

WORKSESSION

CITY OF MANISTEE PLANNING COMMISSION

70 Maple Street, Manistee, Michigan 49660

Thursday, October 16, 2003

7:00 p.m. - Council Chambers, City Hall

AGENDA

The City of Manistee Planning Commission will hold a worksession on Thursday, October 16, 2003 at 7:00 p.m. in the Council Chambers, City Hall, 70 Maple Street, Manistee, Michigan.

- I Roll Call
- II Public Participation:
- III Unfinished Business and Reports:
 - 1. Manistee Saltworks Development - Power Plant (Tondu)
- IV New Business and Communications:
- V Adjourn.

MEMORANDUM

TO: Planning Commission Members

FROM: Denise Blakeslee, Administrative Assistant
Community Development Department

DATE: October 10, 2003

RE: Worksession October 16, 2003

We will continue our review of the Manistee Saltworks Development - Power Plant (Tondu) during the worksession. Enclosed are copies of handouts from the Public Hearing on Thursday at the High School and contact information from Tondu.

See you at the worksession!

cc: City Manager

The Northern Lights Project

Project Overview

The Northern Lights Project involves the development, construction, operation, and maintenance of a 425 MW (nominal net output) coal fueled power plant (the "Northern Lights Plant" or the "Plant") to be located at the current site of the General Chemical Plant in Manistee. Manistee Salt Works Development Corporation was formed by Tondur Corporation as a special purpose entity to acquire the General Chemical site, and has filed for several permits, including the air permit and the special use permit.

Tondur Corporation

Tondur Corporation is an industrial development company based in Houston, Texas that develops, owns and operates cogeneration and independent power plants. Tondur Corporation developed and has an ownership interest in the 60 MW coal fueled TES Filer City Station Cogeneration Plant located near Manistee, Michigan.

Benefits to Local Community and the State of Michigan

The Northern Lights Plant offers significant economic and strategic benefits to the local community and the State of Michigan.

- The Northern Lights Plant will create approximately 60 new full time positions.
- Construction of the Plant will require over 2.5 million manhours of construction labor over a three and half year period providing over \$112 million of construction wages.
- The Plant will produce low-cost electricity for residents and businesses throughout Michigan.
- Compared to natural gas fueled electricity generated power, the Northern Lights Plant is projected to save the people of Michigan over \$50 million per year representing a potential savings of over \$2.0 billion over its expected operating life.
- The Plant will diversify the fuel sources for the state's power infrastructure thereby ensuring that Michigan will remain a competitive location for businesses and new jobs well into the 21st century.

Plant Site

The plant site is located in the City of Manistee on Manistee Lake. The Plant Site is a brownfield area that contains a recently abandoned salt manufacturing plant.

Fuel Supply

The Northern Lights Plant is being designed to burn low-sulfur, Southern Power River Basin ("SPRB") coal located in a large region centered near Gillette, Wyoming. The coal will be delivered to Chicago by train and from Chicago to Manistee via self-unloading lake vessels.

Environmental Controls

The Northern Lights Plant will utilize a selective catalytic converter for NO_x controls, high efficiency SO₂ scrubbers, and high efficiency baghouse particulate controls. This multi-pollutant control approach will use the best available control technology. This control technology in combination with low-pollutant SPRB coal will provide the lowest emission levels of any coal-fired power plant in Michigan.

Development Timetable

The Northern Lights Plant's construction will begin as soon as the required permits are secured, and the Project financing is closed, which is expected in late 2004 or early 2005. The Plant's construction is expected to take 42 months with commercial operations beginning in the first quarter of 2008.

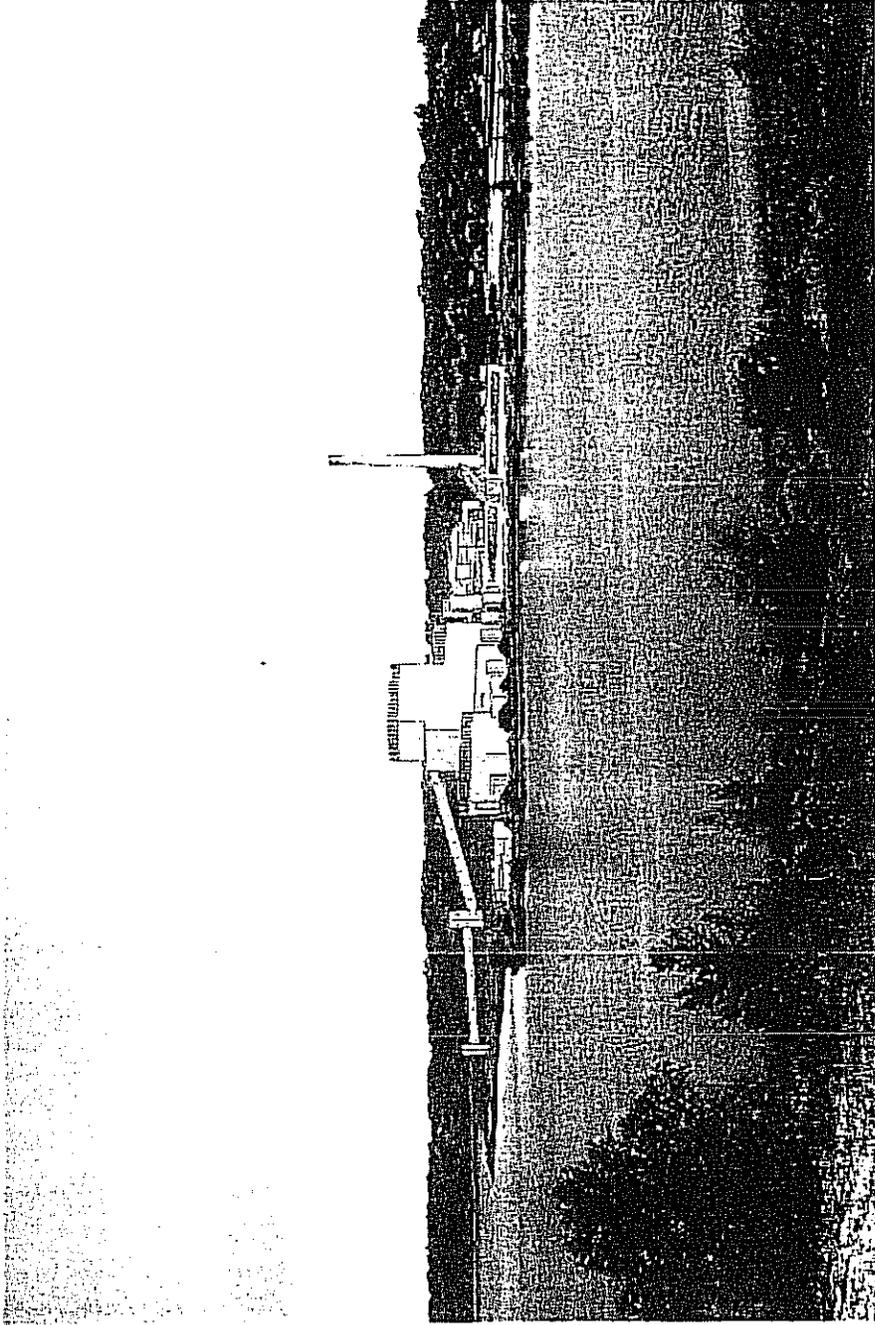


Project Overview

R. J. Tondu

*Filed
Sept 10th*

Manistee Salt Works Development Corporation



Air Quality Permit Application Summary

Permit Application Summary

Site Description

State / Federal Regulatory Summary

BACT / T-BACT Overview

Proposed Air Pollution Control Strategy

Estimate of Emissions

Air Quality Impact Summary

Plant Data

Boiler Size: 4342 Million Btu/hour

Fuel Usage

- Gas Startup
- Coal PRB (Western) @ 264 TPH (max load)

Stack Height = 400 ft. (above grade)

Air Regulations

Multiple and Overlapping Federal and State Requirements

MDEQ picks the most restrictive of all overlapping regulations to judge whether a permit can be granted

Federal Air Regulations

- Prevention of Significant Deterioration (PSD)
- New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutants (NESHAPS)
- Compliance Assurance Monitoring
- Acid Rain Program

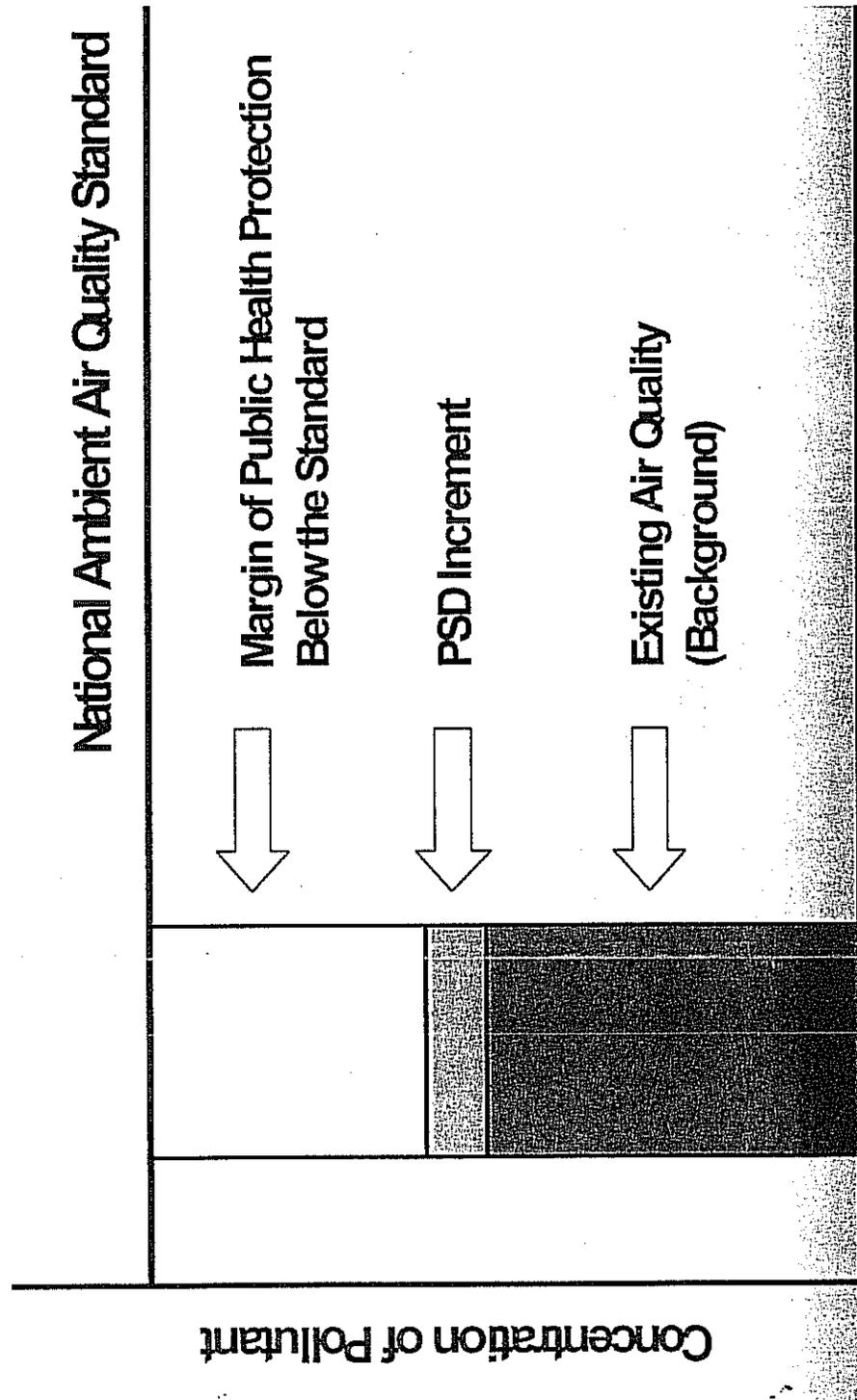
Prevention of Significant Deterioration Program

Designed to Keep Clean Areas Clean

Requires use of Best Available Control Technology (BACT) for major and significant pollutants

Requires demonstration that ground level concentrations of contaminants will not adversely affect public health or welfare, nor exceed PSD clean air increments

Keeping Clean Areas Clean



Best Available Control Technology

Based on maximum degree of reduction

- Case-by-case basis
- Considers energy, environmental and economic impacts

BACT baseline (Federal Rules)

Must be *Available* Technology

Michigan Requirements

More than 20 different rules, including:

- Need for a Permit to Install
- Best Available Control Technology for Toxic Air Contaminants
- Demonstration of compliance with screening levels for toxic air contaminants

BACT for Particulates

Will use natural gas to start boiler

Will use high efficiency fabric filter dust collector to remove the flyash from the flue gases

BACT for Nitrogen Oxides

Use of burners that minimize nitrogen oxide formation

Add on control to further reduce emissions

□ Selective Catalyst Reduction System

– Uses ammonia injection with a catalyst to reduce NO_x to nitrogen and oxygen

BACT for Sulfur Dioxide

Will burn very low sulfur western coal (0.65% max)

Will scrub the sulfur dioxide in flue gas with the injection of lime and the collection of the reaction products in the fabric filter dust collector (additional 83% removal)

BACT for Carbon Monoxide and Volatile Organic Compounds

Will use good combustion control

- Good air/fuel mixing
- Excess oxygen
- Time and temperature sufficient to complete combustion

BACT for Toxics

Acid Gases

- low sulfur and chlorine in fuel and lime scrubber

Trace Metals

- Lime scrubber and fabric filter

Mercury

- Low mercury content coal
- SCR, flue gas desulfurization and fabric filter

BACT for Material Handling and Storage

Coal

- Fugitive dust control plan
 - Extensive use of water and dust suppressants
 - Enclosed conveyors
 - Fabric filter control at coal handling transfer points

Ash and Lime handling

- Enclosed conveyors / pneumatic handling
- Fabric filters designed for very low emissions

Air Pollution Control Summary

Boiler

Particulates	Fabric Filter
SO ₂	FGD, Bag Filter
NOx	SCR
CO	Proper Combustion
VOC	Proper Combustion
<u>Toxics</u>	
- Metals	Fabric Filter
- Organics	Proper Combustion
- Acids	Low CL ₂ Coal
- Mercury	Low Hg Coal, SCR, FGD, Bag Filter

Coal, Ash, Lime

Handling / Storage

Particulates	Fabric Filters
	Wet suppression
	Fugitive Dust Plan

Plant Roadways

Particulates	Fugitive Dust Plan
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* Coal Storage

Pile Runoff	Runoff Containment / Sumps
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Estimate of Emissions

Assumptions --

Full Load Operation

8760 Hours per year

Allowed (permitted) Rates

Basis --

Vendor Data

EPA Emission Data (AP -- 42)

Fuel Sampling

Air Quality Impact Analysis

Based on full load operation

Maximum requested emission rates

EPA-approved models and protocol

MDEQ-supplied MET (weather) data

EPA and DEQ QA/QC of NTH submittal

Predicted Air Quality Impacts (Total facility)

<u>Compound</u>	<u>Impact (micrograms)</u>	<u>Federal Standards (micrograms)</u>
PM/PM10	14.6	150
SO2	65.2	365
NOx	2.8	100
CO	>500 (1)	10,000(1)

(1) CO screening analysis demonstrated no significant impact. Therefore, detailed modeling for CO was not required.

Regulatory Review Process

Application submittal to DEQ September 9th, 2003

MDEQ Technical Review (BACT / Modeling)

EPA Region V Oversight

30-Day Public Comment Period

(local) Public Hearing

Permit Issuance

Summary

Will meet all stringent air quality requirements

Will employ the best available control technology for all of its sources and pollutants.

The ambient air impacts will

- Comply with all public health & welfare standards
- Comply with all MDEQ air toxic screening levels
- Not result in significant deterioration of air quality

Hazardous Substances Reporting Form for Site Plan Review

Note: This form should be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: MANISTEE SALTWORKS DEVELOPMENT CORP.
 Name of business owner: JOE TONDOL - TONDOL CORP.
 Street and mailing address: 14701 ST. MARY'S LANE - SUITE 625
 Telephone: (832) 379-4222

I affirm that the information submitted is accurate.

Owner's signature: *Joe Tondol*
 Information compiled by: CUMMINS & BARNARD INC - LYLE THORNTON
NTH CONSULTANTS, LTD - JOHN CAUDILL

Part I: Management of Hazardous Substances and Polluting Materials

1. Y N Will the proposed facility store, use or generate hazardous substances, as defined in the Zoning Ordinance, or polluting materials (including petroleum-based products) now or in the future? If yes, please complete this form and submit with your site plan.
2. Y N Will hazardous substances or polluting materials be reused or recycled on-site?
3. Y N Will any hazardous substances or polluting materials be stored on-site? If yes, identify the storage location on the site plan. Describe the size and type of secondary containment structure here or on an attached page: State of Mich. Spill Prevention Program
DESIGN FOR 125% AREA
4. Y N Will new underground storage tanks be located less than 2,000 feet from drinking water wells serving two or more establishments or less than 300 feet from a single family drinking water well?
5. NA Are existing underground storage tanks on-site less than 200 feet from a drinking water well serving more than a single household?

If the answers to #4 or #5 are yes, you may be in violation of State of Michigan underground storage tank regulations. Contact the State Police Fire Marshal Division, Lansing Central office for specific requirements. Telephone (517)322-5470 or 1(800)MICH UST (1(800)642-4878).

6. Y N Will the interior of the facility have general purpose floor drains?* If yes, the floor drain will connect to: (circle one)

- a. Sanitary sewer system;
- b. On-site holding tank; or
- c. On-site system approved by the Michigan Department of Environmental Quality in accordance with groundwater discharge permit requirements (Telephone Waste Management Division, _____ District Office (____)____-____.)

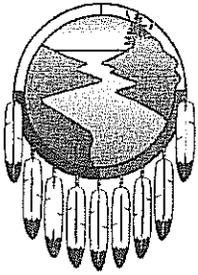
*NOTE: General purpose floor drains should not be connected to a stormwater drainage system, dry well, or septic system.

7. Y N Will hazardous substances or polluting materials be stored, used, or handled out-of-doors near storm drains which discharge to lakes, streams, or wetlands? If yes, describe the type of catch basin or spill containment facilities which will be used (use an attached sheet with diagram, if appropriate): _____

Additional information may be requested from the municipality to assure that site plans comply with local, county and state environmental protection requirements.

Hazardous Substances Reporting Form for Site Plan Review
Input Data

Hazardous Substance	Trade Name	Chemical Components	Chemical Component Form	Maximum Stored Quantity	Storage Container Type	Use
<u>Water Treatment Chemicals</u>						
15% Sodium Hypochlorite		NaOCl	Liquid	800 gallons	400 gal plastic totes	Water Pretreatment System
Coagulant		FeCl ₂ or Alum (Al ₂ SO ₄)	Liquid	5,000 gallons	FRP Tank	Water Pretreatment System
Polymer		Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Water Pretreatment System
Antiscalant		Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Cycle Make-up Water Treatment
Sodium Bisulfite	BT-3838	Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Cycle Make-up Water Treatment
Sulfuric Acid		H ₂ SO ₄	Liquid	800 gallons	400 gal plastic totes	Cycle Make-up Water Treatment
Clean In Place Chemicals		Proprietary Chemical	Liquid	55 gallon drum	Plastic Drum	Cycle Make-up Water Treatment
Coagulant		FeCl ₂ or Alum (Al ₂ SO ₄)	Liquid	400 gallons	FRP Tank	Wastewater Treatment
Lime		CaO	Liquid	Later	RLCS Silo	Wastewater Treatment
Organo-Sodium Sulfide		Proprietary Chemical	Solid	800 gallons	400 gal plastic totes	Wastewater Treatment
Polymer		Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Wastewater Treatment
Sulfuric Acid		H ₂ SO ₄	Liquid	10,000 gallon	CS Tank	Adjustment of Circulating Water Alkalinity
15% Sodium Hypochlorite		NaOCl	Liquid	15,000 gallon	FRP Tank	Control Biological Growth in Cooling Tower Basin
Non-Oxidizing Biocide		Proprietary Chemical	Liquid	10 gallons	5 gallon pail	Destroy Hypochlorite Resistant Biological Species in Cooling Tower
Corrosion/Scale Inhibitor	Corrshield MD4100	Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Corrosion Inhibition of Circulating Water Components
Oxygen Scavenger	Corrol OS7780	Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Boiler Chemicals (AVT)
Amine	Steammate	Proprietary Chemical	Liquid	800 gallons	400 gal plastic totes	Boiler Chemicals (AVT)
Other						
19% Aqueous Ammonia		NH ₄ OH	Liquid	17,000 gallons	CS Tank	NOx Emissions Control
Lime		CaO	Solid	75 tons	RLCS Silo	SO ₂ Emissions Control
Coal			Solid	670,000 tons	Exposed Pile	Fuel
Ash			Solid	2,595 tons	Silos	Ash
Lubricating/Hydraulic Oil			Liquid	10,600 gallons	Steel Reservoir	Steam Turbine
Hydrogen		H ₂	Pressurized Gas	25,000 scf	Bottles	Steam Turbine Generator
Hydrogen		H ₂	Pressurized Gas	5,000 scf	Generator Housing	Steam Turbine Generator
Carbon Dioxide		CO ₂	Pressurized Gas	10,000 scf	Bottles	Steam Turbine Generator
Lubricating/Hydraulic Oil			Liquid	5,000 gallons	Equipment Reservoirs	Lubricated Equipment
GSU Transformer Oil			Liquid	25,000 gallons	Steel Oil Reservoir	GSU Transformer
Auxiliary Transformer Oil			Liquid	5,000 gallons	Steel Oil Reservoir	Aux. Transformer
Diesel Fuel #2			Liquid	50 gallons	Equipment Reservoir	Emergency Generator
Diesel Fuel #2			Liquid	50 gallons	Equipment Reservoir	Diesel Fire Pump
Diesel Fuel #2			Liquid	1,000 gallons	Steel Tank	Mobile Equipment Fuel



Little River Band of Ottawa Indians
375 River Street
Manistee, MI 49660
(231) 723-8288

Resolution # 03-1015-351

Expressing Opposition to Construction of the Northern Lights Project

WHEREAS, the Tribe's status as a federally-recognized Indian tribe was reaffirmed and restored by Congress pursuant to Public Law 103-324, 108 Stat. 2156 (25 U.S.C. §1300k et seq.); and

WHEREAS, the Tribe adopted a new Constitution, pursuant to a vote of the membership on May 27, 1998, which Constitution became effective upon its approval by the Assistant Secretary-Indian Affairs on July 10, 1998; and

WHEREAS, the Tribal Council is authorized under Article IV, Section 7(a) to provide for the public health, peace, morals, education and general welfare of the Little River Band and its members; and

WHEREAS, the Tribal Council has determined that federal laws support Tribal government's sovereign authority to legislate strict air and water quality standards that exceed state and federal standards in order to protect the natural resources of the Tribe for the benefit of the Tribe and its members; and

WHEREAS, the Tribal Council has been notified of the development of the Northern Lights Project by the Tondu Corporation on the current sight of the General Chemical Plant which is located off Manistee Lake; and

WHEREAS, the Tribal Council has received reports from the Conservation Department which identifies the rehabilitation of the Sturgeon species into Manistee River and ultimately Manistee Lake in recent years; and

WHEREAS, the Tribal Council has approved actions, and received federal grant funds, to re-introduce wild rice plants into Manistee Lake which plantings are taking root and improving; and

WHEREAS, the Tribal Council has approved actions, and received federal grant funds, to monitor the fish and amphibian populations and plant life in the Manistee River and Lake; and

WHEREAS, the Little River Band of Ottawa Indians has an interest in maintaining and improving plant, fish, and wildlife populations within the Tribe's Reservation and Ceded Territories and has worked cooperatively with local governments in order to promote this interest, developed a Conservation Department with the necessary technical expertise to promote this interest, and created a Natural Resource Commission to monitor and report to the Tribal Council regarding these interests; and

WHEREAS, the Tribal Council believes that changes to the waste discharge into Manistee Lake and River systems will detrimentally affect the rehabilitated Sturgeon population and re-introduced plant life;

NOW THEREFORE IT IS RESOLVED THAT the Tribal Council of the Little River Band of Ottawa Indians hereby adopts this resolution opposing the issuance of a Special Use Permit by the City of Manistee, Air Quality Permits by state and/or federal agencies, and other permits that would allow construction of the proposed Northern Lights Project.

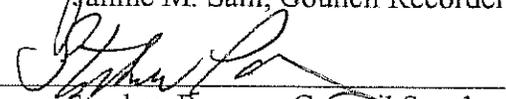
IT IS FURTHER RESOLVED THAT the Tribal Council hereby directs the Conservation Department to develop the necessary technical papers which would identify the effects of this proposed project on the Manistee Lake and River systems.

CERTIFICATE OF ADOPTION

I do hereby certify that the foregoing resolution was duly presented and adopted by the Tribal Council with 17 FOR, 0 AGAINST, 0 ABSTAINING, and 2 ABSENT, at an Open Session of the Little River Band of Ottawa Indians Tribal Council held on October 15, 2003, at the Little River Band's Community Center in Manistee, Michigan, with a quorum being present for such vote.



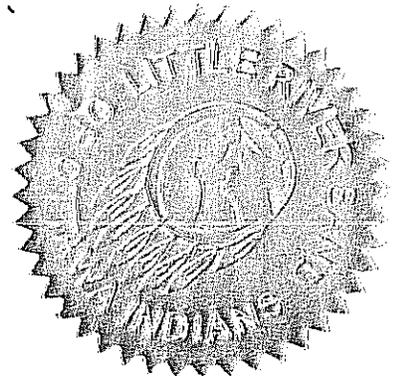
Janine M. Sam, Council Recorder



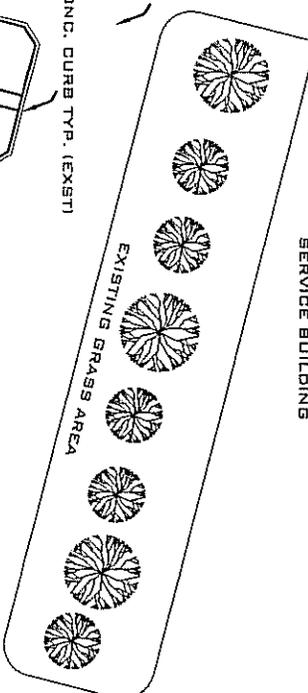
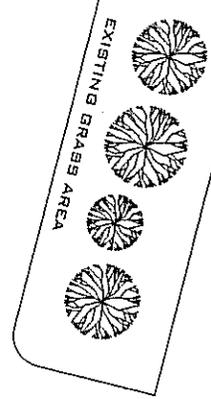
Stephen Parsons, Council Speaker

Attest:

Distribution: Council Records
Tribal Ogema
Tribal Court
Legal Department



PROPE



SERVICE BUILDING

EXISTING FENCE

FISH CLEANING

UTILITY VAULT

1.5" WATER ELECTRIC

FUEL STORAGE

CRUSHED STONE DRIVE (TYP.)

12" CONC. CURB TYP. (EXIST)

GRASS AREA TYP.

EXISTING STEEL SHEET PILE SEA WALL (TYP.)

REMOVE TEN (10) 30'-0" LONG, 4" WIDE PIERS

REMOVE TWO (2) 30'-0" LONG, 3" WIDE PIERS

SERVICE WELL TRAVEL LIFT



MANISTEE LAKE

EXISTING DOCKS
SCALE: 1" = 50'-0"

EXISTING SLIPS TO REM

PROJECT: SENG MARINA

EXISTING DOCKS

DATE: 10-15-03

NO: A1

*THESE ARE NOT CONSTRUCTION DOCUMENTS

RAIL ROAD

EXISTING GRASS AREA

CRUSHED STONE DRIVE (TYP.)

EXIST'G CONC. WALK

SERVICE BUILDING

EXISTING GRASS AREA

UTILITY VALV

1.5" WATER ELECTRIC

GRASS BUFFER

FU

EXISTING SEAWALL

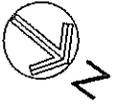
WOOD PILING (TYP.)

SERVICE WELL TRAVEL LIFT TO REMAIN

EXISTING

WOOD FLOATING DOCK (TYP.)

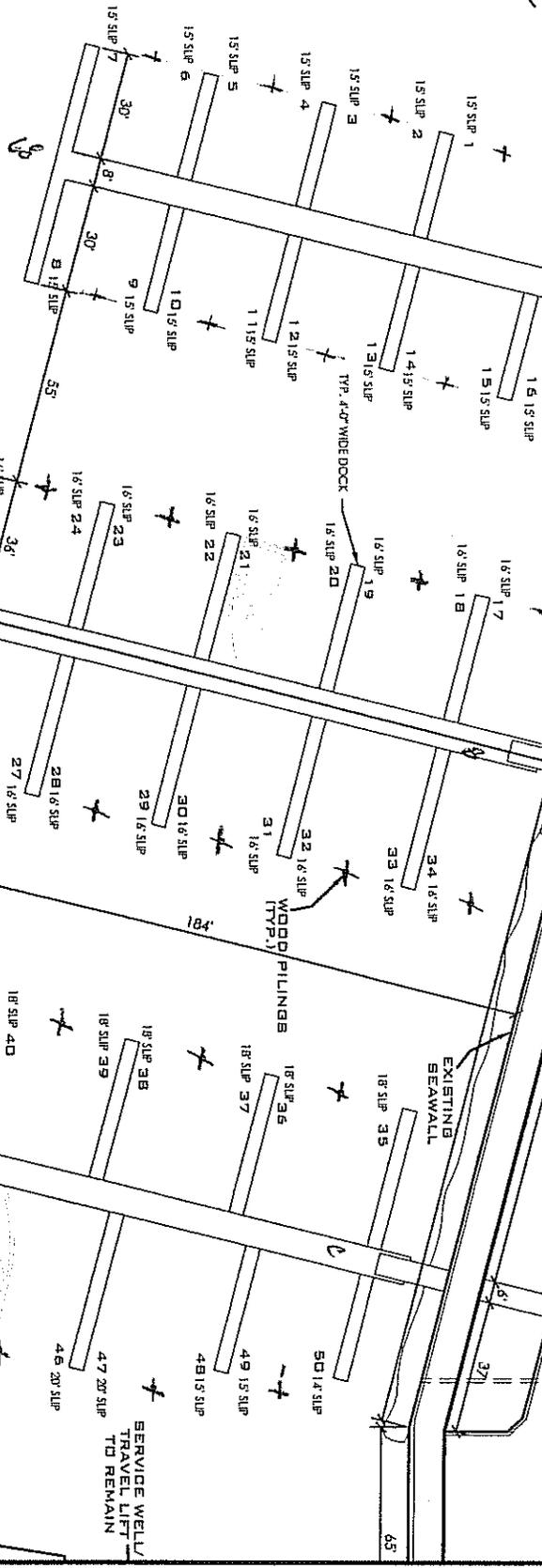
FUTURE DOCK PLAN
SCALE: 1" = 50'-0"



MANISTEE LAKE

TYP. 4'-0" WIDE DOCK

WOOD PILING (TYP.)



PROJECT: SENG MARINA

FUTURE DOCK PLAN

*THESE ARE NOT CONSTRUCTION DOCUMENTS

DATE: 08-15-03

NO: A1