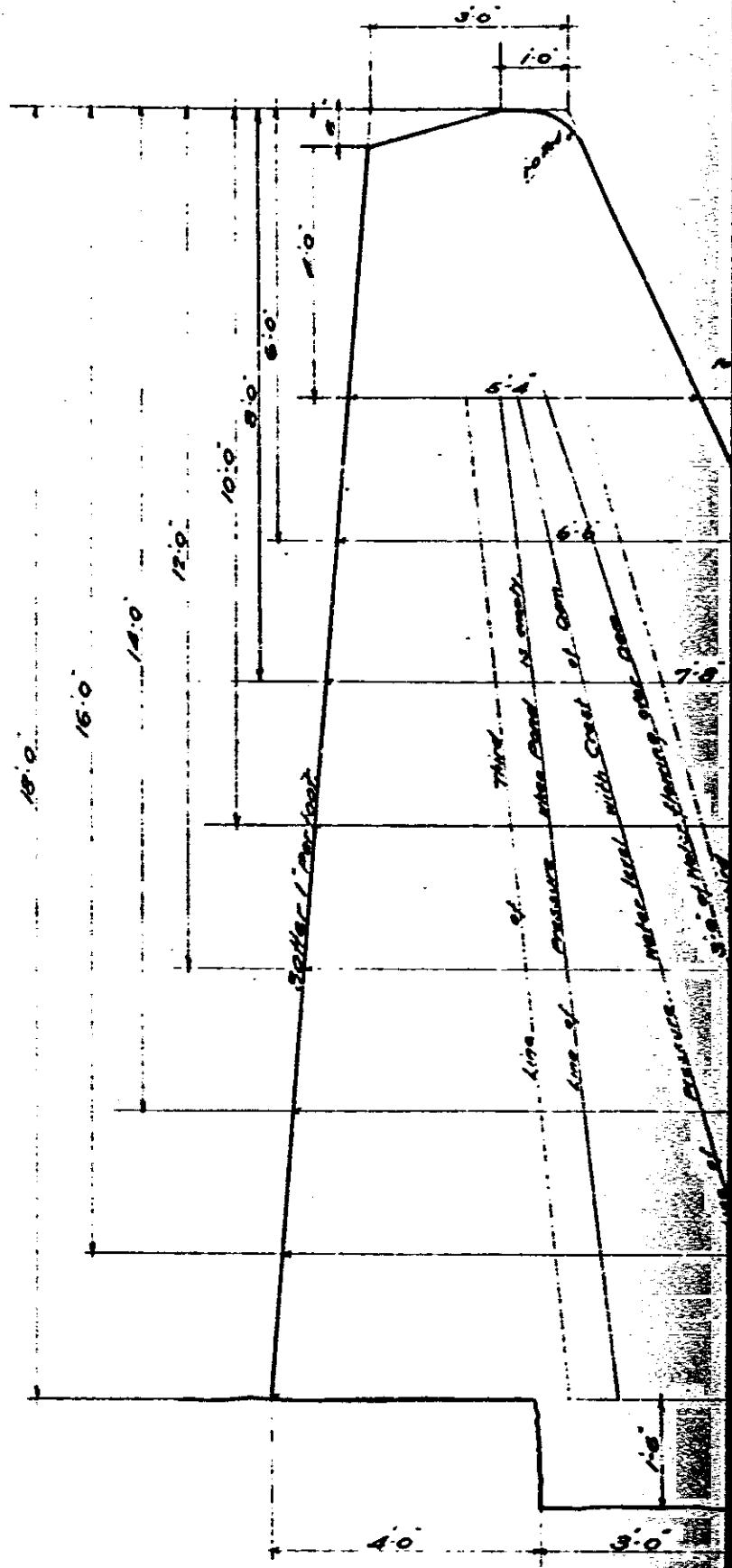
600F

AV. HT. 4.0 FT



HYDROELECTRIC GENERATION
INCREASE-CED FILE 1764
SK-1764-9

CROWN ZELLERBACH CORPORATION		
CARTHAGE, N. Y.		
DESCRIPTION		
DAM		
DRAWN BY	DRAFTER BY	DRAWING NO.
D. HATHWAY		
SCALE	DATE	2/2
NCNE	6/29/62	



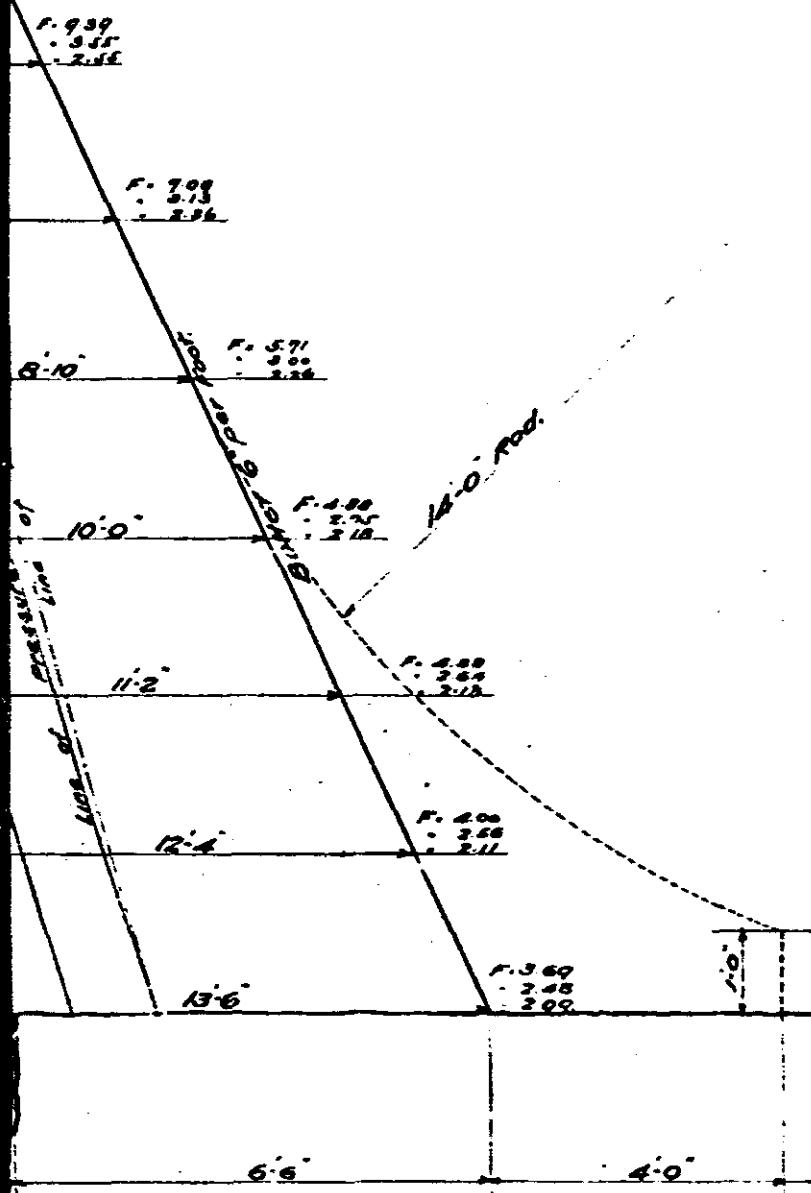
NOTE - Dam to be keyed into
this applies to the diff

Cross Section
West End Poi

Cartho
Scot

Contract #8000
Drawing #8005267767
7/6/68

for against overtopping Water level with Crest
3.0 water flowing over crest 16.10
5.0 16.66
3.00



rock as shown
different heights.

THIS DRAWING IS PART OF
THE APPLICATION FOR
EXEMPTION FROM LICENSING

of Main Dam.

per Company

go. N.Y.

5'-1'

HYDROELECTRIC GENERATION
INCREASE - CEO FILE 1764
SR-1764-10

Stebbins Engineering Co.
Industrial Engineers
39-40 Smith Bldg Waterford N.Y.

APPENDIX I

EVIDENCE OF REAL PROPERTY INTEREST

parties of the second part shall quietly enjoy the said premises; Second. That said Charles B. Walker and Edith E. Walker will forever warrant the title to said premises. In Witness Whereof, the parties of the first part have hereunto set their hands and seals the day and year first above written.

CHARLES B. WALKER (L.S.)
EDITH E. WALKER (L.S.)

\$1.00 I.R. Stps. Aff. & Cane.
State of New York County of Jefferson, 33. On this 5th day of November, Nineteen Hundred and Thirty-six (1936) before me, the subscriber, personally appeared Charles B. Walker and Edith E. Walker to me personally known and known to me to be the same persons described in and who executed the within instrument, and they acknowledged to me that they executed the same.
J. J. Butler Notary Public.

Recorded Nov. 17, 1936 at 10:02 A. M.

Fred Adorni
Clerk.

NATIONAL PAPER PRODUCTS COMPANY
-to-
CROWN ZELLERBACH CORPORATION

THIS INDENTURE, made this 31st day of July, 1936, by and between NATIONAL PAPER PRODUCTS COMPANY, a California corporation, hereinafter named "Grantor," and CROWN ZELLERBACH CORPORATION, a Nevada corporation, hereinafter named "Grantee,"

WITNESSETH: That the Grantor does hereby grant and release unto the Grantee, its successors and assigns forever, all the following real property in the County of Jefferson, State of New York, together with the appurtenances and/or the estate and rights of the Grantor, in said premises:

Parcel 1: ALL THAT PIECE OR PARCEL OF LAND situated in the VILLAGE OF CARTHAGE, and bounded and described as follows, to wit: Beginning at the intersection of the southerly margin of Furnace Street with the easterly margin of Water Street (now called Riverside Drive) and runs thence from said beginning point and along the said southerly margin of Furnace Street, north seventy-six (76) degrees east (original description) about one hundred eighty (180) feet to the most westerly corner of lands conveyed by George B. Phelps to the Utica & Black River Railroad Company; thence along the same north twenty and one-half (20-1/2) degrees east sixty and one-half (60-1/2) feet to an angle thereof, a point in the northerly margin of said Furnace Street; thence continuing along said westerly bound of said railroad lands, north one and one-quarter (1-1/4) degrees east (original description) and being parallel to and twenty (20) feet westerly from the westerly margin of old Mechanic Street, two hundred twelve (212) feet to the northwest corner of said railroad lands; thence along the northerly line thereof, south eighty-one and one-quarter (81-1/4) degrees east about twenty (20) feet to the intersection thereof with the westerly margin of old Mechanic Street; thence along the same north one and one-quarter (1-1/4) degrees east about ninety-four (94) feet to the northeast corner of land conveyed by Ryther & Pringle Company to the Carthage Tissue Paper Mills; thence along the north line thereof, to and along the southerly line of lands conveyed by the said Tissue Paper Mills to said Ryther & Pringle Company, north eighty-six (86) degrees forty-five (45) minutes west one hundred twenty-four and four-tenths (124.4) feet to a point on the bank of Black River and being in the westerly line of lands conveyed by the Antwerp Company to James H. Morrow by deed dated September 1, 1866 and known as the Stewart & Bailey Tannery Lot; thence along the westerly line thereof, southerly about sixty (60) feet to the southwest corner thereof, being also a corner of lands conveyed to the Carthage Iron Company; thence in a straight line, westerly about one hundred eighteen (118) feet to the northeast corner of lands conveyed to Joseph Pratt, Dec. 13, 1871; thence along the northerly line thereof westerly to the northeast corner of lands conveyed to said Pratt by deed dated August 9, 1872; thence along the northerly line thereof, westerly forty-nine (49) feet to the northwest corner thereof, a point in range with the easterly side of the Guyot Grist Mill (formerly); thence at right angles and along the range of said easterly side of said mill, southerly sixty-six (66) feet to the northeast corner of said Grist Mill or to the waters edge; thence along the same, westerly, northerly and westerly to a point in extension of the easterly face of the Pump House belonging to the Village of Carthage; thence along said extended line southerly about eighty-eight (88) feet to the northeast corner of said pump house; thence along the front or east face of said pump house, south four and one-quarter (4-1/4) degrees east twenty-seven and one-tenth (27.1) feet to the southeast corner of said pump house; thence along the northerly line of a strip of land twenty (20) feet in width referred to in a deed from Joseph V. Guyot to the Village of Carthage, dated April 5, 1893, north eighty-six (86) degrees fifteen (15) minutes east (in continuation of the south face of said pump house) thirty-six and five-tenths (36.5) feet to a cross cut on the top of an iron pipe, and angle; thence continuing along said twenty (20) foot strip, south fifty-three (53) degrees twenty-seven (27) minutes east thirty-five and two-tenths (35.2) feet to the easterly face of the side or wing dam; thence along the same, southerly to the north face of the state dam and thence along the same easterly to the abutment at the end of the said dam and thence easterly to the place of beginning.

Together with all water rights connected with the above described parcel or appurtenance thereto.

Excepting from the above described parcel a certain piece or parcel of land situate in the Village of Carthage, and being part of the land conveyed to Joseph Pratt by George B. Phelps, bounded and described as follows: Beginning at a point on the face side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence along the said extended line north seventy-six (76) degrees, (forty-five (45) feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the westerly margin of

Water Street; thence along said margin extended ten (10) feet thence southwesterly thirty (30) feet about to a point (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning.

The accompanying map marked "A," a copy of which is on file in the Jefferson County Clerk's office, shows the location of parcel conveyed above, such parcel being within the red lines on such map.

Parcel 2: THAT CERTAIN TRACT OR PARCEL OF LAND situate in the VILLAGE OF CARTHAGE, and bounded and described as follows, viz: Southerly by lot owned by Francis S. Loomis, easterly by the west margin of Water Street, westerly by Black River and northerly by a line drawn from Water Street to Black River parallel to the westerly extension of the southerly line of one-half (1/2) acre conveyed by Mary F. Stewart to Shortt Manufacturing Company by deed dated January 3, 1876, said line to be drawn four (4) rods northerly from said extended line.

The accompanying map marked "B," a copy of which is on file in the Jefferson County Clerk's office, shows the location of the last parcel herein conveyed, such parcel being within the red lines on such map.

Also, ALL OTHER REAL ESTATE situate within the said County of Jefferson, New York, or interest in real estate, or any rights, privileges, or easements in connection therewith formerly owned by or belonging to the Carthage Tissue Paper Mills and transferred to Grantor herein.

Parcel 3: ALL THAT TRACT OR PARCEL OF LAND situated in the VILLAGE OF CARTHAGE, and bounded southerly by the north margin of Spring Street; easterly by a line parallel with Water Street and two hundred and fifteen (215) feet from its east margin; northerly by the line between village lots numbers thirty-four (34) and thirty-five (35) and the same extended easterly, being one hundred and seven (107) feet from the north margin of the above named Spring Street and westerly by the aforesaid east margin of Water Street, containing one-half (1/2) acre of land, to the same more or less, excepting therefrom so much thereof as has heretofore been conveyed by Herman H. Frink and Sophia S., his wife, to the Utica and Black River Railroad Company; for a particular description of said part so excepted, reference may be had to the Deed of conveyance to said Railroad Company.

Parcel 4: ALL THAT CERTAIN PIECE OR PARCEL OF LAND situate in the VILLAGE OF CARTHAGE, and bounded as follows, viz: Beginning at a point in the north line of a water lot known as the old Nail Factory lot now owned by V. LeRay de Chaumont, a point on west side of the dam or bulkhead that forms the pond for B. Guyot's mill and the nail and axe factories and runs thence along the north line of said factory lot westwardly to the northwest corner therof; thence northwardly to the southwest corner of a water lot conveyed to Nathan Starks on the 17th April, 1833; thence along the south line thereof eastward to the southeast corner thereof, thence easterly to a point in the west side of said bulkhead or dam and south side of the flume leading from said dam or bulkhead to the axe factory, which factory is on said lot conveyed to said Starks, thence along the west side of said dam or bulkhead southwardly to the place of beginning, containing nine hundredths (9/100) of an acre to the same more or less, together with also the right and privilege to the said grantee, its successors and assigns of using in a prudent and saving manner a sufficient quantity of water of the Black River at and upon the said premises aforesaid particularly described and lying and being between the lot and water privileges conveyed by Vincent Le Ray de Chaumont to Nathan Starks now owned by John Parr (1853) and the Nail Factory Lot for the purpose of running or carrying a common double saw mill, having two gates, two flutter wheels, two spur wheels and one bulk wheel or a sufficient quantity of water of the Black River to run or carry other machinery on the above described premises not to exceed in quantity the amount required for the saw mill above described. Said water rights and privileges having been measured and determined by a judgment of the Supreme Court of the State of New York in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, et al., were defendants, and which said judgment was entered in the office of the Clerk of Jefferson County, New York, on the 3rd day of February, 1906, and were in said judgment determined and defined as follows, viz: "To the use of fourteen hundred (1400) inches of water from said pond" and which said use of said water was by said judgment made subject and subordinate to the rights of the several parties therein mentioned and defined.

Now it being the intention convey by this instrument all of said water rights and privileges above stated, subject, however, to all restrictions, limitations and prior rights as stated or set forth either in a certain deed or perpetual lease bearing date the 23rd day of December, 1853, executed by Pierre Joseph DeCaters by his attorney, et al., to Minor Guyot, and recorded in the office of the Clerk of Jefferson County, New York, on the 15th day of May, 1871, in Liber 108 of Deeds at page 146, and as stated in said judgment hereinbefore referred to. Also all rights or title the grantors may have in the bulkhead and wing dam abutting said property.

Also ALL THAT OTHER TRACT OR PARCEL OF LAND and right of way reserved and excepted to the grantors in a certain deed bearing date the 27th day of April, 1904, executed by Joseph V. Guyot and Mary, his wife, to Wooster G. Bell, William D. Bell and Arthur R. Bell, and which deed was recorded in the office of the Clerk of Jefferson County, New York, on the 9th day of May, 1904, in Liber 310 of Deeds at page -- and therein described as follows, viz: Beginning at the waters edge which point marks the northeasterly corner of a lot conveyed to Nathan Starks, thence along the easterly side of said Starks lot to a point in the northerly line of a lot conveyed and now owned by the Village of Carthage, called the Pump lot, thence easterly along the northerly line of said Pump lot to the northeast corner of said Pump House Lot, thence northerly on a line parallel with the first line above described to the waters edge, thence westerly along the waters edge to the place of beginning.

Also a right of way one (1) rod wide along the westerly line of the lands hereby sold from the northerly line of the Pump House Lot prolonged to the waters edge northerly, to be used in common by both parties hereto (said deed last above referred to).

The above described real estate is a portion of certain lots and tracts of land devised by the last will and testament of Joseph V. Guyot to Mary Guyot, his wife, during the term of her natural life and at her death to the parties of the first part, Belle Oberly, Harriet A. Oberly and Minnie and Jennie Oberly, the said Minnie Oberly and Jennie Oberly having died without issue and the said Belle Oberly and Harriet A. Oberly being the sole heirs at law of the said Minnie Oberly and Jennie Oberly, deceased.

Parcel 5: ALL THAT TRACT OR PARCEL OF LAND, situate, lying and being within the boundaries of that portion of Water Street in the VILLAGE OF CARTHAGE, beginning at the intersection of the northerly margin -- Spring Street with the easterly margin of Water Street and running thence along said margin northerly four hundred seventy and four-tenths (470.4) feet to the southerly margin of Furnace Street; thence along said margin of Furnace Street extended westerly forty-nine and five-tenths (49.5) feet to a point in the westerly margin of Water Street; thence along said westerly margin southerly four hundred seventy (470) feet to a point in said margin where it intersects with the northerly margin of Spring Street extended; thence easterly along the northerly margin of Spring Street extended forty-nine and one-half (49-1/2) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Water Street between the northerly margin of Spring Street and the southerly margin of Furnace Street.

Also ALL THAT OTHER TRACT OR PARCEL OF LAND, situate, lying and being within the boundaries of that part of Furnace Street in the VILLAGE OF CARTHAGE, described as follows: Beginning at a point in the southerly margin of Furnace Street, at the intersection of said margin with the westerly margin of Water Street and running thence along said margin forty-nine and five-tenths (49.5) feet to the intersection of the easterly margin of Water Street with the said margin; thence along said southerly margin one hundred seventy-seven and fifty-five one-hundredths (177.55) feet to the westerly limits of the right of way of the New York Central and Hudson River Railroad; thence northerly along said railroad right of way forty-nine and one-half (49-1/2) feet to the northerly margin of Furnace Street; thence along said northerly margin westerly two hundred twenty-seven (227) feet to the intersection of said margin with the westerly margin of Water Street extended; thence southerly along such extended margin forty-nine and five-tenths (49.5) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Furnace Street between the westerly margin of Water Street extended and the right of way of the New York Central and Hudson River Railroad.

Parcel 6: ALL THAT CERTAIN TRACT OR PARCEL OF LAND situated in the VILLAGES OF CARTHAGE AND WEST CARTHAGE, beginning at a point in the center of the River Road or West End Avenue (formerly called Forge Street), said point being in the northeasterly extension of the northwest line of land conveyed by said Franklin E. Robinson to A. Wendler, and runs thence along the center of said road or street north forty-nine (49) degrees west thirteen hundred forty-nine and five-tenths (1349.5) feet to the easterly margin of a private road forty (40) feet wide; thence at right angles to said center south thirty-eight (38) degrees twenty (20) minutes west six hundred forty-six (646) feet to low water mark on the northerly bank of Black River; thence down along said bank at low water mark northeasterly to the south line of five and fifteen-hundredths (5.15) acres conveyed by the Antwerp Co. to Orlin Holcomb August 13, 1865; thence along the same westerly forty-five (45) feet into the channel of said Black River; thence down along said channel to a point forty-five (45) feet from a post on the shore, the corner of thirty-one and thirty-three-hundredths (31.33) acres formerly conveyed to F. S. Stewart; thence north thirty-four and one-half (34-1/2) degrees east forty-five (45) feet to said post on the shore; thence down said shore at low water mark to a point in range with the lower end of DeCater Island; thence across said lower end and to the center of the river; thence up along said center to the lower end of Bulison Island; thence up along the westerly shore of Bulison Island to the southerly point of said Island; thence southerly to the most northerly point of Mink Island; thence easterly and southerly along the shore of said Island to the upper and most southerly point of said Island; thence southwesterly to the nearest point of the Champion shore of Black River; thence easterly and southerly along said shore to the northeasterly corner of the water lots mentioned in a deed made by Henry Spicer and others to Franklin E. Robinson, recorded in the office of the Clerk of the County of Jefferson on the 6th day of August, 1895, in Liber 280 of Deeds, at page 230; thence northeasterly to the north end of Champion Island to the line of land conveyed to William H. Coburn; thence easterly and southerly along the line of the said Coburn to a point on the state dam at the southeast corner of said lot conveyed to said William H. Coburn; thence easterly to the center of Black River on said dam; thence down the center of the said river to a point in range with the west line of thirty-five one-hundredths (35/100) acre conveyed by George B. Phelps to Ruben Wilmott and others April 10, 1876; thence northerly to the southwest corner of said thirty-five one-hundredths (35/100) acre to a point at low water mark on the bank of said river; thence down along said bank at low water mark to the most westerly corner of lands sold to A. Wendler; thence along the northeast line of said lands about four hundred seventeen (417) feet to the place of beginning.

This conveyance includes all water powers and rights to use water connected with the lands herein conveyed which were conveyed to Franklin E. Robinson and by him to the West End Pulp & Casket Company by deed dated March 31, 1897, and recorded in the Jefferson County Clerk's Office, April 2, 1897, in Book 285 of Deeds, at page 459, and including all rights which were conveyed by Allen E. Kilby and wife to said West End Pulp & Casket Company by deed dated February 17, 1899, and recorded in the office of the Clerk of Jefferson County February 23, 1899, at nine o'clock A. M., in Book No. 291 of Deeds, at page 262.

Excepting and reserving such portions of Wind Island and Tannery Island, as are included in the above description; it being understood that no part of either of the said islands was owned by the West End Paper Company.

Also, excepting and reserving the rights conveyed to the Carthage Machine Company to extend their flume down to the westerly end of their premises, as conveyed by Franklin E. Robinson and wife by deed dated December 31, 1901, and recorded in the Jefferson County Clerk's Office January 3, 1903, in Liber 306 of Deeds, at page 24, in which it is described as follows: "Also the right to continue the flume now on said Pulp Shop Lot down at low water mark as far down as the land herein conveyed extends and to repair the same from time to time."

Parcel 7: ALL THAT CERTAIN TRACT OR PARCEL OF LAND situated in the VILLAGES OF CARTHAGE AND WEST CARTHAGE, beginning at a point in the northwest line of the lands conveyed to the West End Paper Company by the West End Pulp & Casket Company, by deed dated May 1, 1902, a point in the easterly margin of a private road, said point of beginning being four hundred twenty-six (226) feet along said northwest line from the center of West End Avenue; thence from said beginning point north fifty (50) degrees west four hundred four (404) feet to a point; thence turning to the right thirty-two (32) degrees fifty-seven (57) minutes north, seventeen (17) degrees three (3) minutes

west, four hundred (44) feet to a point in the line between the lands occupied by Franklin E. Robinson (formerly) and lands occupied by John Backus; thence along said line southeasterly thirty-eight (38) feet to the bank of the Black River (the water mark); thence up along said bank southeasterly to a corner of said lands; thence to said West End Paper Company by said West End Pulp & Casket Company; thence along the said northwest line thereof north forty (40) degrees east two hundred twenty (220) feet to the place of beginning.

Also, a right of way over the private road above mentioned from West End Avenue to the lands above described, said right or private road being forty (40) feet wide and extends along said northwest line from West End Avenue southwesterly to lands above described.

Parcel 6: ALL THAT CERTAIN TRACT OR PARCEL OF LAND situated in the VILLAGES OF CARTHAGE AND WEST CARTHAGE, beginning at a point of intersection of the southwest margin of West End Avenue and the northwest margin of a private road called Park Place, and runs thence along said margin of West End Avenue north fifty (50) degrees west six hundred seventy-four (674) feet to the east corner of the Catherine Leach Lot now (1920) owned by John or Amelia Backus; thence along the southeast line of the same southeasterly about one hundred eighty (180) feet to the north corner of land conveyed by Franklin E. Robinson estate to the West End Paper Company on or about February, 1919; thence along the northeast line thereof south seventoone (17) degrees ten (10) minutes east about four hundred (400) feet to a point an angle; thence south fifty (50) degrees east three hundred sixty-four (364) feet to a point in said northwest margin of said private road called Park Place, and thence along said margin north forty (40) degrees east four hundred one and twenty-five-hundredths (401.25) feet to the place of beginning, containing five (5) acres and forty-six one-hundredths (46/100) of an acre, be the same more or less.

Excepting and reserving, from the above parcel 6, all that tract or parcel of land, situate in the Village of Carthage, described as follows: Being a house and lot on the southwest corner of West End Avenue and Park Place (private road leading to the residence of Dr. Robinson). Bounded as follows: Beginning at the corner of West End Avenue and Park Place, running westerly along West End Avenue twenty-five (25) feet; thence southerly at right angle with West End Avenue one hundred (100) feet; thence easterly parallel with West End Avenue twenty-five (25) feet; thence northerly along the easterly line of Park Place one hundred (100) feet to the place of beginning.

Being the same premises described in a deed from Franklin E. Robinson and wife to Edward P. Powers, dated September 2, 1907, and recorded in Jefferson County Clerk's office October 21, 1907, in Liber 325 of Deeds at page 26.

Also excepting and reserving from the above parcel 6, all that tract or parcel of land, situate in the Village of Carthage, bounded and described as follows, viz: beginning at a point of West End Avenue twenty-five (25) feet westerly from the northwest corner of a private road leading from West End Avenue to Dr. Robinson's house called Park Place; thence westerly twenty-five (25) feet; thence southerly at right angles with West End Avenue one hundred (100) feet; thence easterly parallel with West End Avenue twenty-five (25) feet to the southwest corner of a lot previously deeded to Edward Powers; thence northerly along said lot one hundred (100) feet to West End Avenue at the place of beginning.

Being the same premises described in a deed from Franklin E. Robinson and wife to Jessie A. Powers, dated December 2, 1910, and recorded in Jefferson County Clerk's Office December 7, 1910, in Liber 333 of Deeds, at page 309.

Also excepting and reserving from the above parcel 6 all that tract or parcel of land, situate in the Village of Carthage, County of Jefferson and State of New York, and being bounded and described as follows, viz: beginning in the northwesterly margin of the street called Park Place at a point two hundred (200) feet southeasterly along said margin from the intersection thereof with the southwesterly margin of West End Avenue, and runs thence from said point of beginning north forty-nine and one-half (49-1/2) degrees west at right angles to the margin of Park Place one hundred (100) feet to an X on a rock; thence south forty and one-half (40-1/2) degrees west parallel to said street margin seventy-two (72) feet to a stake; thence south thirty-eight (38) degrees east parallel to the northeast end of the barn and ten (10) feet northeasterly therefrom forty (40) feet and five-tenths (5/10) of a foot to a stake; thence south forty and one-half (40-1/2) degrees west parallel to said street margin eleven (11) feet and fifteen one-hundredths (15/100) of a foot to a stake; thence south forty-nine and one-half (49-1/2) degrees east sixty (60) feet and two-tenths (2/10) of a foot to said margin of Park Place and thence along the same north forty (40) degrees thirty (30) minutes east ninety-one (91) feet to the place of beginning. Containing one hundred ninety-five one-thousandths (995/1000) of an acre, be the same more or less.

Being the same premises described in a deed from Gertrude Robinson and Katherine Robinson, as Executrix, etc., to William H. Boyle, dated September 30, 1922, and recorded in Jefferson County Clerk's Office January 26, 1923, in Liber 370 of Deeds, at page 175.

Parcel 8: ALL THAT CERTAIN TRACT OR PARCEL OF LAND situated in the VILLAGES OF CARTHAGE AND WEST CARTHAGE, beginning at a hub in the west margin of the River Road one hundred twenty-eight (128) feet along said margin from the south line of the land as conveyed by John Garrity, and running thence along said margin north twenty-nine (29) degrees west thirty-eight and one-half (38-1/2) feet to a hub an angle of the road; thence north thirteen (13) degrees west thirty-one and one-half (31-1/2) feet to a hub; thence south eighty-three (83) degrees west one hundred ten (110) feet to a cedar post four (4) feet northerly from an elm tree marked; thence southerly along the bank of the river sixty-six (66) feet to a cedar post and stones, and thence north eighty-five (85) degrees east one hundred forty (140) feet to the place of beginning. Containing twenty one-hundredths (20/100) of an acre more or less, being Lot three (3) of the subdivision of the said land as made by J. P. Brownell, in 1892.

Parcel 10: ALL THAT CERTAIN TRACT OR PARCEL OF LAND situated in the VILLAGES OF CARTHAGE AND WEST CARTHAGE, beginning at the south corner of the said sixteen one-hundredths (16/100) of an acre, a point in the northwest margin of High Street and runs thence along said margin of High Street northeasterly forty-nine (49) feet to a point in said margin one hundred twenty and two-tenths (120.2) feet from the west margin of Front Street or Champion Road; thence north forty-one (41) degrees west one hundred thirty-two and two-tenths (132.2) feet to an iron stake; thence south sixty-seven (67) degrees west fifty-six and eight-tenths (56.8) feet to the north corner of the

"Woolson" lot; thence along the line between said Woolson lot and the lands so conveyed to William S. Farrar, south forty-three and one-half (43-1/2) degrees east one hundred fifty-one and five-tenths (151.5) feet to the place beginning. Containing one hundred sixty-six one-thousandths (166/1000) of an acre, be same more or less.

Being same premises conveyed West End Paper Company by deed of William S. Farrar and wife, recorded in Jefferson County, New York Clerk's Office, Liber 363, page 575.

Together with the appurtenances and all the state and rights of the party of the first part in and to said premises.

Parcel 11: ALL THAT CERTAIN PIECE OR PARCEL OF LAND situate in the VILLAGE OF CARTHAGE, Town of Elba, beginning on the dam opposite the old Nail Factory as and where it stood and was located before its destruction by floods, fourteen (14) feet northerly from the point where a line drawn along the outside of the north wall of said old Nail Factory strikes said dam; thence to a point in the range of the west wall of said old factory, ten (10) feet nine (9) inches from the point which was the northwest corner of said old factory; thence westerly in the same line sixteen (16) feet four (4) inches; thence parallel with the line of the former old west wall of said factory to a point where a line drawn parallel to the line of the former south wall of said factory will pass sixteen (16) feet from it; thence along said line easterly till it strikes a point in the line of the old dam as it stood before the erection of the present state dam; thence continuing easterly along the line of said old dam to the side dam and thence northerly along the same to the place of beginning.

being the same lot of land and not otherwise different which was sold by perpetual lease by V. & J. LeRay de Chaumont to Oliver Child by an instrument of conveyance dated 5th January, 1833, to which reference may be made for further particulars.

And this conveyance of the above described real estate is made subject to any changes or alterations in the boundary lines of the said above described tract or parcel of land which may have been made, if any, by a certain instrument or agreement bearing date the 12th day of November, 1839, which said instrument or agreement was recorded in the Office of the Clerk of Jefferson County, New York, on the 8th day of April, 1890, in Liber 260 at page 108 and which said agreement or instrument establishes the division line between the above described tract of land and a certain water lot adjoining said above described tract of land on the southerly side thereof and conveyed to Elmer Bruce Stevens by the Directors of the Company of American Acres on the 21st day of September, 1869, and any part or parcel of the above described tract or parcel of real estate which may have been segregated from said above described tract or parcel of real estate by said agreement hereinbefore mentioned is excepted and expressly reserved from the operation of this deed;

The grantor also grants and releases to grantee, its successors or assigns, the right and privilege of using a sufficient quantity of water to carry on a pair of rollers to roll iron and fifteen (15) machines to make nails as adjudged, defined and determined by a judgment of the Supreme Court of the State of New York in an action wherein the Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, et al., were defendants and which said judgment was entered in the office of the Clerk of Jefferson County, New York, on the 3d day of February, 1906, to which said judgment reference is hereby made for a particular description and limitation of said water rights and privileges hereby conveyed. It is hereby understood and agreed that any and all water wheels and all manner of water development now upon said real estate shall be and are hereby deemed to be real estate and to pass under this conveyance;

This grant also includes any right or title said grantor has to the said bulkhead or wing dam abutting said above described real estate.

Parcel 12: THAT CERTAIN LOT OF LAND in the VILLAGE OF CARTHAGE, bounded as follows, viz: Beginning at the angle formed by the intersection of the east margin of Water Street with the south margin of Furnace Street; thence along the southerly margin of the last mentioned street north seventy-two and three-fourths (72 3/4) degrees east two (2) chains sixty-nine (69) links; thence southerly parallel with the first mentioned street one (1) chain seven and one-fourth (7-1/4) links; thence south seventy-two and three-fourths (72-3/4) degrees west two (2) chains sixty-nine (69) links parallel with Furnace Street to the margin of Water Street; thence one (1) chain seven and one-fourth (7-1/4) links to the place of beginning, containing one-fourth (1/4) of an acre, be the same more or less.

Also ALL THAT CERTAIN PIECE OF LAND, situate in the aforesaid VILLAGE OF CARTHAGE, and is designated and known upon a map of said Village as Village Lot No. thirty-eight (38) and is bounded as follows, viz: Northerly by one-fourth (1/4) of an acre conveyed 27th April, 1838, to Basille Guyot; southerly by the Village Lot No. thirty-seven (37) contracted 5th March, 1836, to Allen Murray; westerly by a line running from the southwesterly corner of said one-fourth (1/4) of an acre conveyed to Basille Guyot to the northwesterly corner of said Village Lot No. thirty-seven (37) contracted to said Murray, said line being the northeasterly margin of Water Street and easterly by a line running from the southeasterly corner of said one-fourth (1/4) of an acre conveyed to Basille Guyot to the northeasterly corner of said Lot No. thirty-seven (37) contracted to Allen Murray containing one-fourth (1/4) of an acre, be the same more or less.

Subject to the reservations and conditions contained in the letters patent, whereby these lands were originally granted, and also to all taxes levied or assessed on the premises since 16th March, 1836, and also to all highways thereon.

Excepting and reserving from the above described piece such part thereof as may have heretofore been conveyed by Minor Guyot and wife to the Utica & Black River Railroad Company by deed dated June 21, 1871, recorded June 26, 1871, in Book 188 of Deeds, at page 254, reference being thereto had.

Also ALL THAT TRACT OR PARCEL OF LAND, situate in the VILLAGE OF CARTHAGE, and is bounded as follows, viz: On the north by the south margin of Furnace Street; on the east by the west margin of Water Street; on the south by the north line of three one-hundredths (3/100) of an acre formerly contracted to Harry D. Parker and now in possession of the Shott Manufacturing Company and west by Black River at low water mark, containing one-tenth (1/10) of an acre of land, more or less.

Excepting such rights as the People of the State of New York have or may have upon said land and the right of the People of the State of New York to erect and maintain a pier upon said land at the east end of the dam.

Parcel 13: ALL THAT TRACT, PIECE OR PARCEL OF LAND situate in the VILLAGE OF CARTHAGE, bounded as follows, viz: On the north by the old nail works lot that was conveyed to Oliver Child by W. LoRay de Chaumont on January 5, 1833, on the west by the west line of said lot extended southerly to the state dam, on the south by the state dam, and on the east by the side dam of the pond which divides the mills and machinery with water from the drop in the state dam, together with the right to bridge the side dam from Guyot's mill to the above premises and the right to construct a bridge from the above described premises to or near the abutment at the easterly end of the state dam together with the right to the use of the water sufficient to run a grist mill and saw-mill, such use, however, to be subordinate to the rights of prior purchasers and owners of the mills and machinery erected below the above described premises prior to June 13, 1901, the said water rights having been adjudged, defined, and limited by judgment of the Supreme Court made and entered in Jefferson County Clerk's Office February 3, 1908, in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, and others, defendants, to which judgment reference is hereby made, and subject to a written agreement made by and between Frederick Guyot and A. H. Praefis dated October 12, 1889, modifying and defining the boundary line between said lot and the old nail works lot then owned by said Guyot.

And also A CERTAIN OTHER PIECE OR PARCEL OF LAND situate in the said VILLAGE OF CARTHAGE and being part of the land conveyed to Joseph Kraft by George S. Phelps and bounded and described as follows: Beginning at a point on the face side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence, along the said extended line north seventy-six (76) degrees east (forty-five (45) feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the easterly margin of Water Street; thence along said margin extended ten (10) feet; thence southwesterly thirty (30) feet about to a point ten (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning, reserving, however, all highways and rights of way legally existing across said property and also reserving any rights the State of New York may have on or over the same.

Being the same premises conveyed to James A. Outterson by the Northern New York Utilities, Inc., by deed recorded in the Jefferson County Clerk's Office October 7, 1918, in Book 354 of Deeds, at page 133.

Parcel 14: ALL THAT TRACT, PIECE OR PARCEL OF LAND, situate in the VILLAGE OF CARTHAGE, bounded as follows: North by one-fourth (1/4) of an acre conveyed to A. Walsh 16th May, 1842, east by twenty-one one-hundredths (21/100) of an acre conveyed to P. Matthews 3rd March, 1852, and by seven one-hundredths (7/100) of an acre conveyed to said Matthews 3rd March, 1853, south by one-fourth (1/4) of an acre conveyed to Samuel Hopkins 7th April, 1853, and on the west by the east margin of Water Street, containing one-half (1/2) of an acre more or less.

Excepting and reserving from the above described one-half (1/2) of an acre so much thereof as has been conveyed to the Utica and Black River Railroad Co. or so much thereof as is used and occupied by said Company, the premises hereby conveyed, being the same premises that were conveyed to said John W. Brace by Ephraim E. Myers and wife by deed dated September 29, 1891.

Said premises being the same premises conveyed to Clifford P. McDonald and Polly McDonald, his wife, by Ella I. Zehr by deed dated July 20, 1909, and recorded in Jefferson County Clerk's Office July 21, 1909, in Liber 329, page 318.

Also ALL THAT OTHER TRACT OR PARCEL OF LAND, situate in the VILLAGE OF CARTHAGE, being Village Lot No. thirty-five (35) of said Village and is bounded as follows: On the west by the east margin of Water Street; on the north by the south line of Village Lot No. thirty-six (36), which line is parallel to the south bounds of one-fourth (1/4) of an acre that was conveyed to Anthony Walsh on the 16th day of May, 1842, and eight (8) rods southerly from it; on the south by Village Lot No. thirty-four (34), and on the east by a line parallel to the east margin of said street and ten (10) rods from it, being four (4) rods on said street, and contains one-fourth (1/4) of an acre, be the same more or less.

Being the same premises conveyed to Clifford P. McDonald and Polly McDonald by Ella Coulett and others by deed dated November 18, 1907, and recorded in Jefferson County Clerk's Office on the 21st day of July, 1909, in Book 329, page 319.

To have and to hold the premises herein granted unto the Grantee, its successors and assigns, forever. Subject to terms, provisions, covenants and conditions of record.

THIS deed is made to the Grantee as the sole shareholder of the Grantor in connection with the liquidation, winding up and voluntary dissolution of the Grantor.

In Witness Whereof, the Grantor has caused these presents to be executed by its proper officers therunto duly authorized.

(L.S.) NATIONAL PAPER PRODUCTS COMPANY,
In the presence of: Gwendolyn Wilson By D. J. Goldsmith Secretary
E. H. Post By J. D. Zellerbach Pres.

Checked by E. H. Post
State of California, City and County of San Francisco, SS. On this 31st day of October, 1936, before me personally came J. D. Zellerbach and D. J. Goldsmith to me known, who being by me duly sworn, did depose and say: That they reside in City and County of San Francisco; that they are the President and Secretary, respectively, of National Paper Products Company, the corporation described in and which executed the above instrument; that they know the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of the said corporation, and that they signed their names thereto by like order. In Witness Whereof, I have hereunto set my hand and affixed my official seal at my office in the city and county and state aforesaid, the day and year in this certificate first above written.

(L.S.) Anne F. Swift Notary Public
Anne F. Swift Notary Public
in and for the City and County of San Francisco,
State of California
My Commission Expires July 3, 1937

State of California City and County of San Francisco ss. I, H. A. van der Zee, County Clerk of the City and County of San Francisco, State of California, and ex-officio Clerk of the Superior Court thereof, the same being a Court of Record, having by law a seal, the officer authorized by the laws of the State of California to make the following certificate, Do hereby Certify, That Anne P. Swift of the City and County of San Francisco, whose name is subscribed to the annexed instrument and thereon written and before whom the annexed oath or affidavit was taken, was at the time of taking such oath or affidavit, a Notary Public in and for the said City and County of San Francisco, residing in said City and County, duly authorized to take the same, and an officer duly authorized by the laws of said State to take and certify the acknowledgment and proof of deeds to be recorded in said State. And further that I am well acquainted with the handwriting of said officer, and verily believe that the signature to such furl or certificate is genuine. I further certify that an impression of the seals of Notaries Public are not required by law to be filed in my office. In Testimony Whereof, I have hereunto set my hand and affixed the seal of the said Superior Court. Dated Nov 10 1936
 (I.S.) H. A. van der Zee Clerk.
 Received Nov. 17. 1936 at 10:10 A. M.

STATE OF NEW YORK
 County of Jefferson

ss.

I, H. BEN MITCHELL, County Clerk of the County of Jefferson, and Clerk of the Supreme and County Courts in and for said County, the same being Courts of Record, do hereby certify:

That I have compared the foregoing copy of Deed: National Paper Products Company to Crown Zellerbach Corporation. hereto annexed with the original Recorded: November 17, 1936 at 10:10 a.m. in Liber 418 of Deeds on Page 174. in this office, and that the same is a true and correct transcript thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of the said Courts at the City of Watertown, N.Y., this 9th day of December 1936.

By

Deputy Clerk.

6-6

Also ALL THAT CERTAIN OTHER PIECE OF LAND in WILNA, Jeff. Co., N.Y.; Beginning at the N.W. corner of 38-33/100 acres conveyed to Conrad I. Becker 28th Aug. 1848; Thence along the West line thereof South 12 chains 50 links to the S. W. corner thereof; thence S. 26° W. 9 chains 62 links; thence E. 54° W. 99 links; thence the same course continued 6 chains 16 links to the S. corner of 25-75/100 acres contracted to V. Lanphear; thence along the S.E. line thereof 7 chains .03 links to the East corner thereof; thence along the E.E. line thereof N. 54° 37 chains 20 links to the North corner thereof; thence N. 40° E. one chain; thence N. 54° E. 12 chains 50 links; thence N. 64° E. 6 chains 70 links; thence S. 16° E. 4 chains 30 links and S. 37° E. 11 chains 38 links to a post standing in the West line of 26-67/100 -- conveyed to Eli P. Becker; thence along the same South 9 chains 78 links to the Southeast corner thereof and thence along the South line thereof East 13 chains 50 links to the place of Beginning, containing 59-50/100 acres of land, more or less.

Reserving from above described lands all mines and minerals the same as in the original conveyances.

It is understood that the boundaries of above lands are the same as were adjudicated upon as correct in the suit of Lewis Becker against George A. Duly. Being the same parcel of land conveyed by Hiram M. Brownell and wife to Nelson H. Gound by deed on October 17th, 1890, and recorded on the 22nd day of October 1898 in Book 7290 of Deeds at Page 561 at the office of the County Clerk.

Also THE SAME TRACT OR PARCEL OF LAND situate in the TOWN OF WILNA County of Jefferson and State of New York, bounded as follows; being part of subdivision lot #901 of Great Lot # of MacCombs purchase and beginning at the North corner of 59-51/100 acres conveyed to Thomas Smith; thence along the Fulton Road (it being the southeast line of 56-06/100 acres conveyed to John Carncross) N. 61° East 16 chains 48 links to a point south 61° W. one chain and 98 links from the South East of the aforesaid 56-06/100 acres; thence S. 29° E. 18 chains 30 links to the north line of 26-87/100 acres of land conveyed to Eli P. Becker; thence along said line W. 14 chains 30 links to the N.W. corner of said 26-87/100 acres; thence along the W. line thereof S. 2 chains 72 links to a corner of said 59-51/100 acres conveyed to Thomas Smith; thence along the easterly line thereof N. 37° W. 11 chains 38 links; thence N. 16° W. 4 chains 30 links to the place of beginning, containing 24-81/100 acres of land be the same more or less.

Being the same premises conveyed by Clinton Maxon, Ella Parks and Myrtle Maxon by deed of January 3rd, 1914 and Jan 14, 1914 and subject to all reservations as contained in the original deed, above deed was recorded in Jefferson County Clerks Office January 16th, 1914.

100-CH-617
ACQUISITION

THIS INDENTURE, made this 31st day of July, 1936, by
and between NATIONAL PAPER PRODUCTS COMPANY, a California corpo-
ration, hereinafter named "Grantor," and CROWN ZELLERBACH CORPO-
RATION, a Nevada corporation, hereinafter named "Grantee,"

WITNESSETH,

That the Grantor does hereby grant and release unto
the Grantee, its successors and assigns forever, all the follow-
ing real property in the County of Jefferson, State of New York,
together with the appurtenances and/or the estate and rights of
the Grantor, in said premises:

Conveyed to C. & C. Co. Inc. of the
Parcel 1: all that piece or parcel of land situated
in the Village of Carthage, and bounded and described as
follows, to wit:

Beginning at the intersection of the southerly
margin of Furnace Street with the easterly margin of
Water Street (now called Riverside Drive) and runs
thence from said beginning point and along the said
southerly margin of Furnace Street, north seventy-six
(76) degrees east (original description) about one
hundred eighty (180) feet to the most westerly corner
of lands conveyed by George R. Phelps to the Utica &
Black River Railroad Company; thence along the same
north twenty and one-half (20-1/2) degrees east sixty
and one-half (60-1/2) feet to an angle thereof, a point
in the northerly margin of said Furnace Street; thence
continuing along said westerly bounds of said railroad
lands, north one and one-quarter (1-1/4) degrees east
(original description) and being parallel to and twenty
(20) feet westerly from the westerly margin of old
Mechanic Street, two hundred twelve (212) feet to the
northwest corner of said railroad lands; thence along the
northerly line thereof, south eighty-one and one-quarter
(81-1/4) degrees east about twenty (20) feet to the inter-
section thereof with the westerly margin of old Mechanic
Street; thence along the same north one and one-quarter
(1-1/4) degrees east about ninety-four (94) feet to the
northeast corner of land conveyed by Ryther & Pringle
Company to the Carthage Tissue Paper Mills; thence along
the north line thereof, to and along the southerly line
of lands conveyed by the said Tissue Paper Mills to said
Ryther & Pringle Company, north eighty-six (86) degrees
forty-five (45) minutes west one hundred twenty-four
and four-tenths (124.4) feet to a point on the bank
of Black River and being in the westerly line of
lands conveyed by the Antwerp Company to James H.
Morrow by deed dated September 1, 1866, and known as the

P

Stewart & Bailey Tannery Lot; thence along the westerly line thereof, southerly about sixty (60) feet to the southwest corner thereof, being also a corner of lands conveyed to the Carthage Iron Company; thence in a straight line, westerly about one hundred eighteen (118) feet to the northeast corner of lands conveyed to Joseph Pratt, Dec. 15, 1871; thence along the northerly line thereof westerly to the northeast corner of lands conveyed to said Pratt by deed dated August 9, 1872; thence along the northerly line thereof, westerly forty-nine (49) feet to the northwest corner thereof, a point in range with the easterly side of the Guyot Grist Mill (formerly); thence at right angles and along the range of said easterly side of said mill, southerly sixty-six (66) feet to the northeast corner of said Grist Mill or to the waters edge; thence along the same, westerly, northerly and westerly to a point in extension of the easterly face of the Pump House belonging to the Village of Carthage; thence along said extended line southerly about eighty-eight (88) feet to the northeast corner of said pump house; thence along the front or east face of said pump house, south four and one-quarter (4-1/4) degrees east twenty-seven and one-tenth (27.1) feet to the southeast corner of said pump house, thence along the northerly line of a strip of land twenty (20) feet in width referred to in a deed from Joseph V. Guyot to the Village of Carthage, dated April 5, 1893, north eighty-six (86) degrees fifteen (15) minutes east (in continuation of the south face of said pump house) thirty-six and five-tenths (36.5) feet to a cross cut on the top of an iron pipe, and angle; thence continuing along said twenty (20) foot strip, south fifty-three (53) degrees twenty-seven (27) minutes east thirty-five and two-tenths (35.2) feet to the easterly face of the side or wing dam; thence along the same, southerly to the north face of the state dam and thence along the same easterly to the abutment at the end of the said dam and thence easterly to the place of beginning.

Together with all water rights connected with the above described parcel or appurtenant thereto.

Excepting from the above described parcel a certain piece or parcel of land situate in the Village of Carthage, and being part of the land conveyed to Joseph Pratt by George B. Phelps, bounded and described as follows: Beginning at a point on the face side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence along the said extended line north seventy-six (76) degrees, (forty-five (45) feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the westerly margin of Water Street; thence along said margin extended ten (10) feet thence southwesterly thirty (30) feet about to a point ten (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning.

~~The accompanying map marked "A," a copy of which is on file in the Jefferson County Clerk's office, shows the location of parcel conveyed above, such parcel being within the red lines on such map.~~

Conveyed

C-74 ~~Parcel 2: That certain tract or parcel of land situate in the Village of Carthage, and bounded and described as follows, viz: Southerly by lot owned by Francis S. Loomis, easterly by the west margin of Water Street, westerly by Black River and northerly by a line drawn from Water Street to Black River parallel to the westerly extension of the southerly line of one-half (1/2) acre conveyed by Mary J. Stewart to Shortt Manufacturing Company by deed dated January 3, 1876, said line to be drawn four (4) rods northerly from said extended line.~~

~~The accompanying map marked "B," a copy of which is on file in the Jefferson County Clerk's office, shows the location of the last parcel herein conveyed, such parcel being within the red lines on such map.~~

~~Also, all other real estate situate within the said County of Jefferson, New York, or interest in real estate, or any rights, privileges, or easements in connection therewith formerly owned by or belonging to the Carthage Tissue Paper Mills and transferred to Grantor herein.~~

~~Parcel 3: All that tract or parcel of land situated in the Village of Carthage, and bounded southerly by the north margin of Spring Street; easterly by a line parallel with Water Street and two hundred and fifteen (215) feet from its east margin; northerly by the line between village lots numbers thirty-four (34) and thirty-five (35) and the same extended easterly, being one hundred and seven (107) feet from the north margin of the above named Spring Street and westerly by the aforesaid east margin of Water Street, containing one-half (1/2) acre of land, be the same more or less, excepting therefrom so much thereof as has heretofore been conveyed by Herman H. Frink and Sophia S., his wife, to the Utica and Black River Railroad Company; for a particular description of said part so excepted, reference may be had to the deed of conveyance to said Railroad Company.~~

Conveyed

~~Parcel 4: All that certain piece or parcel of land situate in the Village of Carthage, and bounded as follows, viz: Beginning at a point in the north line of a water lot known as the old Nail Factory lot now owned by V. Le Ray de Chaumont, a point on west side of the dam or bulkhead that forms the pond for B. Guyot's mill and the nail and axe factories and runs thence along the north line of said factory lot westwardly to the northwest corner thereof; thence northwardly to the southwest corner of a water lot conveyed to Nathan Starks on the 17th April, 1833; thence along the south line thereof eastward to the southeast corner thereof, thence eastwardly to a point in the west side of said bulkhead or dam and south side of the flume leading from said dam or bulkhead to the axe factory, which factory is on said lot conveyed to said Starks, thence along the west side of said dam or bulkhead southwardly to the place of beginning, containing nine hundredths (9/100) of an acre be the same more or less together with also the right and privilege to the said grantee, its successors and assigns of using in a prudent and saving manner a sufficient quantity of water~~

of the Black River at and upon the said premises so before particularly described and lying and being between the lot and water privileges conveyed by Vincent Le Ray de Chaumont to Nathan Starks now owned by John Parr (1853) and the Nail Factory Lot for the purpose of running or carrying a common double saw mill, having two gates, two flutter wheels, two spur wheels and one bulk wheel or a sufficient quantity of water of the Black River to run or carry other machinery on the above described premises not to exceed in quantity the amount required for the saw mill above described. Said water rights and privileges having been measured and determined by a Judgment of the Supreme Court of the State of New York in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, et al., were defendants, and which said judgment was entered in the office of the Clerk of Jefferson County, New York, on the 3rd day of February, 1905, and were in said judgment determined and defined as follows, viz: "To the use of fourteen hundred (1400) inches of water from said pond" and which said use of said water was by said judgment made subject and subordinate to the rights of the several parties therein mentioned and defined. Now it being the intention to convey by this instrument all of said water rights and privileges above stated, subject, however, to all restrictions, limitations and prior rights as stated or set forth either in a certain deed or perpetual lease bearing date the 23rd day of December, 1853, executed by Pierre Joseph DaCaters by his attorney, et al., to Minor Guyot, and recorded in the office of the Clerk of Jefferson County, New York, on the 16th day of May, 1871, in Liber 188 of Deeds at page 148, and as stated in said judgment hereinbefore referred to. Also all rights or title the grantors may have in the bulkhead and wing dam abutting said property.

Also all that other tract or parcel of land and right of way reserved and excepted to the grantors in a certain deed bearing date the 27th day of April, 1904, executed by Joseph V. Guyot and Mary, his wife, to Wooster O. Ball, William D. Ball and Arthur R. Ball, and which deed was recorded in the office of the Clerk of Jefferson County, New York, on the 9th day of May, 1904, in Liber 310 of Deeds at page _____ and therein described as follows, viz: Beginning at the waters edge which point marks the northeasterly corner of a lot conveyed to Nathan Starks, thence along the easterly side of said Starks lot to a point in the northerly line of a lot conveyed and now owned by the Village of Carthage, called the Pump lot, thence easterly along the northerly line of said Pump lot to the northeast corner of said Pump House Lot, thence northerly on a line parallel with the first line above described to the waters edge, thence westerly along the waters edge to the place of beginning. Also a right of way one (1) rod wide along the westerly line of the lands hereby sold from the northerly line of the Pump House Lot prolonged to the waters edge northerly, to be used in common by both parties hereto (said deed last above referred to). The above described real estate is a portion of certain lots and tracts of land devised by the last will and testament of Joseph V. Guyot to

of the Black River at and upon the said premises so before particularly described and lying and being between the lot and water privileges conveyed by Vincent Le Ray de Chaumont to Nathan Starks now owned by John Farr (1853) and the Nail Factory Lot for the purpose of running or carrying a common double saw mill, having two gates, two flutter wheels, two spur wheels and one bulk wheel or a sufficient quantity of water of the Black River to run or carry other machinery on the above described premises not to exceed in quantity the amount required for the saw mill above described. Said water rights and privileges having been measured and determined by a judgment of the Supreme Court of the State of New York in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, et al., were defendants, and which said judgment was entered in the office of the Clerk of Jefferson County, New York, on the 3rd day of February, 1906, and were in said judgment determined and defined as follows, viz: "To the use of fourteen hundred (1400) inches of water from said pond" and which said use of said water was by said judgment made subject and subordinate to the rights of the several parties therein mentioned and defined. Now it being the intention to convey by this instrument all of said water rights and privileges above stated, subject, however, to all restrictions, limitations and prior rights as stated or set forth either in a certain deed or perpetual lease bearing date the 23rd day of December, 1853, executed by Pierre Joseph DeCaters by his attorney, et al., to Minor Guyot, and recorded in the office of the Clerk of Jefferson County, New York, on the 16th day of May, 1871, in Liber 188 of Deeds at page 146, and as stated in said judgment hereinbefore referred to. Also all rights or title the grantors may have in the bulkhead and wing dam abutting said property.

Also all that other tract or parcel of land and right of way reserved and excepted to the grantors in a certain deed bearing date the 27th day of April, 1904, executed by Joseph V. Guyot and Mary, his wife, to Wooster O. Ball, William D. Ball and Arthur R. Ball, and which deed was recorded in the office of the Clerk of Jefferson County, New York, on the 9th day of May, 1904, in Liber 310 of Deeds at page _____ and therein described as follows, viz: Beginning at the waters edge which point marks the northeasterly corner of a lot conveyed to Nathan Starks, thence along the easterly side of said Starks lot to a point in the northerly line of a lot conveyed and now owned by the Village of Carthage, called the Pump lot, thence easterly along the northerly line of said Pump lot to the northeast corner of said Pump House Lot, thence northerly on a line parallel with the first line above described to the waters edge, thence westerly along the waters edge to the place of beginning. Also a right of way one (1) rod wide along the westerly line of the lands hereby sold from the northerly line of the Pump House Lot prolonged to the waters edge northerly, to be used in common by both parties hereto (said deed last above referred to). The above described real estate is a portion of certain lots and tracts of land devised by the last will and testament of Joseph V. Guyot to

Con'd
1/4
Con'd
1/4
Con'd
1/4

Mary Guyot, his wife, during the term of her natural life and at her death to the parties of the first part, Belle Oberly, Harriet A. Oberly and Minnie and Jennie Oberly, the said Minnie Oberly and Jennie Oberly having died without issue and the said Belle Oberly and Harriet A. Oberly being the sole heirs at law of the said Minnie Oberly and Jennie Oberly, deceased.

Parcel 5: All that tract or parcel of land, situate, lying and being within the boundaries of that portion of Water Street in the Village of Carthage, beginning at the intersection of the northerly margin Spring Street with the easterly margin of Water Street and running thence along said margin northerly four hundred seventy and four-tenths (470.4) feet to the southerly margin of Furnace Street; thence along said margin of Furnace Street extended westerly forty-nine and five-tenths (49.5) feet to a point in the westerly margin of Water Street; thence along said westerly margin southerly four hundred seventy (470) feet to a point in said margin where it intersects with the northerly margin of Spring Street extended; thence easterly along the northerly margin of Spring Street extended forty-nine and one-half (49-1/2) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Water Street between the northerly margin of Spring Street and the southerly margin of Furnace Street.

Also all that other tract or parcel of land, situate, lying and being within the boundaries of that part of Furnace Street in the Village of Carthage, described as follows:

Beginning at a point in the southerly margin of Furnace Street at the intersection of said margin with the westerly margin of Water Street and running thence along said margin forty-nine and five-tenths (49.5) feet to the intersection of the easterly margin of Water Street with the said margin; thence along said southerly margin one hundred seventy-seven and fifty-five one-hundredths (177.55) feet to the westerly limits of the right of way of the New York Central and Hudson River Railroad; thence northerly along said railroad right of way forty-nine and one-half (49-1/2) feet to the northerly margin of Furnace Street; thence along said northerly margin westerly two hundred twenty-seven (227) feet to the intersection of said margin with the westerly margin of Water Street extended; thence southerly along such extended margin forty-nine and five-tenths (49.5) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Furnace Street between the westerly margin of Water Street extended and the right of way of the New York Central and Hudson River Railroad.

Parcel 6: All that certain tract or parcel of land situated in the Villages of Carthage and West Carthage, beginning at a point in the center of the River Road or West End Avenue. (formerly called Forge Street), said

point being in the northeasterly extension of the northwest line of land conveyed by said Franklin E. Robinson to A. Wendler, and runs thence along the center of said road or street north forty-nine (49) degrees west thirteen hundred forty-nine and five-tenths (1349.5) feet to the easterly margin of a private road forty (40) feet wide; thence at right angles to said center south thirty-eight (38) degrees twenty (20) minutes west six hundred forty-six (646) feet to low water mark on the northerly bank of Black River; thence down along said bank at low water mark northwesterly to the south line of five and fifteen-hundredths (5.15) acres conveyed by the Antwerp Co. to Orlin Holcomb August 13, 1865; thence along the same westerly forty-five (45) feet into the channel of said Black River; thence down along said channel to a point forty-five (45) feet from a post on the shore, the corner of thirty-one and thirty-three-hundredths (31.33) acres formerly conveyed to P. S. Stewart; thence north thirty-four and one-half (34-1/2) degrees east forty-five (45) feet to said post on the shore; thence down said shore at low water mark to a point in range with the lower end of DeGater Island; thence across said lower end and to the center of the river; thence up along said center to the lower end of Bullison Island; thence up along the westerly shore of Bullison Island to the southerly point of said Island; thence southerly to the most northerly point of Mink Island; thence easterly and southerly along the shore of said Island to the upper and most southerly point of said Island; thence southwesterly to the nearest point of the Champion shore of Black River; thence easterly and southerly along said shore to the northwesterly corner of the water lots mentioned in a deed made by Henry Spicer and others to Franklin E. Robinson, recorded in the office of the Clerk of the County of Jefferson on the 6th day of August, 1895, in Liber 280 of Deeds, at page 238; thence northeasterly to the north end of Champion Island to the line of land conveyed to William M. Coburn; thence easterly and southerly along the line of the said Coburn to a point on the state dam at the southeast corner of said lot conveyed to said William M. Coburn; thence easterly to the center of Black River on said dam; thence down the center of the said river to a point in range with the west line of thirty-five one-hundredths (35/100) acre conveyed by George B. Phelps to Rueben Wilmott and others April 10, 1876; thence northerly to the southwest corner of said thirty-five one-hundredths (35/100) acre to a point at low water mark on the bank of said river; thence down along said bank at low water mark to the most westerly corner of lands sold to A. Wendler; thence along the northwest line of said lands about four hundred seventeen (417) feet to the place of beginning.

This conveyance includes all water powers and rights to use water connected with the lands herein conveyed which were conveyed to Franklin E. Robinson and by him to the West End Pulp & Casket Company by deed dated March 31, 1897, and recorded in the Jefferson County Clerk's Office, April 2, 1897, in Book 285 of Deeds, at page 459, and including all rights which were conveyed.

by Allen E. Kilby and wife to said West End Pulp & Casket Company by deed dated February 17, 1899, and recorded in the office of the Clerk of Jefferson County, February 23, 1899, at nine o'clock A. M., in Book No. 291 of Deeds, at page 262.

Excepting and reserving such portions of Wind Island and Tannery Island, as are included in the above description; it being understood that no part of either of the said islands was owned by the West End Paper Company.

Also, excepting and reserving the rights conveyed to the Carthage Machine Company to extend their flume down to the westerly end of their premises, as conveyed by Franklin E. Robinson and wife by deed dated December 31, 1901, and recorded in the Jefferson County Clerk's Office January 3, 1903, in Liber 306 of Deeds, at page 24, in which it is described as follows:

"Also the right to continue the flume now on said Pulp Shop Lot down at low water mark as far down as the land herein conveyed extends, and to repair the same from time to time."

Parcel 7: All that certain tract or parcel of land situated in the Villages of Carthage and West Carthage, beginning at a point in the northwest line of the lands conveyed to the West End Paper Company by the West End Pulp & Casket Company, by deed dated May 1, 1902, a point in the easterly margin of a private road, said point of beginning being four hundred twenty-six (426) feet along said northwest line from the center of West End Avenue; thence from said beginning point north fifty (50) degrees west four hundred four (404) feet to a stake; thence turning to the right thirty-two (32) degrees fifty-seven (57) minutes north, seventeen (17) degrees three (3) minutes west, four hundred (400) feet to a point in the line between the lands occupied by Franklin E. Robinson (formerly) and lands occupied by John Backus; thence along said line southwesterly thirty-eight (38) feet to the bank of the Black River at low water mark; thence up along said bank south-easterly to a corner of said lands conveyed to said West End Paper Company by said West End Pulp & Casket Company; thence along the said northwest line thereof north forty (40) degrees east two hundred twenty (220) feet to the place of beginning.

Also, a right of way over the private road above mentioned from West End Avenue to the lands above described, said right or private road being forty (40) feet wide and extends along said northwest line from West End Avenue southwesterly to lands above described.

Parcel 8: All that certain tract or parcel of land situated in the Villages of Carthage and West Carthage, beginning at a point of intersection of the southwest margin of West End Avenue and the northwest margin of a private road called Park Place, and runs thence along

said margin of West End Avenue north fifty (50) degrees west six hundred seventy-four (674) feet to the east corner of the Catharins Leach Lot now (1920) owned by John or Amelia Backus; thence along the southeast line of the same southwesterly about one hundred eighty (180) feet to the north corner of land conveyed by Franklin E. Robinson estate to the West End Paper Company on or about February, 1919; thence along the northeast line thereof south-seventeen (17) degrees ten (10) minutes east about four hundred (400) feet to a point an angle; thence south fifty (50) degrees east three hundred sixty-four (364) feet to a point in said northwest margin of said private road called Park Place, and thence along said margin north forty (40) degrees east four hundred one and twenty-five-hundredths (401.25) feet to the place of beginning, containing five (5) acres and forty-six one-hundredths (46/100) of an acre, be the same more or less.

Excepting and reserving from the above parcel 8, all that tract or parcel of land, situate in the Village of Carthage, described as follows: Being a house and lot on the southwest corner of West End Avenue and Park Place (private road leading to the residence of Dr. Robinson). Bounded as follows: beginning at the corner of West End Avenue and Park Place, running westerly along West End Avenue twenty-five (25) feet; thence southerly at right angle with West End Avenue one hundred (100) feet; thence easterly parallel with West End Avenue twenty-five (25) feet; thence northerly along the westerly line of Park Place one hundred (100) feet to the place of beginning. Being the same premises described in a deed from Franklin E. Robinson and wife to Edward P. Powers, dated September 2, 1907, and recorded in Jefferson County Clerk's office October 21, 1907, in Liber 325 of Deeds at page 26.

Also excepting and reserving from the above parcel 8, all that tract or parcel of land, situate in the Village of Carthage, bounded and described as follows, viz: beginning at a point of West End Avenue twenty-five (25) feet westerly from the northwest corner of a private road leading from West End Avenue to Dr. Robinson's house called Park Place; thence westerly twenty-five (25) feet; thence southerly at right angles with West End Avenue one hundred (100) feet; thence easterly parallel with West End Avenue twenty-five (25) feet to the southwest corner of a lot previously deeded to Edward Powers; thence northerly along said lot one hundred (100) feet to West End Avenue at the place of beginning. Being the same premises described in a deed from Franklin E. Robinson and wife to Jessie A. Powers, dated December 2, 1910, and recorded in Jefferson County Clerk's Office December 7, 1910, in Liber 333 of Deeds, at page 308.

Also excepting and reserving from the above parcel 8 all that tract or parcel of land, situate in the Village of Carthage, County of Jefferson and State of New York, and being bounded and described as follows, viz: be-

ginning in the northwesterly margin of the street called Park Place at a point two hundred (200) feet southwesterly along said margin from the intersection thereof with the southwesterly margin of West End Avenue, and runs thence from said point of beginning north forty-nine and one-half (49-1/2) degrees west at right angles to the margin of Park Place one hundred (100) feet to an X on a rock; thence south forty and one-half (40-1/2) degrees west parallel to said street margin seventy-two (72) feet to a stake; thence south thirty-eight (38) degrees east parallel to the northeast end of the barn and ten (10) feet northeasterly therefrom forty (40) feet and five-tenths (5/10) of a foot to a stake; thence south forty and one-half (40-1/2) degrees west parallel to said street margin eleven (11) feet and fifteen one-hundredths (15/100) of a foot to a stake; thence south forty-nine and one-half (49-1/2) degrees east sixty (60) feet and two-tenths (2/10) of a foot to said margin of Park Place and thence along the same north forty (40) degrees thirty (30) minutes east ninety-one (91) feet to the place of beginning. Containing one hundred ninety-five one-thousandths (195/1000) of an acre, be the same more or less. Being the same premises described in a deed from Gertrude Robinson and Katherine Robinson, as Executors, etc., to William H. Boyle, dated September 30, 1922, and recorded in Jefferson County Clerk's Office January 26, 1923, in Liber 370 of Deeds, at page 175.

Parcel 9
Parcel 9: All that certain tract or parcel of land situated in the Villages of Carthage and West Carthage, beginning at a hub in the west margin of the River Road one hundred twenty-eight (128) feet along said margin from the south line of the land as conveyed by John Garrity, and running thence along said margin north twenty-nine (29) degrees west thirty-eight and one-half (38-1/2) feet to a hub an angle of the road; thence north thirteen (13) degrees west thirty-one and one-half (31-1/2) feet to a hub; thence south eighty-three (83) degrees west one hundred ten (110) feet to a cedar post four (4) feet northerly from an elm tree marked; thence southerly along the bank of the river sixty-six (66) feet to a cedar post and stones, and thence north eighty-five (85) degrees east one hundred forty (140) feet to the place of beginning. Containing twenty-one-hundredths (21/100) of an acre more or less, being Lot three (3) of the subdivision of the said land as made by J. P. Brownell, in 1892.

Parcel 10: All that certain tract or parcel of land situated in the Villages of Carthage and West Carthage, beginning at the south corner of the said sixteen one-hundredths (16/100) of an acre, a point in the northwest margin of High Street and runs thence along said margin of High Street northeasterly forty-nine (49) feet to a point in said margin one hundred twenty and two-tenths (120.2) feet from the west margin of Front Street or Champion Road; thence north forty-one (41) degrees west one hundred thirty-two and two-tenths (132.2) feet to an iron stake; thence south sixty-seven (67) degrees west fifty-six and eight-tenths (56.8) feet to the north corner of the "Woolson" lot;

thence along the line between said Woolson lot and the lands so conveyed to William S. Farrar, south forty-three and one-half (43-1/2) degrees east one hundred fifty-one and five-tenths (151.5) feet to the place of beginning. Containing one hundred sixty-six one-thousandths (166/1000) of an acre, be the same more or less. Being same premises conveyed to West End Paper Company by deed of William S. Farrar and wife, recorded in Jefferson County, New York Clerk's Office, Liber 363, page 575.

Together with the appurtenances and all the estate and rights of the party of the first part in and to said premises.

Parcel 11: All that certain piece or parcel of land situate in the Village of Carthage, Town of Wilna, beginning on the dam opposite the old Nail Factory as and where it stood and was located before its destruction by floods, fourteen (14) feet northerly from the point where a line drawn along the outside of the north wall of said old Nail Factory strikes said dam; thence to a point in the range of the west wall of said old factory, ten (10) feet nine (9) inches from the point which was the northwest corner of said old factory; thence westerly in the same line sixteen (16) feet four (4) inches; thence parallel with the line of the former old west wall of said old factory to a point where a line drawn parallel to the line of the former south wall of said factory will pass sixteen (16) feet from it; thence along said line easterly till it strikes a point in the line of the old dam as it stood before the erection of the present state dam; thence continuing easterly along the line of said old dam to the side dam and thence northerly along the same to the place of beginning, being the same lot of land and not otherwise different which was sold by perpetual lease by V. & J. LeRay de Chaumont to Oliver Child by an instrument of conveyance dated 5th January, 1833, to which reference may be made for further particulars.

And this conveyance of the above described real estate is made subject to any changes or alterations in the boundary lines of the said above described tract or parcel of land which may have been made, if any, by a certain instrument or agreement bearing date the 12th day of November, 1889, which said instrument or agreement was recorded in the Office of the Clerk of Jefferson County, New York, on the 8th day of April, 1890, in Liber 260 at page 103 and which said agreement or instrument establishes the division line between the above described tract of land and a certain water lot adjoining said above described tract of land on the southerly side thereof and conveyed to Elwin Bruce Stevens by the Directors of the Company of American Acres on the 21st day of September, 1869, and any part or parcel of the above described tract or parcel of real estate which may have been segregated from said

Con't 1/4

above described tract or parcel of real estate by said agreement hereinbefore mentioned is excepted and expressly reserved from the operation of this deed;

The grantor also grants and releases to grantee, its successors or assigns, the right and privilege of using a sufficient quantity of water to carry on a pair of rollers to roll iron and fifteen (15) machines to make nails as adjudged, defined and determined by a judgment of the Supreme Court of the State of New York in an action wherein the Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, et al., were defendants and which said judgment was entered in the office of the Clerk of Jefferson County, New York, on the 3d day of February, 1906, to which said judgment reference is hereby made for a particular description and limitation of said water rights and privileges hereby conveyed. It is hereby understood and agreed that any and all water wheels and all manner of water development now upon said real estate shall be and are hereby deemed to be real estate and to pass under this conveyance;

This grant also includes any right or title said grantor has to the said bulkhead or wing dam abutting said above described real estate.

Parcel 12: That certain lot of land in the Village of Carthage, bounded as follows, viz: Beginning at the angle formed by the intersection of the east margin of Water Street with the south margin of Furnace Street; thence along the southerly margin of the last mentioned street north seventy-two and three-fourths (72-3/4) degrees east two (2) chains sixty-nine (69) links; thence southerly parallel with the first mentioned street one (1) chain seven and one-fourth (7-1/4) links; thence south seventy-two and three-fourths (72-3/4) degrees west two (2) chains sixty-nine (69) links parallel with Furnace Street to the margin of Water Street; thence one (1) chain seven and one-fourth (7-1/4) links to the place of beginning, containing one-fourth (1/4) of an acre, be the same more or less.

Also all that certain piece of land, situate in the aforesaid Village of Carthage, and is designated and known upon a map of said Village as Village Lot No. thirty-eight (38) and is bounded as follows, viz: Northerly by one-fourth (1/4) of an acre conveyed 27th April, 1838, to Bazille Guyot; southerly by the Village Lot No. thirty-seven (37) contracted 5th March, 1836, to Allen Murray; westerly by a line running from the southwesterly corner of said one-fourth (1/4) of an acre conveyed to Bazille Guyot to the northwesterly corner of said Village Lot No. thirty-seven (37) contracted to said Murray, said line being the northeasterly margin of Water Street and easterly by a line

running from the southeasterly corner of said one-fourth (1/4) of an acre conveyed to Bazille Guyot to the northeasterly corner of said Lot No. thirty-seven (37) contracted to Allen Murray containing one-fourth (1/4) of an acre, be the same more or less. Subject to the reservations and conditions contained in the letters patent, whereby these lands were originally granted, and also to all taxes levied or assessed on the premises since 16th March, 1836, and also to all highways thereon.

Excepting and reserving from the above described piece such part thereof as may have heretofore been conveyed by Minor Guyot and wife to the Utica & Black River Railroad Company by deed dated June 21, 1871, recorded June 26, 1871, in Book 188 of Deeds, at page 254, reference being thereto had.

Also all that tract or parcel of land, situate in the Village of Carthage, and is bounded as follows, viz: On the north by the south margin of Furnace Street; on the east by the west margin of Water Street; on the south by the north line of three-one-hundredths (3/100) of an acre formerly contracted to Harry D. Parker and now in possession of the Shortt Manufacturing Company and west by Black River at low water mark, containing one-tenth (1/10) of an acre of land, more or less. Excepting such rights as the People of the State of New York have or may have upon said land and the right of the People of the State of New York to erect and maintain a pier upon said land at the east end of the dam.

Parcel 13: All that tract, piece or parcel of land situate in the Village of Carthage, bounded as follows, viz: On the north by the old nail works lot that was conveyed to Oliver Child by V. LeRay de Chaumont on January 5, 1833, on the west by the west line of said lot extended southerly to the state dam, on the south by the state dam, and on the east by the side dam of the pond which supplies the mills and machinery with water from the drop in the state dam, together with the right to bridge the side dam from Guyot's mill to the above premises and the right to construct a bridge from the above described premises to or near the abutment at the east end of the state dam together with the right to the use of the water sufficient to run a grist mill and sawmill, such use, however, to be subordinate to the rights of prior purchasers and owners of the mills and machinery erected below the above described premises prior to June 13, 1901, the said water rights having been adjudged, defined, and limited by judgment of the Supreme Court made and entered in Jefferson County Clerk's Office February 3, 1906, in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, and others, defendants, to which judgment reference is hereby made; and subject to a written agreement made by and between Frederick Guyot and A. H. Francis

dated November 12, 1889, modifying and defining the boundary line between said lot and the old nail works lot then owned by said Guyot. And also a certain other piece or parcel of land situate in the said Village of Carthage and being part of the land conveyed to Joseph Pratt by George B. Phelps and bounded and described as follows: Beginning at a point on the face side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence along the said extended line north seventy-six (76) degrees east (forty-five [45] feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the westerly margin of Water Street; thence along said margin extended ten (10) feet; thence southwesterly thirty (30) feet about to a point ten (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning, reserving, however, all highways and rights of way legally existing across said property and also reserving any rights the State of New York may have on or over the same.

Being the same premises conveyed to James A. Outterson by the Northern New York Utilities, Inc., by deed recorded in the Jefferson County Clerk's Office October 7, 1918, in Book 354 of Deeds, at page 133.

Parcel 14: All that tract, piece or parcel of land, situate in the Village of Carthage, bounded as follows: North by one-fourth (1/4) of an acre conveyed to A. Walsh 16th May, 1842, east by twenty-one one-hundredths (21/100) of an acre conveyed to P. Matthews 3rd March, 1852, and by seven one-hundredths (7/100) of an acre conveyed to said Matthews 3rd March, 1853, south by one-fourth (1/4) of an acre conveyed to Samuel Hopkins 7th April, 1853, and on the west by the east margin of Water Street, containing one-half (1/2) of an acre more or less, excepting and reserving from the above described one-half (1/2) of an acre so much thereof as has been conveyed to the Utica and Black River Railroad Co. or so much thereof as is used and occupied by said company, the premises hereby conveyed, being the same premises that were conveyed to said John W. Brace by Ephraim H. Myers and wife by deed dated September 29, 1891. Said premises being the same premises conveyed to Clifford P. McDonald and Polly McDonald, his wife, by Eula I. Zehr by deed dated July 20, 1909, and recorded in Jefferson County Clerk's Office July 21, 1909, in Liber 329, page 318.

Also all that other tract or parcel of land, situate in the Village of Carthage, being Village Lot No. thirty-five (35) of said Village and is bounded as follows:

On the west by the east margin of Water Street; on the north by the south line of Village Lot No. thirty-six (36), which line is parallel to the south bounds of one-fourth (1/4) of an acre that was conveyed to Anthony Walsh on the 16th day of May, 1842, and eight (8) rods southerly from it; on the south by Village Lot No. thirty-four (34), and on the east by a line parallel to the east margin of said street and ten (10) rods from it, being four (4) rods on said street, and contains one-fourth (1/4) of an acre, be the same more or less.

Being the same premises conveyed to Clifford P. McDonald and Polly McDonald by Ella Goulett and others by deed dated November 18, 1907, and recorded in Jefferson County Clerk's Office on the 21st day of July, 1909, in Book 329, page 319.

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, its successors and assigns, forever.

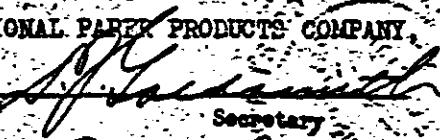
Subject to terms, provisions, covenants and conditions of record.

This deed is made to the Grantee as the sole shareholder of the Grantor in connection with the liquidation, winding up and voluntary dissolution of the Grantor.

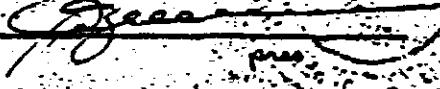
IN WITNESS WHEREOF, the Grantor has caused these presents to be executed by its proper officers thereunto duly authorized.

NATIONAL PAPER PRODUCTS COMPANY.

By


M. McDonald
Secretary

By


G. G. Jackson
Pres.

In the presence of:







THIS IS A LEGAL INSTRUMENT AND SHOULD BE EXECUTED UNDER SUPERVISION OF AN ATTORNEY.
THIS INDENTURE, made the 3rd day of February, nineteen hundred and seventy-four.

BETWEEN RICHARD J. ZECHER, residing in Passaic, New Jersey,
22331

party of the first part, and
CROWN ZELLERBACH CORPORATION, a foreign corporation,
with an office at West End Avenue, Carthage, Jefferson County,
New York.

party of the second part,

WITNESSETH, that the party of the first part, in consideration of -----

-----One Dollar----- Dollars,
lawful money of the United States, and other good and valuable consideration
paid by the party of the second part do hereby grant and release unto the party of the second part,
its successors and assigns

and assigns forever,

ALL THAT TRACT OR PARCEL OF LAND, situate in the Village of Carthage,
County of Jefferson and State of New York, and being bounded and described as follows:
Beginning in the N. W'ly margin of the Street call Park Place at a point 200 ft. S. W'ly
along said margin from the intersection thereof with the S. W'ly margin of West End
Ave., and runs thence from said point of beginning N. 49- $\frac{1}{2}$ deg. W. at right angles
to the margin of Park Place 100 ft. to an X on a rock, thence S. 40- $\frac{1}{2}$ deg. W.
parallel to said Street margin 72 ft. to a stake, thence S. 38 deg. E. parallel to the
N. E. end of the barn and 10 ft. N. E'ly therefrom 40 feet and 5/10 of a foot to a stake,
thence S. 40- $\frac{1}{2}$ deg. W. parallel to said Street margin 11 ft. and 15/100 of a foot to a
stake, thence S. 49- $\frac{1}{2}$ deg. E 60 ft. and 2/10 of a foot to said margin of Park Place
and thence along the same N. 40 deg. 30' E 91 ft. to the place of beginning, containing
195/1000 of an acre be the same more or less.

Being the same premises conveyed by Edwin J. Zecher to Richard J. Zecher
by deed dated March 22, 1970, and recorded in Jefferson County Clerk's Office in
Liber 820 of deeds at page 806 on

Said premises are currently known and referred to as Robinson-Lane, Carthage,
Jefferson County, New York.

R. X. Zecher

00204

This Indenture,

Made the 1st day of
April Nineteen Hundred and Seventy-Eight
Between HAROLD W. JOHNSON, residing at 14 Bridge Street, in the
Village of West Carthage, Jefferson County, New York,

party of the first part, and
CROWN ZELLERBACH CORPORATION, a Corporation of the State
of Nevada, with offices at One Bush Street, San Francisco,
California,

Witness that the party of the first part, in consideration of
ONE Dollar (\$1.00)
lawful money of the United States, and other good and valuable considerations
paid by the party of the second part, does hereby grant and release unto the
party of the second part, its successors and assigns forever, all

THAT TRACT, PIECE OR PARCEL OF LAND, situate in the Village of Carthage, County of Jefferson and State of New York, described as follows: Being a lot and house on the southwest corner of West End Avenue and Park Place (private road leading to the residence of Dr. Robinson), bounded as follows: Beginning at the corner of West End Avenue and Park Place running westerly along West End Avenue 25 feet; thence southerly at right angles with West End Avenue one hundred feet; thence easterly parallel with West End Avenue 25 feet; thence northerly along the westerly line of Park Place one hundred feet to the place of beginning.

ALSO ALL THAT OTHER TRACT OR PARCEL OF LAND, situate as aforesaid and bounded and described as follows, viz: Beginning at a point on West End Avenue 25 feet westerly from the northwest corner of a private road leading from West End Avenue to Dr. Robinson's house called Park Place; thence westerly 25 feet; thence southerly at right angles with West End Avenue 100 feet; thence easterly parallel with West End Avenue 25 feet to the southwest corner of a lot previously deeded to Edward Powers; thence northerly along said lot 100 feet to West End Avenue at the place of beginning.

Being the same premises conveyed by Commissioner, Jefferson County Department of Social Services to Harold W. Johnson and Charles J. Pfaff by deed dated December 1, 1970, and recorded in Jefferson County Clerk's office on December 15, 1970, in Book C26 of Deeds at page 206.

Being the same premises conveyed by Charles J. Pfaff to Harold W. Johnson by deed dated September 22, 1975, and recorded in Jefferson County Clerk's office on September 23, 1975, in Liber 867 of Deeds at page 949.

RECEIVED
10/1/75
10/1/75
10/1/75

CENTRAL
ENGINEERING
RECEIVED

DEC 3 1981

ROUTE TO:

ACTION BY:

THIS INDENTURE, made this 30th day of April, 1973, by and between CROWN ZELLERBACH CORPORATION, a Nevada corporation, hereinafter named "Grantor", and the VILLAGE OF CARTHAGE, hereinafter named "Grantee";

W I T N E S S E T H:

That the Grantor does hereby grant and release unto the Grantee, its successors and assigns forever, all the real property in the County of Jefferson, State of New York, together with the appurtenances and/or the estate and rights of Grantor as described in Exhibit A attached hereto and made a part hereof.

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, its successors and assigns forever.

SUBJECT to terms, provisions, covenants and conditions of record.

ALSO, EXCEPTING THEREFROM, any and all rights pertaining to water, water supply, water usage, dams, flumes and various easements, together with the right of ingress and egress to exercise these rights.

IN WITNESS WHEREUP, the Grantor has caused these presents to be executed by its proper officers thereunto duly authorized.

CROWN ZELLERBACH CORPORATION.



STATE OF CALIFORNIA
City and County of San Francisco

I, MARTIN MONGAN, County Clerk and Clerk of the Superior Court of the State of California, in and for the City and County of San Francisco, which Court is a Court of Record having by law a seal, DO HEREBY CERTIFY: That
GERALDINE D. COHEN

whose name is subscribed to the attached certificate of acknowledgment, proof or affidavit, was at the time of taking said acknowledgment, proof or affidavit, a Notary Public in and for the City and County of San Francisco, duly commissioned and sworn in said City and County, and was as such, an officer of said State, duly authorized by the laws thereof so take and certify the same, as well as to take and certify the proof and acknowledgment of deeds and other instruments in writing to be recorded in said State, and that full faith and credit are and ought to be given to his official acts; that the certificate of such officer is required to be under seal; that the impression of his official seal is not required by law to be on file in the office of the County Clerk; I further certify that I am well acquainted with the handwriting of said notary and verily believe that the signature to the attached certificate is genuine, and further that the annexed instrument is executed and acknowledged according to the laws of the State of California.

In witness whereof, I have hereunto set my hand and annexed the seal of the Superior Court of the State of California, in and for the City and County of San Francisco.

Dated:
JUN 1 1973

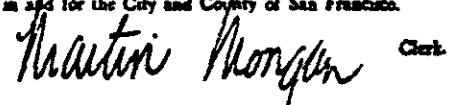

Martin Mongan
Clerk

EXHIBIT A

Parcel 1: All that piece or parcel of land situated in the Village of Carthage, and bounded and described as follows, to wit:

Beginning at the intersection of the southerly margin of Furnace Street with the easterly margin of Water Street (now called Riverside Drive) and runs thence from said beginning point and along the said southerly margin of Furnace Street, north seventy-six (76) degrees east (original description) about one hundred eighty (180) feet to the most westerly corner of lands conveyed by George B. Phelps to the Utica & Black River Railroad Company; thence along the same north twenty and one-half (20-1/2) degrees east sixty and one-half (60-1/2) feet to an angle thereof, a point in the northerly margin of said Furnace Street; thence continuing along said westerly bounds of said railroad lands, north one and one-quarter (1-1/4) degrees east (original description) and being parallel to and twenty (20) feet westerly from the westerly margin of old Mechanic Street, two hundred twelve (212) feet to the northwest corner of said railroad lands; thence along the northerly line thereof, south eighty-one and one-quarter (81-1/4) degrees east about twenty (20) feet to the intersection thereof with the westerly margin of old Mechanic Street; thence along the same north one and one-quarter (1-1/4) degrees east about ninety-four (94) feet to the northeast corner of land conveyed by Ryther & Pringle Company to the Carthage Tissue Paper Mills; thence along the north line thereof, to and along the southerly line of lands conveyed by the said Tissue Paper Mills to said Ryther & Pringle Company, north eighty-six (86) degrees forty-five (45) minutes west one hundred twenty-four and four-tenths (124.4) feet to a point on the bank of Black River and being in the westerly line of lands conveyed by the Antwerp Company to James H. Morris by deed dated September 1, 1665, and known as the Stewart & Bailey Tannery Lot; thence along the westerly line thereof, southerly about sixty (60) feet to the southwest corner thereof, being also a corner of lands conveyed to the Carthage Iron Company; thence in a straight line, westerly about one hundred eighteen (118) feet to the northeast corner of lands conveyed to Joseph Pratt, Dec. 13, 1871; thence along the northerly line thereof westerly to the northeast corner of lands conveyed to said Pratt by deed dated August 9, 1872; thence along the northerly line thereof, westerly forty-nine (49) feet to the northwest corner thereof, a point in range with the easterly side of the Guyot Grist Mill (formerly); thence at right angles and along the range of said easterly side of said mill, southerly sixty-six (66) feet to the northeast corner of said Grist Mill or to the waters edge; thence along the same, westerly, northerly and westerly to a point in extension of the easterly face of the Pump House belonging to the Village of Carthage; thence along said extended line southerly about eighty-eight (88) feet to the northeast corner of said pump house; thence along the front or east face of said pump house, south four and one-quarter (4-1/4)

degrees east twenty-seven and one-tenth (27.1) feet to the southeast corner of said pump house; thence along the northerly line of a strip of land twenty (20) feet in width referred to in a deed from Joseph V. Guyot to the Village of Carthage, dated April 5, 1893, north eighty-six (86) degrees fifteen (15) minutes east (in continuation of the south face of said pump house) thirty-six and five-tenths (36.5) feet to a cross cut on the top of an iron pipe, and angle; thence continuing along said twenty (20) foot strip, south fifty-three (53) degrees twenty-seven (27) minutes east thirty-five and two-tenths (35.2) feet to the easterly face of the side or wing dam; thence along the same, southerly to the north face of the state dam and thence along the same easterly to the abutment at the end of the said dam and thence easterly to the place of beginning.

Excepting from the above described parcel a certain piece or parcel of land situate in the Village of Carthage, and being part of the land conveyed to Joseph Pratt by George F. Phelps, bounded and described as follows: Beginning at a point on the face side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence along the said extended line north seventy-six (76) degrees, (forty-five (45) feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the westerly margin of Water Street; thence along said margin extended ten (10) feet thence southwesterly thirty (30) feet about to a point ten (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning.

Parcel 2: That certain tract or parcel of land situate in the Village of Carthage, and bounded and described as follows, viz: Southerly by lot owned by Francis S. Loomis, easterly by the west margin of Water Street, westerly by Black River and northerly by a line drawn from Water Street to Black River parallel to the westerly extension of the southerly line of one-half (1/2) acre conveyed by Mary F. Stewart to Shortt Manufacturing Company by deed dated January 3, 1876, said line to be drawn four (4) rods northerly from said extended line.

Parcel 3: All that certain piece or parcel of land situate in the Village of Carthage, and bounded as follows, viz: Beginning at a point in the north line of a water lot known as the old Nail Factory lot now owned by V. Le Ray de Cheumont, a point on west side of the dam or bulkhead that forms the bond for B. Guyot's mill and the nail and axe factories and runs thence along the north line of said factory lot westwardly to the northwest corner thereof; thence northwardly to the southwest corner of a water lot conveyed to Nathan Starkes on the 17th April, 1853; thence along the south line thereof eastward to the southeast corner thereof, thence eastwardly to a point in the west side of said bulkhead or dam and south side of the flume leading from said dam or bulkhead to the axe factory, which factory is on said lot conveyed to said Starkes, thence along the west side of said dam or bulkhead southwardly to the place of beginning, containing nine hundredths (9/100) of an acre be the same more or less,

Also all that other tract or parcel of land and right of way reserved and excepted to the grantors in a certain deed bearing date the 27th day of April, 1904, executed by Joseph V. Guyot and Mary, his wife, to Wooster C. Ball, William D. Ball and Arthur A. Ball, and which deed was recorded in the office of the Clerk of Jefferson County, New York, on the 9th day of May, 1904, in Liber 310 of Deeds at page ____ and therein described as follows, viz: Beginning at the waters edge which point marks the northcasterly corner of a lot conveyed to Nathan Starks, thence along the easterly side of said Starks lot to a point in the northerly line of a lot conveyed and now owned by the Village of Carthage, called the Pump lot, thence easterly along the northerly line of said Pump lot to the northeast corner of said Pump House Lot, thence northerly on a line parallel with the first line above described to the waters edge, thence westerly along the waters edge to the place of beginning. Also a right of way one (1) rod wide along the westerly line of the lands hereby sold from the northerly line of the Pump House Lot prolonged to the waters edge northerly, to be used in common by both parties hereto (said deed last above referred to). The above described real estate is a portion of certain lots and tracts of land devised by the last will and testament of Joseph V. Guyot to Mary Guyot, his wife, during the term of her natural life and at her death to the parties of the first part, Belle Oberly, Harriet A. Oberly and Minnie and Jennie Oberly, the said Minnie Oberly and Jennie Oberly having died without issue and the said Belle Oberly and Harriet A. Oberly being the sole heirs at law of the said Minnie Oberly and Jennie Oberly, deceased.

Parcel 4: All that tract or parcel of land, situate, lying and being within the boundaries of that portion of Water Street in the Village of Carthage, beginning at the intersection of the northerly margin Spring Street with the easterly margin of Water Street and running thence along said margin northerly four hundred seventy and four-tenths (470.4) feet to the southerly margin of Furnace Street; thence along said margin of Furnace Street extended westerly forty-nine and five-tenths (49.5) feet to a point in the westerly margin of Water Street; thence along said westerly margin southerly four hundred seventy (470) feet to a point in said margin where it intersects with the northerly margin of Spring Street extended; thence easterly along the northerly margin of Spring Street extended forty-nine and one-half (49-1/2) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Water Street between the northerly margin of Spring Street and the southerly margin of Furnace Street.

Also all that other tract or parcel of land, situate, lying and being within the boundaries of that part of Furnace Street in the Village of Carthage, described as follows:

Beginning at a point in the southerly margin of Furnace Street at the intersection of said margin with the westerly margin of Water Street and running thence along said margin forty-nine and five-tenths (49.5) feet to the intersection of the easterly margin of Water Street with the said margin; thence along said southerly

margin one hundred seventy-seven and fifty-five one-hundredths (177.55) feet to the westerly limits of the right of way of the New York Central and Hudson River Railroad; thence northerly along said railroad right of way forty-nine and one-half (49-1/2) feet to the northerly margin of Furnace Street; thence along said northerly margin westerly two hundred twenty-seven (227) feet to the intersection of said margin with the westerly margin of Water Street extended; thence southerly along such extended margin forty-nine and five-tenths (49.5) feet to the place of beginning. It being hereby intended to convey all the land lying within the boundaries of Furnace Street between the westerly margin of Water Street extended and the right of way of the New York Central and Hudson River Railroad.

Parcel 5: All that certain piece or parcel of land situate in the Village of Carthage, Town of Wilna, beginning on the dam opposite the old Nail Factory as and where it stood and was located before its destruction by floods, fourteen (14) feet northerly from the point where a line drawn along the outside of the north wall of said old Nail Factory strikes said dam; thence to a point in the range of the west wall of said old factory, ten (10) feet nine (9) inches from the point which was the northwest corner of said old factory; thence westerly in the same line sixteen (16) feet four (4) inches; thence parallel with the line of the former old west wall of said old factory to a point where a line drawn parallel to the line of the former south wall of said factory will pass sixteen (16) feet from it; thence along said line easterly till it strikes a point in the line of the old dam as it stood before the erection of the present state dam; thence continuing easterly along the line of said old dam to the side due and thence northerly along the same to the place of beginning, being the same lot of land and not otherwise different which was sold by perpetual lease by V. & J. LeRoy de Chaumont to Oliver Child by an instrument of conveyance dated 5th January, 1855, to which reference may be made for further particulars.

And this conveyance of the above described real estate is made subject to any changes or alterations in the boundary lines of the said above described tract or parcel of land which may have been made, if any, by a certain instrument or agreement bearing date the 11th day of November, 1839, which said instrument or agreement was recorded in the Office of the Clerk of Jefferson County, New York, on the 6th day of April, 1890, in Liber 150 at page 103 and which said agreement or instrument establishes the division line between the above described tract of land and a certain water lot adjoining said above described tract of land on the southerly side thereof and conveyed to Elizur Bruce Stevens by the Directors of the Company of American Acres on the 1st day of September, 1869, and any part or parcel of the above described tract or parcel of real estate which may have been segregated from said above described tract or parcel of real estate by said agreement hereinbefore mentioned is excepted and expressly reserved from the operation of this deed;

Parcel 6: That certain lot of land in the Village of Carthage, bounded as follows, viz: Beginning at the angle formed by the intersection of the east margin of Water Street with the south margin of Furnace Street; thence along the southerly margin of the last mentioned street north seventy-two and three-fourths ($72\frac{3}{4}$) degrees east two (2) chains sixty-nine (69) links; thence southerly parallel with the first mentioned street one (1) chain seven and one-fourth ($7\frac{1}{4}$) links; thence south seventy-two and three-fourths ($72\frac{3}{4}$) degrees west two (2) chains sixty-nine (69) links parallel with Furnace Street to the margin of Water Street; thence one (1) chain seven and one-fourth ($7\frac{1}{4}$) links to the place of beginning, containing one-fourth (1/4) of an acre, be the same more or less.

Also all that certain piece of land, situate in the aforesaid Village of Carthage, and is designated and known upon a map of said Village as Village Lot No. thirty-eight (38) and is bounded as follows, viz: Northerly by one-fourth (1/4) of an acre conveyed 27th April, 1839, to Bazille Guyot; southerly by the Village Lot No. thirty-seven (37) contracted 5th March, 1836, to Allen Murray; westerly by a line running from the southwesterly corner of said one-fourth (1/4) of an acre conveyed to Bazille Guyot to the northwesterly corner of said Village Lot No. thirty-seven (37) contracted to said Murray, said line being the north-easterly margin of Water Street and easterly by a line running from the southeasterly corner of said one-fourth (1/4) of an acre conveyed to Bazille Guyot to the northeasterly corner of said Lot No. thirty-seven (37) contracted to Allen Murray containing one-fourth (1/4) of an acre, be the same more or less. Subject to the reservations and conditions contained in the letters patent, whereby these lands were originally granted, and also to all taxes levied or assessed on the premises since 16th March, 1836, and also to all highways thereon.

Excepting and reserving from the above described piece such part thereof as may have heretofore been conveyed by Minor Guyot and wife to the Utica & Black River Railroad Company by deed dated June 21, 1871, recorded June 26, 1871, in Book 188 of Deeds, at page 254, reference being thereto had.

Also all that tract or parcel of land, situate in the Village of Carthage, and is bounded as follows, viz: On the north by the south margin of Furnace Street; on the east by the west margin of Water Street; on the south by the north line of three one-hundredths ($3/100$) of an acre formerly contracted to Harry D. Parker and now in possession of the Snort Manufacturing Company and west by Black River at low water mark, containing one-tenth (1/10) of an acre of land, more or less. Noting such rights as the People of the State of New York have or may have upon said land and the right of the People of the State of New York to erect and maintain a pier upon said land at the east end of the dam.

Parcel 7: All that tract, piece or parcel of land situate in the Village of Carthage, bounded as follows, viz: On the north by the old nail works lot that was conveyed to Oliver Child by V. LeRay de Chaumont on January 5, 1832, on the west by the west line of said lot extended southerly to the state dam, on the south by the state dam, and on the east by the side dam of the pond which supplies the mills and machinery with water from the drop in the state dam, together with the right to bridge the side dam from Guyot's mill to the above premises and the right to construct a bridge from the above described premises to or near the abutment at the east end of the state dam together with the right to the use of the water sufficient to run a grist mill and sawmill, such use, however, to be subordinate to the rights of prior purchasers and owners of the mills and machinery erected below the above described premises prior to June 18, 1901, the said water rights having been adjudged, defined, and limited by judgment of the Supreme Court made and entered in Jefferson County Clerk's Office February 5, 1906, in an action wherein Carthage Tissue Paper Mills was plaintiff and the Village of Carthage, and others, defendants, to which judgment reference is hereby made, and subject to a written agreement made by and between Frederick Guyot and A. E. Francis dated November 12, 1889, modifying and defining the boundary line between said lot and the old nail works lot then owned by said Guyot. And also a certain other piece or parcel of land situate in the said Village of Carthage and being part of the land conveyed to Joseph Pratt by George B. Phelps and bounded and described as follows: Beginning at a point on the free side of the abutment at the easterly end of the state dam and at a point where the southerly margin of Furnace Street extended intersects said abutment and runs thence along the said extended line north seventy-six (76) degrees east (forty-five [45] feet to a hole and iron pin in the rock) seventy-two (72) feet to a point in the westerly margin of Water Street; thence along said margin extended ten (10) feet; thence southwesterly thirty (30) feet about to a point ten (10) feet at right angles northwesterly from the hole and iron pin; thence northwesterly ten (10) feet to an iron pin in the rock; and thence southwesterly about forty (40) feet and parallel with the first line, to the edge of the pond, and thence southerly twenty (20) feet to the place of beginning, reserving, however, all highways and rights of way legally existing across said property and also reserving any rights the State of New York may have on or over the same.

Being the same premises conveyed to James A. Outerson by the Northern New York Utilities, Inc., by deed recorded in the Jefferson County Clerk's Office October 7, 1918, in Book 354 of Deeds, at page 156.

Parcel 8: All that tract, piece or parcel of land, situate in the Village of Cartage, bounded as follows: North by one-fourth (1/4) of an acre conveyed to A. Walsh 16th May, 1842, east by twenty-one one-hundredths (21/100) of an acre conveyed to P. Matthews 3rd March, 1852, and by seven one-hundredths (7/100) of an acre conveyed to said Matthews 3rd March, 1853, south by one-fourth (1/4) of an acre conveyed to Samuel Hopkins 7th April, 1853, and on the west by the east margin of Water Street, containing one-half (1/2) of an acre more or less, excepting and reserving from the above described one-half (1/2) of an acre so much thereof as has been conveyed to the Utica and Black River Railroad Co. or so much thereof as is used and occupied by said company, the premises hereby conveyed, being the same premises that were conveyed to said John W. Brace by Epiphania M. Myers and wife by deed dated September 29, 1891. Said premises being the same premises conveyed to Clifford P. McDonald and Polly McDonald, his wife, by Eula I. Zehr by deed dated July 20, 1909, and recorded in Jefferson County Clerk's Office July 21, 1909, in Liber 329, page 618.

APPENDIX II

GOVERNMENT AGENCY MAILING LIST

DEPARTMENT OF THE ARMY
Buffalo District,
Corps. of Engineers
1776 Niagara Street
Buffalo, New York 14207

NEW YORK STATE
Department of Environmental
Conservation, Division of Fish and Wildlife
50 Wolf Road
Albany, New York 12233

UNITED STATES
Department of the Interior
Regional Director, Region 5
Fish and Wildlife Service
One Gateway Center
Suite 700
Newton Corner, Mass. 02158

NEW YORK STATE
Parks and Recreation
Agency Building #1
Empire State Plaza
Albany, New York 12228
Attn: State Historic
Preservation Officer

UNITED STATES
Department of the Interior
Fish and Wildlife Service
100 Grange Place
Room 202
Cortland, New York 13045

STATE OF NEW YORK
Department of Public Service
Empire State Plaza
Albany, New York 12223

NEW YORK STATE
Parks and Recreation
Agency Building #1
Empire State Plaza
Albany, New York 12238
Attn: Director State Recreation Agency

UNITED STATES
Department of the Interior
Heritage Conservation and
Recreation Service
Northeast Region
Federal Office Building
600 Arch Street
Room 9310
Philadelphia, Pennsylvania 19106

REGIONAL ADMINISTRATOR, REGION II
United States
Environmental Protection Agency
Room 1009
26 Federal Plaza
New York, New York 10007

CHAIRMAN
Great Lakes Basin Commission
3475 Plymouth Road 48105
P.O. Box 999 Mail: 48106
Ann Arbor, Michigan

MR. PETER BERLE
Commissioner
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

DIRECTOR, NORTHEAST REGION
National Marine Fisheries Service
NOAA
14 Elm Street
Federal Building
Gloucester, Massachusetts 01930
Attn: Mr. Allen E. Peterson, Jr.

MR. WILLIAM P. PATTERSON
Regional Environmental Officer
Department of the Interior
15 State Street
Boston, Massachusetts 02109

AREA MANAGER
U.S. Fish and Wildlife Service
100 Chestnut Street
Harrisburg, PA 17101

REGIONAL DIRECTOR
National Park Service
143 South Third Street
Philadelphia, PA 19106

DISTRICT CHIEF
U.S. Geological Survey
P.O. Box 1350
Albany, New York 12201

APPENDIX III

LETTERS TO GOVERNMENT AGENCIES

SUBJECT: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Sir:

Crown Zellerbach Corporation is considering a hydroelectric generation expansion at our facility located in Carthage, N.Y. A description of this project (Exhibit A) and various drawings and graphs are enclosed.

We are preparing an application for exemption of this project from the licensing requirements of Part I of the Federal Power Act. In Section 4.107 of Title 18, paragraph e, the applicant is required to obtain assistance from your agency in preparing the required information relating to the environmental impact of this project. Exhibit E, enclosed, is a preliminary draft of the description that we will submit to satisfy this requirement.

We hope that this project does not present any problems that are of concern to your department. We will need a statement from your office commenting on our project.

Your assistance is appreciated.

Very truly yours,

R.L. Witter:rp

Enclosures: EXHIBIT A
EXHIBIT E
FIGURES 1, 2, 3, 7, 8, 9

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage
P.R. Kohn, SFO 1606



CrownZellerbach Central Engineering

October 27, 1981

New York State
Department of Environmental Conservation
Division of Fish & Wildlife
50 Wolf Road
Albany, New York 12233

SUBJECT: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Sir:

Crown Zellerbach Corporation is considering a hydroelectric generation expansion at our facility located in Carthage, N.Y. A description of the project (Exhibit A) and various drawings and graphs are enclosed.

We are preparing an application for exemption of this project from the licensing requirements of Part I of the Federal Power Act. In Section 4.107 of Title 18, paragraph e, the applicant is required to obtain assistance from your agency in preparing the required information relating to the environmental impact of this project. Exhibit E, enclosed, is a preliminary draft of the description that we will submit to satisfy this requirement.

We hope that this project does not present any problems that are of concern to your department. We are most interested in your comments regarding endangered species and possible conflict with fish and wildlife habitat. We will need a statement from your office commenting on our project.

Your assistance is appreciated.

Very truly yours,

R. L. Witter

R.L. Witter:rp

Enclosures: EXHIBIT A
EXHIBIT E
FIGURES 1, 2, 3, 7, 8, 9

cc: L. Moncini, CEO
C.R. Partridge, CEO

R.A. Little, CEO
T.C. James, Carthage
P.R. Kohn, SFO 1606



CrownZellerbach
Central Engineering

October 27, 1981

United States Department
of the Interior
Regional Director, Region 5
Fish & Wildlife Service
One Gateway Center, Suite 700
Newton Corner, Massachusetts 02158

SUBJECT: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Sir:

Crown Zellerbach Corporation is considering a hydroelectric generation expansion at our facility located in Carthage, N.Y. A description of this project (Exhibit A) and various drawings and graphs are enclosed.

We are preparing an application for exemption of this project from the licensing requirements of Part I of the Federal Power Act. In Section 4.107 of Title 18, paragraph e, the applicant is required to obtain assistance from your agency in preparing the required information relating to the environmental impact of this project. Exhibit E, enclosed, is a preliminary draft of the description that we will submit to satisfy this requirement.

We hope that this project does not present any problems that are of concern to your department. We are most interested in your comments regarding Federally listed or proposed endangered species. We will need a statement from your office commenting on our project.

Your assistance is appreciated.

Very truly yours,

Raymond L. Witter

R.L. Witter:rp

Enclosures: EXHIBIT A
EXHIBIT E
FIGURES 1, 2, 3, 7, 8, 9

cc: L. Moncini, CEO
C.R. Partridge, CEO

R.A. Little, CEO
T.C. James, Carthage
P.R. Kohn, SFO 1606



CrownZellerbach
Central Engineering

October 27, 1981

New York State
Parks & Recreation
Agency Building L
Empire State Plaza
Albany, New York 12238

Attn: State Historic Preservation Officer

Subject: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Sir:

Crown Zellerbach Corporation is considering a hydroelectric generation expansion at our facility located in Carthage, N.Y. A description of this project (Exhibit A) and various drawings and graphs are enclosed.

We are preparing an application for exemption of this project from the licensing requirements of Part I of the Federal Power Act. In Section 4.107 of Title 18, paragraph e, the applicant is required to obtain assistance from your agency in preparing the required information relating to the environmental impact of this project. Exhibit E, enclosed, is a preliminary draft of the description that we will submit to satisfy this requirement.

We hope that this project does not present any problems that are of concern to your department. We are most interested in your comments regarding the effect our project may have upon cultural resources included in or eligible for inclusion in the National Register of Historic Places. We will need a statement from your office commenting on our project.

Your assistance is appreciated.

Very truly yours,

R.L. Witter:rp

R.L. Witter

Enclosures: EXHIBIT A
EXHIBIT E
FIGURES 1, 2, 3, 7, 8, 9



CrownZellerbach
Central Engineering

October 27, 1981

United States Department
of the Interior
Fish and Wildlife Service
100 Grange Place, Room 202
Cortland, New York 13045

SUBJECT: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Sir:

Crown Zellerbach Corporation is considering a hydroelectric generation expansion at our facility located in Carthage, N.Y. A description of this project (Exhibit A) and various drawings and graphs are enclosed.

We are preparing an application for exemption of this project from the licensing requirements of Part I of the Federal Power Act. In Section 4.107 of Title 18, paragraph e, the applicant is required to obtain assistance from your agency in preparing the required information relating to the environmental impact of this project. Exhibit E, enclosed, is a preliminary draft of the description that we will submit to satisfy this requirement.

We hope that this project does not present any problems that are of concern to your department. We are most interested in your comments regarding any possible conflict with fish and wildlife habitat. We will need a statement from your office commenting on our project.

Your assistance is appreciated.

Very truly yours,

R.L. Witter

R.L. Witter:rp

Enclosures: EXHIBIT A
EXHIBIT E
FIGURES 1, 2, 3, 7, 8, 9

cc: L. Moncini, CEO
C.R. Partridge, CEO

R.A. Little, CEO
T.C. James, Carthage
P.R. Kohn, SFO 1606



CrownZellerbach
Central Engineering

November 3, 1981

UNITED STATES
Department of the Interior
Office of Environmental Project Review
15 State Street
Boston, Massachusetts 02109

Attn: Mr. William Patterson

Re: CEO File 1764

Dear Mr. Patterson:

Thank you for your prompt response to my letter dated 27th October 1981. At the same time that I mailed the letter to you I also sent similar letters to a number of other Federal and State agencies. The specific offices that I contacted are shown on the attached list. Out of the four addresses contained in your letter, only one appears on my list. I intend to immediately contact the other three.

We are presently in the initial stages of preparing the environmental report for our application. When we have received replies from all the offices we have contacted and have completed our environmental report should we send a copy to you for review?

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING OFFICE

R.L. Witter

R.L. Witter:kz
Attach. (3 Pages)
ccs: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

P.R. Kohn, SFO, 1606

T.C. James, Carthage

6363 Airport Way South, Seattle WA 98108

Phones: (206) Purchasing 764-5100, Engineering 764-5200. Cable: CrownZ CEO Sea TWX 9104442119



CrownZellerbach
Central Engineering

November 5, 1981

NEW YORK STATE
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Attn: Mr. Murdock MacKenzie

Re: CEO File 1764
Application for Exemption
Hydro Electric Generation Expansion Project
Carthage Mill
CZ Corporation

Dear Mr. MacKenzie:

Enclosed you will find fourteen (14) copies of the government agency inquiry letter that I mailed last week. These copies are supplied at your request for use in co-ordinating the environmental review process for our project. I have also enclosed a list of all government offices to which this package of information has been sent.

As I mentioned to you on the phone this morning there are two (2) specific pieces of information which I need from your office. These are:

- 1) Fish Species Survey on the Black River in the vicinity of Carthage, New York.
- 2) The NYSDEC classification of the Black River in the vicinity of Carthage, New York with regard to water quality. I would also appreciate a description of the water classification categories.

I would appreciate receiving these two (2) pieces of information as soon as possible so that they may be included in our exemption application.

I will plan to contact you periodically as you requested. Thank you for your help.

NEW YORK STATE
Department of Environmental Conservation
Page 2 - Nov. 5, 1981
Mr. Mackenzie

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING OFFICE

R. Witter

R.L. Witter:kz

Encls.

ccs: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage
P.R. Kohn, SFO, 1606



CrownZellerbach
Central Engineering

November 13, 1981

United States Department of Interior
Fish and Wildlife Service
100 Grange Place Room 202
Cortland, New York 13045

Attention: Mr. Peter Petokas

Reference: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Petokas:

In response to your suggestion I am enclosing with this letter a copy of our Exhibit E, Environmental Report. This is a rough draft and is incomplete, however I feel it represents what we will submit with the final application. I am also including copies of replies that we have received from other government agencies to date.

I will call you on either November 20 or November 23 to see if you have any comments regarding this attachment.

Thank you for your comments and assistance.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING OFFICE

R.L. Witter:dp

R.L. Witter

Attachment

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage
P.R. Kohn, SFO 1606

R.L.W

CrownZellerbach

Carthage Mill

November 19, 1981

New York State Parks & Recreation Agency
Building #1
Empire State Plaza
Albany, New York 12238

Attn: Ms. Lenor Kuwik

Subject: Application for Exemption
Hydroelectric Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Ms. Kuwik:

Enclosed you will find nine polaroid pictures of our manufacturing site in Carthage, New York. These photographs are being sent in response to your request during our telephone discussion on November 17, 1981. The photographs are described as follows:

1. Panorama of the mill site looking northeast from across the Black River. The Crown Zellerbach mill site is on the far side of the river in the photograph. The present power house is behind the peak of the roof in the right center.
2. Same as photograph No. 1 taken from a closer vantage point.
3. Powerhouse and tailrace of existing generating plant looking upriver.
4. Same as photograph No. 2 taken from a closer vantage point.
5. South bank of tailrace at power house. The Black River is over the bank to the right in the photograph.
6. Tailrace looking downstream (northwest) from the power house.
7. Looking from the headgates across the top of the waterbox with the tailrace in the background. This photograph is looking in the same direction as No. 6.
8. Looking south across the waterbox, headgates to the waterbox appear on the left, West End Dam is in the background, just to the right of the headgate structure.
9. Headgates at entrance to waterbox, looking west.

CrownZellerbach
Carthage Mill

November 19, 1981

Page 2

New York State Parks & Recreation Agency

If these photographs do not supply the information you are looking for, we will be happy to provide more. I will contact you to get your comments sometime next week.

Very truly yours,

CROWN ZELLERBACH

R. L. Witter

R. L. Witter

Enclosures: 9 photographs

cc: L. Moncini - CEO
C. R. Partridge - CEO
R. A. Little - CEO
T. C. James - Carthage
P. R. Kohn - SFO - 1606
M. MacKenzie - NYSDEC, Albany



CrownZellerbach
Central Engineering

December 1, 1981

NEW YORK STATE PARKS AND RECREATION AGENCY
Building #1 Empire State Plaza
Albany, New York 12238

Attn: Ms. Lenore Kuwik

Re: CEO File 1764
Application for Exemption
Hydro Electric Generation
Expansion Project
Carthage Mill
CZ Corporation

Dear Ms. Kuwik:

As we discussed last week I am forwarding a recent aerial photo of the Carthage mill site. If in the future you find that you have no further use for this photograph we would appreciate getting it back. Please let me know if there is any other information that you need. When do you expect that a reply from your office regarding this matter will be forthcoming?

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING OFFICE

R.L. Witter

R.L. Witter:kz

Encls. (1 Photo)

ccs: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage
P.R. Kohn, SFO, 1606
Mr. M. MacKenzie, Albany, New York



CrownZellerbach
Central Engineering

December 8, 1981

Department of the Army
Buffalo District
Corps of Engineers
1776 Niagara St.
Buffalo, New York 14207

Attention: Mr. Brad Price

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Price:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Although we don't anticipate a formal response from your office regarding this transmittal, we would welcome any comments or suggestions you may have after reviewing it.

Please note that we have stated in the application our intent to obtain all necessary U.S. Army Corps of Engineers permits as noted in your letter of 17 November 1981.

We appreciate the assistance you have provided and your prompt response to our initial inquiry.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter

✓R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton w/l
6363 Airport Way S, Seattle WA 98108



CrownZellerbach
Central Engineering

December 8, 1981

New York State
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Attention: Mr. M. MacKenzie

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. MacKenzie:

Enclosed please find two copies of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. These copies are being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

In making our initial distribution of the project description to interested state agencies on 27 October 1981, we sent a copy to your office, in care of Mr. Peter Berle and a copy addressed to the NYSDEC Division of Fish and Wildlife. One of the copies enclosed is for the Fish and Wildlife group and the other copy is for you. I will be calling you on Friday, 11 December 1981, at which time you can tell me if you need additional copies.

We are looking forward to receiving your department's comments on our proposed project. We appreciate the efforts that you have already made in our behalf.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter

R.L. Witter:rp

Enclosure (2)



CrownZellerbach
Central Engineering

December 8, 1981

New York State
Parks & Recreation Agency
Building #1
Empire State Plaza
Albany, New York 12238

Attention: Ms. Lenor Kuwik

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Ms. Kuwik:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

It is our understanding that your comments on our application will be conveyed through Mr. MacKenzie's office. If, after reviewing the enclosed document, you have any questions or require additional information, I will be happy to assist you. We appreciate the efforts you have already made in our behalf in reviewing our proposed project.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R. L. Witter

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage, w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton Power Co. w/l



CrownZellerbach Central Engineering

December 8, 1981

United States Department of the
Interior Fish and Wildlife Service
100 Grange Place, Room 202
Cortland, New York 13045

Attention: Mr. Peter J. Petokas

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Petokas:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Please note that we have addressed those questions listed in your letter of 13 November 1981 in our application. It is our understanding that you will provide written comments after reviewing the enclosed document. It is our intent to submit these comments to FERC as part of our application.

Thank you for the assistance you have provided so far in this review process.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

✓ R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton Power Co. w/l



CrownZellerbach
Central Engineering

December 8, 1981

State of New York
Department of Public Service
Three Rockefeller State Plaza
Albany, New York 12223

Attention: Mr. Samuel R. Madison

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Madison:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Although we don't anticipate a formal response from your office regarding this transmittal, we would welcome any comments or suggestions you may have after reviewing it.

We appreciate the assistance you have provided and your prompt response to our initial inquiry.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R. L. Witter

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/1
P.R. Kohn, SFO 1606 w/1
K.F. Corneau, Triton Power Co. w/1



CrownZellerbach
Central Engineering

December 8, 1981

New York State Parks & Recreation
Agency Building 1
Empire State Plaza
Albany, New York 12228

Attention: Mr. Roy Roberts

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Roberts:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

As stated in the application, we will consider provision of boat access and public parking as suggested in your letter of 16 November 1981. Our representatives will be prepared to review this aspect with you during the site visit to be scheduled in the near future.

Thank you for your assistance in reviewing our proposed project.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter:rp

R-L. Witter

Enclosure(1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage, w/1
P.R. Kohn, SFO 1606 w/1
K.F. Corneau, Triton Power Co. w/1



CrownZellerbach
Central Engineering

December 8, 1981

United States Department of the Interior
Heritage Conservation and Recreation Service
Northeast Region
Federal Office Building
500 Arch Street, Room 9310
Philadelphia, Pennsylvania 19106

Attention: Mr. Earl Wade

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Wade:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

We are looking forward to receiving your department's written comments on our proposed project. It is our understanding that since the H.C. & R.S. and the National Park Service offices have merged, that you will comment for both offices. Based on this we are not sending any correspondence regarding this project to the Third Street address for the National Park Service in Philadelphia.

Thank you for the assistance you have provided to date.

Very truly yours,

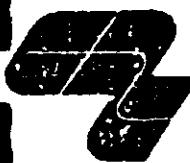
CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton Power Co. w/l



CrownZellerbach
Central Engineering

December 8, 1981

United States Environmental Protection
Agency Region II
26 Federal Plaza
New York, N.Y. 10278

Attention: Ms. Barbara Pastalove

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Ms. Pastalove,

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Please note in our application that we have addressed your concerns about lack of flow over the dam and the nature of the spoil material to be removed. We intend to comply with NYSDEC and U.S. Fish and Wildlife recommendations on these matters.

Although we don't anticipate a formal response from your office regarding this transmittal, we would welcome any comments or suggestions you may have after reviewing it.

We appreciate your reviewing our initial submittal and your prompt written response which we have received.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton Power Co. w/l



CrownZellerbach
Central Engineering

December 8, 1981

National Marine Fisheries Service, NOAA
14 Elm Street
Federal Building
Gloucester, Massachusetts 01930

Attention: Mr. Doug Beach

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Beach:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

We have noted in our application that there are no marine resources in the Black River that are of concern to your department. We are waiting for your confirmation of this by letter.

Thank you for the comments that you have already provided.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R-L. Witter

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage, w/l
P.R. Kohn, SFO 1606 w/l
K.F. Corneau, Triton Power Co. w/l



CrownZellerbach
Central Engineering

December 9, 1981

United States Department of the Interior
Fish and Wildlife Service
100 Chestnut St., Room 310
Harrisburg, Pennsylvania 17101-2591

Attention: Mr. Norman R. Chupp

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Chupp:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Please note that we have included in our application a copy of the information you provided on threatened or endangered species. Although we don't anticipate a formal response from your office regarding this transmittal, we would welcome any comments or suggestions you have after reviewing it.

We appreciate the information you have provided and your prompt response to our initial inquiry.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter:rp

R. L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/1
P.R. Kohn, SFO 1606 w/1
K.F. Corneau, Triton Power Co.



CrownZellerbach
Central Engineering

December 9, 1981

United States Department of the Interior
Geological Survey
Water Resources Division
P.O. Box 1350
Albany, New York 12201

Attention: Mr. William B. Gannon

Subject: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. Gannon:

Enclosed please find a copy of the final draft of our application for exemption from licensing for our small hydroelectric power generating project located at our facility in Carthage, New York. This copy is being sent to you for information prior to our formal submittal to the Federal Energy Regulatory Commission.

Although we don't anticipate a formal response from your office regarding this transmittal, we would welcome any comments or suggestions you may have after reviewing it.

We appreciate the information you have provided and your prompt response to our initial inquiry.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING

R.L. Witter:rp

R.L. Witter:rp

Enclosure (1)

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO
T.C. James, Carthage w/1
P.R. Kohn, SFO 1606 w/1
K.F. Corneau, Triton Power Co.



CrownZellerbach
Central Engineering

December 11, 1981

New York State
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Attention: Mr. M. MacKenzie

Reference: Application for Exemption Hydroelectric
Generation Expansion Project
Carthage Mill
Crown Zellerbach Corporation
CEO File 1764

Dear Mr. MacKenzie:

As you are well aware, timing is a very critical aspect of our application for exemption at our Carthage mill site. You have explained to me the difficult position your department is in right now, faced with reviewing the large number of applications that have been submitted. In addition, we are concerned that weather may delay or postpone the site visit that has tentatively been scheduled. We fear that by the time we receive your final complete response on our project we may find ourselves at a disadvantage.

Over the past month we have made every effort to learn what concerns all interested government agencies have. A number of agencies have already responded to us, and we have addressed all of these concerns in our application. We are eager to file our application, using the information we have and any tentative comments which your office can give us. We will address your additional concerns when we have your final response, and we intend to submit your final response to FERC to be included with our original application.

We are sympathetic to the difficult position you and other state offices find themselves in. However, if you are able to respond with partial comments, as I described above, we feel it would be of great value to our project.

Thank you again for your help.

Very truly yours,

CROWN ZELLERBACH CORPORATION
CENTRAL ENGINEERING OFFICE

R. L. Witter

R.L. Witter:dp

cc: L. Moncini, CEO
C.R. Partridge, CEO
R.A. Little, CEO

T.C. James, Carthage
P.R. Kohn, SFO 1606
K.F. Corneau, Triton Power Co.

APPENDIX IV

REPLIES FROM GOVERNMENT AGENCIES



DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207

NCBED-HI

17 November 1981

Mr. R. L. Witter
Crown Zellerbach
Central Engineering
6363 Airport Way South
Seattle, WA 98108

Dear Mr. Witter:

This is in reference to your FERC application for exemption from licensing of the Carthage Mill Dam.

It does not appear that the proposed project would affect the navigability of the river or be in conflict with any U.S. Army Corps of Engineers Projects either existing or proposed for authorization.

Please note, however, that whether or not an exemption is awarded, any construction which would result in the discharge of dredged or fill material in or affecting the waters or wetlands at the project would require a Department of the Army Permit under Section 404 of the Federal Clean Water Act.

If you have any questions in regard to the above Section 404 process, please contact Mr. Frank Henry of our Permit Section at (716) 876-5454, extension 2313.

Sincerely,

Bradford S. Price
BRADFORD S. PRICE, P.E.
Chief, Lower Great Lakes
Hydrologic Investigations Section



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
100 Grange Place
Room 202
Cortland, New York 13045

R.L.W.

NOV 23 1981

NOV 16 1981

November 13, 1981

Mr. Raymond L. Witter
Crown Zellerbach Corporation
6363 Airport Way South
Seattle, Washington 98108

Dear Mr. Witter:

Thank you for your letter of October 27, 1981, to our Regional Director requesting preapplication consultation with the U. S. Fish and Wildlife Service in regard to your Carthage Mill Hydroelectric Project on the Black River at Carthage, New York. As indicated in Mr. Chupp's November 9, 1981, letter to you, your request for technical assistance was forwarded to our office in Cortland, New York. It is our understanding that Crown Zellerbach Corporation intends to submit an application to the Federal Energy Regulatory Commission (FERC) for exemption of this project from licensing under the Federal Power Act pursuant to procedures established by FERC Order No. 106: Exemption from All or Part of Part I of the Federal Power Act of Small Hydroelectric Power Projects with an Installed Capacity of 5 Megawatts or Less.

As you know, the Federal Energy Regulatory Commission requires you to coordinate with the Fish and Wildlife Service for technical assistance in assessing the impacts of your proposed project on fish and wildlife habitats and resources. The Service also has a legal mandate under the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) to evaluate, and comment to the FERC, on proposals for hydroelectric development.

This letter provides technical assistance only and as such does not constitute the report of the Secretary of the Interior within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act. Nor should our input at this stage in your planning process be construed as sufficient to accompany any request for license, renewal of license, amendment of license, or exemption from license that you may submit for this project to the FERC.

Your draft environmental report does not adequately describe fish and wildlife resources, nor project impacts on those resources. We are precluded, therefore, from providing specific recommendations for the protection of fish and wildlife at this time. However, the following questions will serve to identify our major concerns regarding hydroelectric development in general, and to assist you in determining the environmental feasibility of your project and preparing your final environmental report (Exhibit E). Detailed analysis and/or studies are not necessarily required to respond to these questions. Depending on your specific project plans, many of them could be addressed with a brief statement.

1. What is the nature of the environmental setting of the project area? What kinds of vegetative cover are commonly found there? What are the more common species of birds, fish and other animals and their relative abundance in the area?
2. Are there any Federally listed threatened or endangered species within your project area? Our Harrisburg Area Office responded on November 9, 1981, with information regarding the presence of federally listed endangered and threatened species within the impact area of the proposed Carthage Hydroelectric Project.
3. Are there any anadromous fishes in the project area? Are there any plans to restore historic runs of anadromous fish through the project area? The New York State Department of Environmental Conservation should be contacted about such restoration plans. What will be the impact of the project on fish movements through the project area? In addition to considering impacts on anadromous fish, are there important populations of resident fish species that should be provided free movement, both upstream and downstream, through the project area? The FWS can provide engineering and technical guidance regarding the planning of fish passage facilities, if deemed necessary for your project. However, the actual design and construction are the responsibility of the applicant. Requests for assistance with the planning of fish passage facilities may be directed to the Regional Director, U. S. Fish and Wildlife Service, One Gateway Center, Suite 700, Newton Corner, Massachusetts 02158.
4. What is the existing water quality in the project area? What is the status of pollution abatement efforts in the river? Is the river expected to achieve Class B Standards (fishable/swimmable) by 1983, as directed by the Clean Water Act?

5. What is the existing streamflow regime through the project area? Hydrological information, including average monthly discharge, average annual flow, and 7Q10 flow (average 7-day low flow that can be expected to occur every 10 years) should be incorporated into your environmental report. On a monthly basis, what will be the specific impact of project operation on streamflow (both at the dam and at the tailrace if a penstock or diversion canal is to be used)? Will the project store water for peaking power production or will it operate as a run-of-the-river facility? If deemed necessary, we will request that the FERC require a program of minimum flow releases at the dam to mitigate impacts on downstream fish and wildlife resources. The magnitude of these releases would be contingent upon further study of the project area; existing hydrology, consultation with State fishery biologists, and assessment of detailed information on existing fish and wildlife resources and project operation.

You should also consider other water withdrawals both up and downstream from your project area. Not only could these affect your operating capacity, but they may also have a cumulative impact on downstream fish and wildlife habitat, greater than that which would result from the operation of your project by itself.

6. What is the extent of the impoundment above the dam? Area-capacity data for elevations between the expected minimum and maximum pool levels should be incorporated into your environmental report. Describe the fish and wildlife habitat within the impoundment area, giving particular attention to any wetlands found in this area. The predominant kinds of wetland vegetation and their utilization by wildlife should be indicated. What will be the impact of project operation on fish and wildlife habitat within the impoundment? Will there be significant water level fluctuations (drawdowns), and if so, when and to what extent will these occur? Will the project include modification to an existing dam so as to increase the water elevation within the impoundment? How will this affect fish and wildlife habitat?

7. What is the extent of recreational utilization of fish and wildlife resources within the project area? What species of fish are commonly sought by anglers in the project area? Is there a tailrace fishery? What are the current and future fishery management plans for the project area? Are wildlife populations currently exploited commercially within the project area? What is the extent of consumptive (e.g., fishing and hunting) and non-consumptive (e.g., wildlife observation and photography) utilization of wildlife? How will the project affect public utilization of fish and wildlife resources? Will access to the waterway be open to the public for recreational purposes?

8. What construction activities will be undertaken in connection with this project? What new structures will be required? What steps will be taken to ensure protection of fish and wildlife habitat during construction? When will most of the construction activities take place? Appropriate preventative measures should be incorporated into the project design to minimize damage to habitat and resources during project construction. Potential problem areas include erosion, excessive turbidity, and pollutant discharges from heavy equipment. The District Engineer, Buffalo District Corps of Engineers, should be contacted to determine if the proposed construction activities will affect waters of the United States and if Department of the Army authorization is required.

9. What areas of aquatic habitat will be dredged? Are any wetlands to be dredged? Will any terrestrial habitat be destroyed? How and when will the dredging be conducted? What is the nature of the dredge material? Where will the dredge spoil be stored? How will impacts on fish and wildlife minimized during dredging operations?

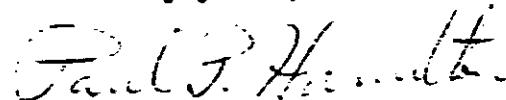
10. What routine maintenance is anticipated during the life of the project? Will periodic drawdowns be required for maintenance of the dam and associated structures? If so, what will be the impacts of these water level fluctuations on fish and wildlife resources? Are there alternatives for routine maintenance other than periodic drawdown?

11. What is the location and scope of power-transmission facilities? Right-of-way maintenance should follow latest state-of-the-art methods which protect the natural environment.

We appreciate the opportunity to provide preliminary input at this stage in your planning process. We look forward to the opportunity to review your revised draft and final environmental reports prior to submission to the FERC. It is our understanding that the FERC wants Fish and Wildlife Service comments on the final report attached to your application for license.

Should you have any questions, please do not hesitate to contact Mr. Peter J. Petokas of this office (607/753-9334) for further assistance.

Sincerely yours,



Paul P. Hamilton
Field Supervisor

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE

THREE ROCKEFELLER STATE PLAZA, ALBANY 12223

PUBLIC SERVICE COMMISSION

JUL L. GIOIA
Chairman

EDWARD P. LARKIN
ARMEL CARRINGTON MARR
RODOLFO A. JERRY, JR.
ANNE F. MEAD
RICHARD E. SCHULER
ROSEMARY S. POOLER



DAVID E. BLABEY
Counsel

SAMUEL R. MADISON
Secretary

November 6, 1981

Mr. R. L. Witter
Central Engineering
Crown Zellerbach Corporation
6363 Airport Way South
Seattle, WA 98108

Dear Mr. Witter:

This is in response to your letter of October 27, 1981 requesting guidance and comments about a proposal to expand a hydroelectric generation facility at Carthage, New York.

In light of the fact that most of the State approvals for small hydroelectric projects are environmental in nature, the responsibility for issuing these approvals rests with the Department of Environmental Conservation. If you have not done so already, I urge you to contact Mr. Murdock MacKenzie, New York State Department of Environmental Conservation, 50 Wolf Road, Albany, NY 12233 (telephone: 518-457-7418), who can answer your questions about these requirements. Additionally, it is my understanding that the construction of any hydroelectric facility is subject to Federal Energy Regulation Commission jurisdiction, but that they have adopted simplified procedures for small hydroelectric projects (under 80MW), such as you contemplate. Power generated for in-plant use or for sale to the local utility is exempt from all Public Service Commission regulation (see Laws of 1981, Chapter 843). Nevertheless, if you intend to sell excess generation to the Niagara Mohawk Power Corporation, you should be aware of the fact that Chapter 843 of the Laws of 1981 contains a provision which requires the utility to purchase your excess output at a price of not less than six cents per kilowatt-hour. The Public Service Commission is available to oversee this sales relationship.

Very truly yours,

Samuel R. Madison
Secretary

SRM:ECS:ka



NEW YORK STATE PARKS & RECREATION, Agency, Building 1, Empire State Plaza, Albany, New York 12228, (518) 457-3756
Chairman, Commissioner

November 16, 1981

NY 11-1981

Crown Zellerback Central Engineering
6363 Airport Way South
Seattle, Washington 98108

ROUTE TO:
ACTION BY:

Attn: Mr. Ray Witter

RE: Hydroelectric Generation Expansion Project
Carthage Mill, Carthage, New York

Dear Sir:

We have reviewed the project description provided, relative to the proposed project and wish to comment as follows:

The Statewide Comprehensive Outdoor Recreation Plan indicates a projected need exists in both Jefferson and Lewis Counties to provide facilities to accommodate cross-country skiing. Additionally we request consideration be given to the provision of a small boat and canoe access accommodation, together with suitable parking.

Beyond this we find very little justification to request that additional recreation facilities be provided at this site.

Thank you for providing us the opportunity to review and to comment on this proposal.

Sincerely,


Roy Roberts
Sr. Marine Services Representative

RR/eh

CC: Murdock MacKenzie, DEC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

26 FEDERAL PLAZA

NEW YORK NEW YORK 10278

23 NOV. 1981

Mr. R. L. Witter
Crown Zellerbach
Central Engineering
6363 Airport Way South
Seattle, Washington 98108

Dear Mr. Witter:

This is in reference to your proposal to expand the generating capacity of the existing Carthage Mill facility located on Black River in Carthage, New York. We have reviewed the preliminary project description submitted with your letter of October 27, 1981, and offer the following comments for consideration.

Expansion of the existing mill would result in a lack of flow over the dam during six and one-half months of the year (as opposed to the two months currently experienced), and the 1,200 foot stretch of the river immediately below the dam would be dewatered during this period of time. The impact of such long-term dewatering on the fishery which may now be present below the dam must be evaluated. Both the New York State Department of Environmental Conservation and the U.S. Fish and Wildlife Service should be consulted to determine the need for a conservation fishery release or other mitigation measures.

The expansion will require extensive dredging in and around the tailrace and the removal of large spoil piles now situated at the mouth of the tailrace. Data on the nature of this spoil material and on the proposed disposal site(s) should be provided. The Corps of Engineers should also be contacted regarding the need for a federal permit for this work.

Thank you for contacting us during your pre-application phase. Please call Ms. Barbara Pastalove of my staff at (212) 264-8676 should you have any questions or wish to consult further with us.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Anne Norton Miller".

Anne Norton Miller, Chief
Environmental Impacts Branch

CENTRAL
ENGINEERING
RECEIVED

DEC 14 1981

ROUTE TO:

ACTION BY:



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Services Division
Habitat Protection Branch
7 Pleasant Street
Gloucester, MA 01930

December 10, 1981

Mr. R.L. Witter
Crown Zellerbach Corporation
Central Engineering
6363 Airport Way South
Seattle, Washington 98108

RE: CEO File 1764

Dear Mr. Witter:

We have reviewed the Draft Application for Exemption from Licensing provided in your December 8, 1981, letter regarding the Carthage Mill Hydro Project on the Black River in Jefferson County, New York. It does not appear that the proposed project will significantly affect resources for which the National Marine Fisheries Service is responsible. Therefore, we have no comments at this time.

Sincerely,

Ruth Rehfus
Branch Chief





United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Project Review
15 State Street
Boston, Massachusetts 02109

October 28, 1981

R.L. Witter
Crown Zellerbach
Central Engineering
6363 Airport Way South
Seattle, Washington 98108

Dear Mr. Witter:

This is in reply to your recent letter regarding an hydroelectric generation expansion project for your Carthage Mill, Carthage, New York.

The material which you forwarded provides no specific information as to what may result from the project other than your assertion that "no adverse environmental effects" will result from it. Since the material offers no record of coordination with the several concerned federal and state environmental agencies, this is somewhat inadequate. To assist you in remedying this, it is recommended that you contact the following offices and obtain their comments on the proposal.

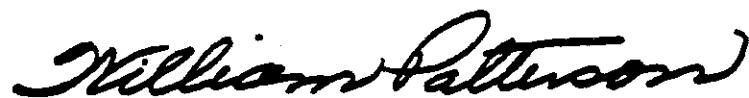
Area Manager
U.S. Fish & Wildlife Service
100 Chestnut Street
Harrisburg, PA 17101

Regional Director
National Park Service
143 South Third Street
Philadelphia, PA 19106

District Chief
U.S. Geological Survey
P.O. Box 1350
Albany, New York 12201

Mr. Orin Lehman
Commissioner, New York State Office
of Parks, Recreation and Historic Preservation
Agency Building #1
Empire State Plaza
Albany, New York 12238
518-474-0468

Sincerely,



William Patterson
Regional Environmental Officer



United States Department of the Interior

OFFICE OF THE SECRETARY

Office of Environmental Project Review
15 State Street
Boston, Massachusetts 02109

November 17, 1981

R.L. Witter
Crown Zellerbach Corporation
Central Engineering Office
6363 Airport Way South
Seattle, Washington 98108

Dear Mr. Witter:

This is in reply to your letter of November 3 regarding the Carthage Mill Project, Carthage, New York.

When you have received replies from the earlier recommended agencies, it is assumed that you will incorporate them in your environmental report to the Federal Energy Regulatory Commission. Since such material is routinely forwarded to this Department for review and comment, there is no need for you to make a separate mailing to any Interior office. Thank you for the offer though.

Sincerely,

William Patterson

William Patterson
Regional Environmental Officer



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

HARRISBURG AREA OFFICE
100 Chestnut Street, Room 310
Harrisburg, Pennsylvania 17101 -2591

NOV 9 1981

Mr. R. L. Witter
Crown Zellerbach Central Engineering
6363 Airport Way South
Seattle, Washington 98109

Dear Mr. Witter:

This responds to your letter of November 2, 1981, requesting information on the presence of federally listed or proposed endangered or threatened species within the impact area of the proposed hydroelectric generating expansion project, Black River, Carthage, Jefferson County, New York.

Except for occasional transient species, no federally listed or proposed threatened or endangered species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884 as amended; 16 U.S.C. 1531 et seq.) is required with the Fish and Wildlife Service (FWS). Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to endangered species under our jurisdiction. It does not address other FWS concerns under the Fish and Wildlife Coordination Act or other legislation.

A compilation of federally listed endangered and threatened species in New York is enclosed for your information.

We have forwarded your letter to our Ecological Services Field Office in Cortland, New York, for additional technical assistance comments concerning those fish and wildlife resources not discussed in this letter.

Sincerely,

Norman R. Chupp
Area Manager

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW YORK

Common Name	Scientific Name	Status	Distribution
FISHES:			
Cisco, longjaw	<u>Coregonus alpenae</u>	E	Lake Erie-probably extinct
Pike, blue	<u>Stizostedion vitreum</u> <u>glaucum</u>	E	Deep water of Lake Erie & Lake Ontario - probably extinct
Sturgeon, shortnose*	<u>Acipenser brevirostrum</u>	E	Hudson River and other Atlantic Coastal rivers
REPTILES:			
Turtle, green*	<u>Chelonia mydas</u>	T	Oceanic summer visitor coastal waters
Turtle, hawksbill*	<u>Eretmochelys imbricata</u>	E	Oceanic summer visitor coastal waters
Turtle, leatherback*	<u>Dermochelys coriacea</u>	E	Oceanic summer resident coastal waters
Turtle, loggerhead*	<u>Caretta caretta</u>	T	Oceanic summer resident coastal waters
Turtle, Atlantic ridley*	<u>Lepidochelys kempii</u>	E	Oceanic summer resident coastal waters
BIRDS:			
Eagle, bald	<u>Haliaeetus leucocephalus</u>	E	Entire state
Falcon, American peregrine	<u>Falco peregrinus anatum</u>	E	Entire state - re-establishment to former breeding range in progress
Falcon, Arctic	<u>Falco peregrinus tundrius</u>	E	Entire state migratory - no nesting
MAMMALS:			
Bat, Indiana	<u>Myotis sodalis</u>	E	Entire state
Cougar, eastern	<u>Felis concolor cougar</u>	E	Entire state - probably extinct
Whale, blue*	<u>Balaenoptera musculus</u>	E	Oceanic
Whale, finback*	<u>Balaenoptera physalus</u>	E	Oceanic
Whale, humpback*	<u>Megaptera novaeangliae</u>	E	Oceanic
Whale, right*	<u>Eubalaena</u> spp. (all species)	E	Oceanic
Whale, sei*	<u>Balaenoptera borealis</u>	E	Oceanic
Whale, sperm*	<u>Physeter catodon</u>	E	Oceanic

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW YORK (Cont'd)

Common Name	Scientific Name	Status	Distribution
<u>MOLLUSKS:</u>			
Snail, chittenango ovate amber	<u>Siccinea ovalis</u> <u>chittenangoensis</u>	T	Madison County
<u>PLANTS:</u>			
Monkshood, northern wild	<u>Aconitum noveboracense</u>	T	Ulster County



United States Department of the Interior

GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
P.O. BOX 1350
ALBANY, NEW YORK 12201

November 13, 1981

Crown Zellerbach Corporation
Central Engineering
6363 Airport Way South
Seattle, Washington 98108

Dear Sir:

This letter is in answer to your letter dated November 2, 1981, concerning expansion of your hydroelectric facility in Carthage, New York. We can state that based on the description as presented in Exhibit A, the project will not create any additional problems that affect the mission of the Water Resources Division of the U.S. Geological Survey.

The basic responsibility of our agency in relation to the expansion of the hydroelectric generation facility is to be able to measure the quantity and quality of streamflow. The proposed changes to your hydroelectric generation plant should present no additional problems in our ability to measure these parameters of streamflow.

Sincerely,

For The District Chief

William B. Gannon
William B. Gannon
Hydrologist

WBG:les

APPENDIX V

U.S. GEOLOGICAL SURVEY MAPS

Full size reproductions of the following U.S. Geological
Survey Maps are contained in the drawing packet which accompanies
this document.

CARTHAGE, N.Y.

COPENHAGEN, N.Y.

DEFERIET, N.Y.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
1:625,000
MAP

CARTHAGE QUADRANGLE
NEW YORK
1:5 MINUTE SCALE TOPOGRAPHIC
MAP CAPTURED BY SPACEMAP
1960



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COPENHAGEN QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (1900-1901)
1901 CANTON OF SWITZERLAND
WATER LEVELS
1901







APPENDIX VI

CHANNEL IMPROVEMENT DETAILS

CROWN
HYDROPOWER
CAR
CHANNEL

SHADED AREAS TO BE
TO ELEVATIONS SHOWN
IMPROVEMENT SHEET

HERRINGS
PONO

DECATER ISL

680

686

684

682

682
684
HARRISON ISL.

685

685

682

680

10-50

680

680

680

680

680

680

680

680

680

680

680

680

680

680

680

680

680

680

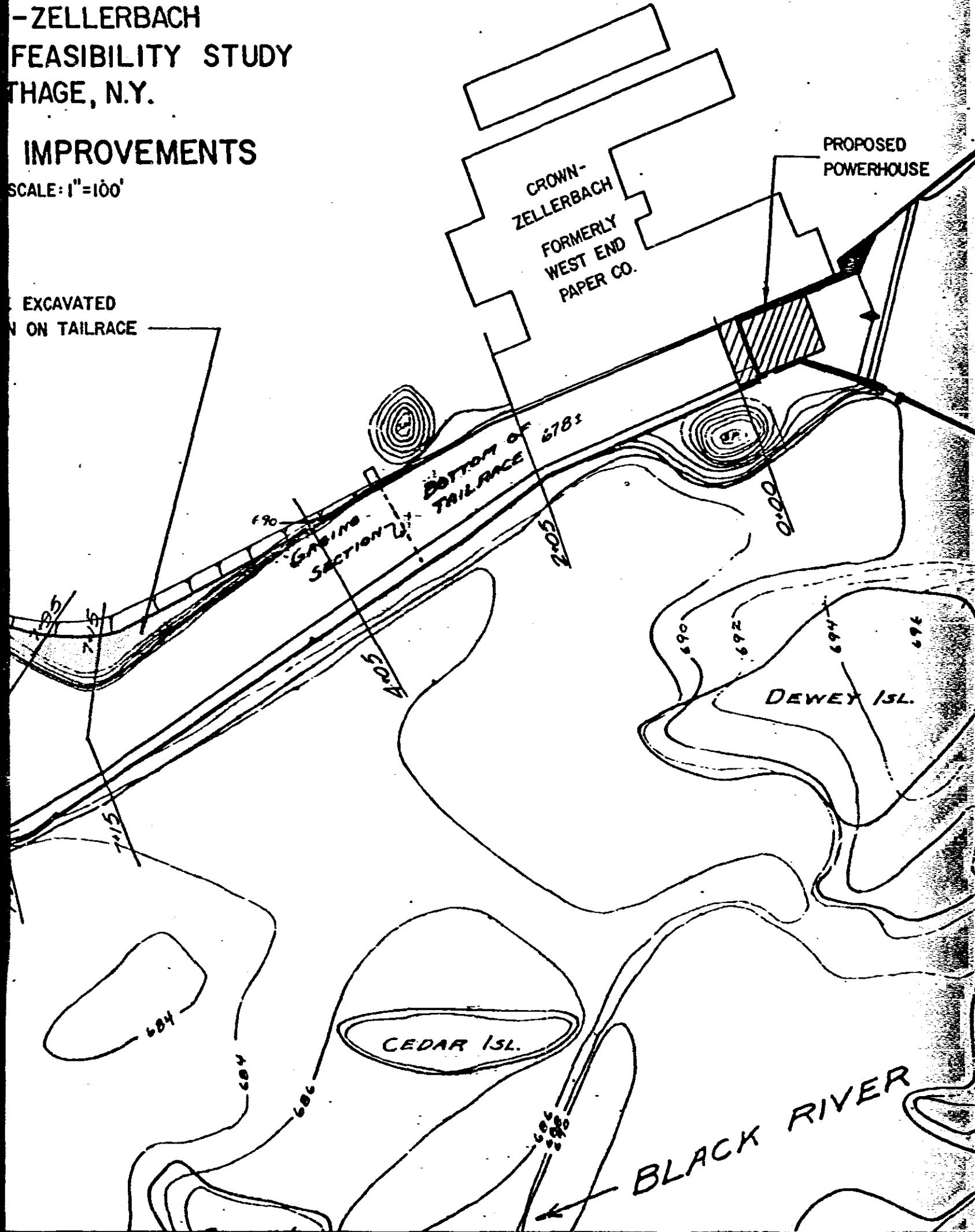
THIS DWG. IS PART OF
THE APPLICATION FOR
EXEMPTION FROM LICENSING.

HYDROELECTRIC GENERATION
INCREASE-CEO FILE 1764
SK-1764-3

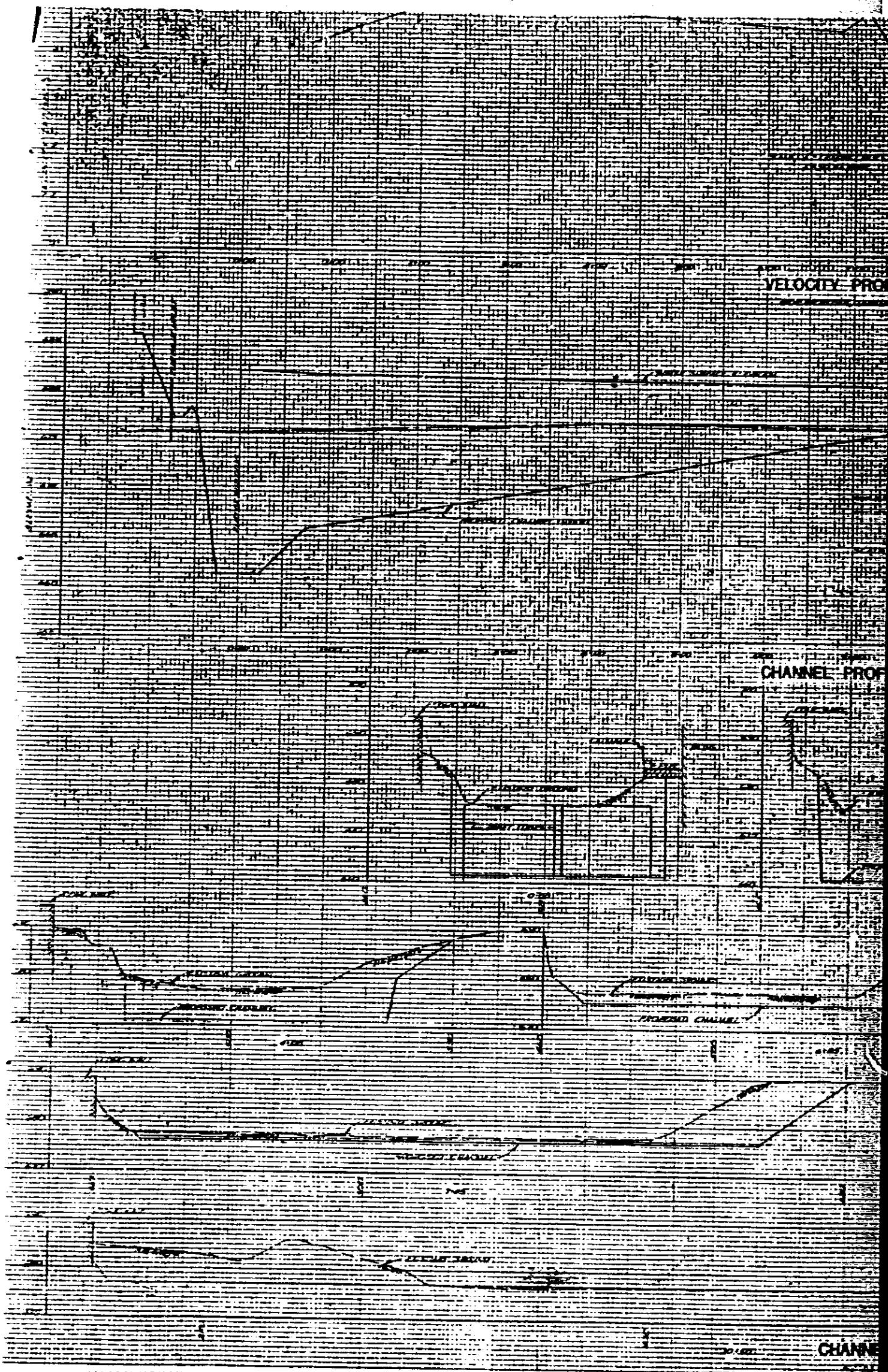
**-ZELLERBACH
FEASIBILITY STUDY
THAGE, N.Y.**

IMPROVEMENTS

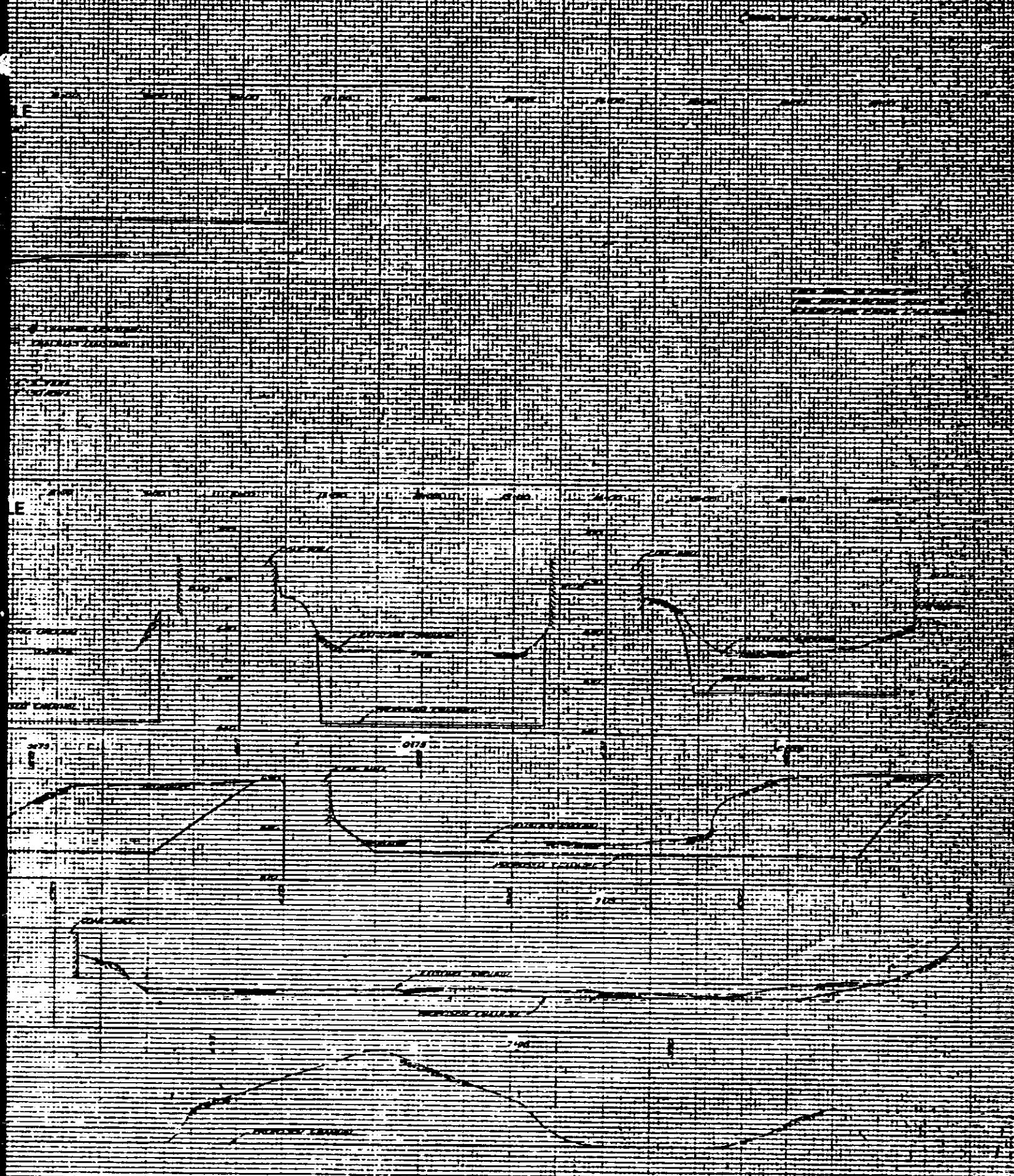
SCALE: 1" = 100'



A full size reproduction of drawing SK-1764-4
CHANNEL CROSS SECTIONS is contained in the drawing
packet which accompanies this document.



CROWN ZELLERBACH INC.
HYDROPOWER FEASIBILITY STUDY
FOR THE
YAR RAGE IMPROVEMENTS
Project No. 100-10000



CROSS-SECTIONS

THE BOSTONIAN

**DOCUMENT
FILMED ON
APERTURE
CARD**

ACCESSION

NO: 8201060222

**NUMBER OF
PAGES 10**