JACKSONVILLE ELECTRIC AUTHORITY
P. O. BOX 53015
233 W. DUVAL STREET
JACKSONVILLE, FL 32201

SJRCTENV 86-13

April 25, 1986



st. johns river POWER PARK

Mr. Hamilton S. Oven, Jr. P.E.
Administrator of Power Plant Siting
Fla. Dept. of Env. Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Dear Mr. Oven:

Subject: Jacksonville Electric Authority
St. Johns River Coal Terminal
Condition of Certification XXXII
Conveyor Details
Power Plant Siting Application No. PA 81-13

In accordance with the Florida Power Plant Siting Act, Part II, Chapter 403 Florida Statutes, the Jacksonville Electric Authority (JEA) has previously been granted certification for the location, construction, and operation of the St. Johns River Power Park Units 1 and 2, and its associated facilities including a coal unloading facility and transmission lines. This Certification Order, issued on June 29, 1982, also addresses the future construction and operation of a conveyor system to transport coal from the unloading facility on the south side of Blount Island to the Power Park. Condition XXXII of the Certification Order specifically requires that JEA submit information concerning location, design, construction and operation of the coal conveyor system from Blount Island to the main plant site at least 120 days prior to construction.

In accordance with this Condition, we are submitting a description of the coal conveyor system linkage between St. Johns River Coal Terminal and Power Park. This material is provided in Attachment 1 and includes the following:

- Background Information
- System Location
- System Description
- Environmental Aspects

Condition XXXII states that the Secretary of the Department of Environmental Regulation (DER) should issue DER's response within 90 days of receipt.

In addition, JEA requests that DER also issue the Water Quality Certification for the conveyor system linking the coal terminal and the Power Park pursuant to Section 401 of the Federal Water Pollution Control Act, Public Law 92-500, as amended. This certification has been requested by the United States Coast Guard for JEA's Bridge Permit Application for the conveyor crossing of

(CONT.)

the St. Johns River Back Channel. It should be noted that the Water Quality Certification for the Power Park and the coal terminal facility on Blount Island was previously granted as part of the 1982 Site Certification. JEA will forward this certification to the Coast Guard upon receipt.

In addition, please find enclosed a Coastal Zone Management Consistency Certification, prepared as specified in 15 CFR 930.57. State concurrence with this Consistency Certification is required by the Coast Guard for issuance of the Bridge Permit.

Section 380.23, Florida Statutes, suggests that the issuance of the Power Park Certification on June 29, 1982, and satisfaction of Condition of Certification XXXII demonstrates the consistency of the St. Johns River Coal Terminal and the conveyor system linking it to the Power Park with Florida's Coastal Management Plan. Therefore, in accordance with 15 CFR 930.63, please provide the Coast Guard with state concurrence with the attached consistency statement. The contact at the Coast Guard for this matter is Lieutenant Commander J. V. O'Shea (Seventh Coast Guard District, Federal Building, 51 S.W. 1ST Avenue, Miami, Florida, 33130-1681). We would also appreciate receiving a copy of the concurrence statement.

It is our understanding that notice of the submittal of Condition XXXII will be provided to all parties to the certification proceeding and will be handled by DER's counsel. We have provided you with 20 copies of the submittal. If you need the assistance of JEA's counsel, Mr. William Preston (Hopping Boyd Green & Sams), please contact me. We request that Mr. Preston also be copied on all noticing documents.

If you have any questions or require additional information, please contact Athena Tsengas at (904) 633-4517.

Very truly yours,

Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/AJT/lwr
cc: J. V. O'Shea (USCG)
W. Preston (HBG&S)

Attachments:
1. Description of the Coal Conveyor Linkage System Between the St. Johns River Coal Terminal and the St. Johns River Power Park.
2. CZM Statement of Consistency

# Attachment 1

# DESCRIPTION OF THE COAL CONVEYOR LINKAGE SYSTEM BETWEEN THE ST. JOHNS RIVER COAL TERMINAL AND THE ST. JOHNS RIVER POWER PARK

JACKSONVILLE ELECTRIC AUTHORITY

April 1986

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I BACKGROUND INFORMATION

On June 29, 1982, the Florida Governor and Cabinet issued a Certification Order (DOAH Case No. 81-357) and Conditions of Certification approving the construction of the St. Johns River Power Park (SJRPP) Units 1 and 2 and their associated facilities. The SJRPP is a joint venture effort of the Jacksonville Electric Authority (JEA) and Florida Power and Light Company (FPL). The Certification Order also approves the construction of a coal unloading facility (the St. Johns River Coal Terminal, or SJRCT) on the south shore of Blount Island adjacent to the Fulton-Dames Point Cutoff of the St. Johns River. The present design is to deliver coal from the SJRCT to the Power Park by a 3.2-mile-long conveyor system.

Condition of Certification XXXII contained in the Certification Order addresses the coal conveyor system as follows:

XXXII Coal Conveyor System

"JEA shall submit to DER information concerning location, design, construction and operation of any coal conveyor system from Blount Island to the main plant site as least 120 days prior to construction of the coal conveyor system. The Secretary of DER shall indicate DER's approval or disapproval within 90 days of receipt. DER may also impose reasonable conditions on the construction and operation of this conveyor system. These conditions may impose appropriate restrictions on construction, operation and maintenance of the coal conveyor system in order to comply with applicable nonprocedural standards of any agency. DER's decision shall be final unless further review is timely sought by any party pursuant to Section 120.57 or Section 403.516, Florida Statutes..."

The existing Certification Order specifically approves and licenses the SJRCT at the proposed site. It approves the construction of a 1,200-foot wharf along the southwestern portion of the site and requires the

submission of additional information about the design of the linkage system between the Power Park and the SJRCT. The purpose of this submission is to present the information required by Condition of Certification XXXII.

## II LOCATION OF THE ST. JOHNS RIVER COAL TERMINAL AND CONVEYOR LINKAGE SYSTEM

The coal unloading terminal is located on the southern shore of Blount Island adjacent the Fulton-Dames Point Cutoff of the St. Johns River. The wharf structure of the SJRCT is oriented toward the southeast corner of the project site. This location places the terminal close to the north-south alignment of the transmission line right-of-way as it crosses Blount Island. The conveyor system is located within this right-of-way to a large extent as it crosses Blount Island. Drawing Nos. 94120-01 and 94120-02 show the site location and the site plan for the terminal and the conveyor linkage to the Power Park.

The ship unloader's grab bucket will discharge into a hopper carried in the unloader main frame. A short Belt Conveyor A serves as the initial link connecting the unloader to the first transfer point at the southeast corner of the site (see Drawing Nos. 94120-03 and 94120-04), from where Conveyor Belt B will run northward. Conveyor B will generally follow the existing JEA transmission line easements across Blount Island to a transfer point near the apex of the island (see Drawing Nos. 94120-04 and 94120-05). Belt Conveyor C crosses Blount Island Channel and Heckscher Drive (SR 105) and continues northward within an easement which will be obtained from the Jacksonville Port Authority (see Drawing Nos. 94120-06 and 94120-07). Belt Conveyor D is oriented northward into the Power Park coal storage area (see Drawing No. 94120-08), where it transfers to Belt Conveyor E or to the Power Park coal storage area via the stacker (see Drawing No. 94120-09). Belt Conveyor E transfers to existing Conveyor C-2 of the Power Park's coal handling system.

The interface between Belt Conveyor D and the Power Park's coal handling system has been designed to enable coal mixing. All mechanical components used to achieve coal mixing are located within the property boundary of the Power Park.

## III COAL CONVEYOR LINKAGE DESCRIPTION

The St. Johns River Coal Terminal is a facility for receiving waterborne coal and transporting it by an overland conveyor system to the Power Park. Annual quantities may reach approximately 3 million tons, delivered in consignments up to 45,000 tons.

### III.1 THE CONVEYOR LINKAGE SYSTEM

#### III.1.1 General

The belt conveyor system between the SJRCT and the Power Park comprises four 48-inch-wide conveyors, designated A, B, C, and D, in series. Initially, the belts will be able to handle coal at a maximum rate of 1,500 tons per hour. However, the belts have been sized to allow for the future capability of handling 2,200 tons per hour. The system will be of heavy duty design and construction to operate continuously, 24 hours a day, and up to 4,000 hours per year. Drawing No. 94120-11 shows a flow diagram for the conveyor system material handling.

#### III.1.2 Design Standards

The conveyor system will be designed and constructed in accordance with Conveyor Equipment Manufacturers Association (CEMA) standards. Materials and equipment will be of modern design and workmanship and will follow the best, modern trade practices. Structures will have clean lines free of ledges, pockets, crevices and the like which can contain dirt and moisture leading to accelerated rates of corrosion. Spaces between members which are inaccessible or difficult to reach will be avoided or sealed.

#### III.1.3 Idlers

The 48-inch-wide conveyor belts will be carried on idler rolls and pulleys.

III.1.4 Pulley Assemblies

Pulleys will have diameters to suit the belting.

III.1.5 Drive Units

Conveyor drive arrangements will consist of gear reducers directly coupled to the drive pulley assemblies. They will be driven by motors with torque control characteristics. Brakes and flywheels will be employed, as necessary, for control of conveyor drift and holdbacks to prevent rollback. Drive units will be arranged so as to have the driving pulley in contact with the clean side of the belt. Drives may either be of parallel shaft or right angle orientation.

III.1.6 Belt Tensioning Devices

Each conveyor will have a belt tensioning arrangement to suit the purpose. Belt tensioning mechanisms will have a length of travel adequate for taking up belt movement and stretch, plus a length of belt sufficient for making a vulcanized splice.

III.1.7 Conveyor Belting

Conveyor belting will be of fabric or steel cord construction. Covers will be abrasion-resistant, of thickness to suit the service conditions, and in balance with their operating life expectancies. Conveyors B andC will have return belt inversion arrangements to keep the carrying side of the belt uppermost over the return run.

III.1.8 Belt Cleaners

Each conveyor will be equipped with belt scrapers and return belt plows, as required.

III.1.9 Chutes and Skirtboards

Conveyors will be fitted with feed and discharge chutes and with skirtboards to contain and center the coal flow. They will be enclosed to

contain dust, and Transfer Stations 1 and 2 will be equipped with spray systems for dust suppression. Abrasion-resistant liners will be provided on impingement and sliding surfaces. Access to liners and spray bars will be available through dust-tight inspection doors.

Dust curtains will be provided at the head chute and loading skirts. Bifurcated chutes will contain flop gates, operated by activators remotely controlled from the main control room.

III.1.10 Framework

Except for the length of Conveyor A, over which the ship unloader will operate, and the length of Conveyor D, corresponding to the stacker and reclaimer traverse distance, conveyors will be carried in a steel truss framework. Eighteen feet minimum headroom will be provided under the framework over the major part of the conveyor lengths. A 23-foot clearance will be provided at rail crossings; a minimum of 18 feet over highways.

The truss framework will carry a main walkway on one side and an access way on the other side. Walkways will be made of grating. Access ladders from grade and conveyor crossovers will be provided at intervals. The conveyor-carrying side will be enclosed with hinged hood covers locked in place with quickly detachable latches. The return strand of belting will be fully enclosed by hinged side panels and a fixed dust pan. The hinged hood and side panels will provide ready access for cleanup with a mobile vacuum system. Over Heckscher Drive and Blount Island Boulevard, conveyors will be housed in totally enclosed galleries. Galleries and truss framework will be supported on bents or towers carried on piled foundations.

The head end of Conveyor A and the tail end of Conveyor B will be carried on a trestle, from landside to the wharf, over tidal water. The trestle will also carry a wharf access road.

Conveyors A and D, wharf and stacker/reclaimer conveyors, will have a stringer framework for the horizontal runs over which the ship unloader and the stacker and reclaimer operate. Wind screens will be provided instead of hood covers along those lengths, since belt loading occurs over that length, in the case of Conveyor A, and belt loading and unloading occurs in the case of Conveyor D. These functions require unobstructed access to the carrying strand of belt, which would not be feasible if hood covers were provided.

III.1.11 Transfer Stations

Machinery floors in conveyor transfer stations will be metal grating. Stairways, walkways, platforms, and ladders will be provided for access to equipment requiring periodic attention.

III.1.12 Belt Turnovers

The return belt runs of Conveyors B and C will be inverted at head and tail ends so that the carrying surface will be uppermost. Therefore, coal particles adhering to the carrying surface will not be deposited along the return runs.

III.1.13 Belt Weigh Scale and Sampling

Near the tail end of Conveyor B, a weigh scale will be located to monitor tonnage passing.

At Transfer Station Number 3, a sample cutter will be installed to obtain primary samples from the coal stream. An adjacent building will house the remainder of the sampling system.

III.1.14 Tramp Metal Detection and Removal

Upstream of Transfer Station Number 1, a metal detector will be installed to detect magnetic and nonmagnetic tramp metal. The metallic object will be removed, if identified as nonmagnetic, by an attendent stationed there. At the head end of Conveyor A, a magnet will be stationed to remove magnetic metallic objects.

The attendant will give an all-clear signal to the ship unloader operator when ready to restart.

III.2 DUST CONTROL

III.2.1 Wet System (See Drawing No. 94120-12)

Dust control will be by means of containment and suppression methods. Containment will be provided by enclosing the coal stream to the maximum extent possible. The containment systems are presented in Sections III.1.9 and III.1.10.

There will be two suppression systems: one for the ship unloader and another for two of the conveyor transfer stations. The ship unloader will have windshields at the hopper. Around the periphery of the hopper will be a spray header with nozzles directed across the hopper mouth. The spray headers will be protected from damage by the bucket and falling coal. The sprays will operate intermittently in phase with the bucket dump cycle.

Sprays will also be located around the feeder under the hopper. Hopper outlet feeder sprays will be actuated by coal flow. To reduce droplet surface tension and improve the affinity of droplets for dust particles, a wetting agent will be added by means of a proportioning pump to the spray water.

Because of intermittent spray water usage corresponding to the batch nature of the coal unloading, the average flow rate is appreciably smaller than the peak. A hose and reel arrangement with a ship-unloader-mounted water surge tank can therefore be used. The water spray pump and surfactant proportioner will all be mounted on the ship unloader.

Transfer station dust control will be by means of totally enclosed chutes and skirtboards, with the first two transfer stations also equipped with water-surfactant solution sprays. Water sprays at the

third, fourth, and fifth transfers are not necessary since the earlier spray points will condition the coal sufficiently to control dust. Sprays will be activated by the coal flow.

III.2.2 Dry System (See Drawing No. 94120-13)
Dry dust control is for clean-up of accumulated dust in enclosed spaces to prevent conditions that could result in an explosion hazard.

Vacuum headers will run in segments along the enclosed conveyor framework, with branch connections at regular intervals, for plug-in of hand-held suction nozzles. Each branch will have a valve; all would normally be closed. Each header segment will have a hose connection to a mobile vacuum suction unit.

The high-power mobile vacuum unit(s) will be for use over the length of the entire system.

III.3 WATER DISTRIBUTION
Water for fire protection on Blount Island will be supplied from the JPA well system through an extension of the JPA fire mains (see Drawing No. 94120-16).

Potable water for the service building, located in the vicinity of the ship unloader wharf, will be supplied from the JPA system. Consumption will be approximately 400 gallons per day (based upon 30 to 40 gallons per person per day). Water for dust suppression on Blount Island will come from one new well to supply the ship unloader and the two Transfer Stations 1 and 2. The well will be approximately 750 feet deep. Submersible pumps will be used to pump water through a filter bed into a storage tank. Annual water consumption could reach approximately 9 million gallons.

III.4 SERVICE BUILDING
The service building will be a masonry structure with insulated metal roofing or a prefabricated building. In plan, overall dimensions will

be about 40 x 100 feet. Its location will be onshore close to the land-side end of the trestle and dock access road (see Drawing No. 94120-10). The floor slab will be located above the 100-year flood elevation.

Enclosed spaces will be force ventilated or air conditioned. Windows and electric lighting will be provided. Communications by telephone, intercom, and radio will be installed. The service building will be surrounded by a paved area for open storage and vehicle parking. A security fence will surround the area and restrict access to the wharf. Precipitation runoff will be drained into a nearby swale.

Potable water will be provided from the JPA system, and sewage will be pumped to the JPA treatment plant.

## III.5 ELECTRICAL SYSTEM

### III.5.1 Conveyors

Conveyors will be provided with several safety devices for personnel and equipment protection:

- o Pull-cord switches for the full length,
- o Underspeed switches,
- o Misalignment sensors.
- o Tramp metal detector, and
- o Tramp metal magnet.

### III.5.2 Lighting

The ship unloader will carry its own floodlighting to illuminate unloading operations. The dock will be floodlit from lights mounted on poles aligned on the rear of the wharf clear of the ship unloader clearance envelope. The conveyors will be illuminated by lights mounted along the main walkway.

## III.6 CONVEYOR SYSTEM CONSTRUCTION SCHEDULE

The present projected date for beginning the site earthwork is approximately February 1987. Construction of the service building would begin

around May 1987, and the erection of the belt conveyor system would begin around September 1987. It is anticipated that the SJRCT would be ready for service approximately October 1988.

## IV ENVIRONMENTAL ASPECTS

The following section describes the environmentally significant features of the proposed coal conveyor system. The environmental issues concerning the construction/operation of a coal unloading terminal and the concept of coal conveyance to the Power Park have been previously addressed in both the Site Certification Application and the Environmental Impact Statement/State Analysis Report prepared in 1981 and the public hearing process completed in 1982.

The proposed coal handling system between the SJRCT and the Power Park is a totally enclosed traveling belt conveyor in lieu of a rail linkage system.

### IV.1 CONSTRUCTION

#### IV.1.1 Trestle/Blount Island Conveyor

The major environmental impacts of the trestle and conveyor construction onto and across Blount Island will be due to pile driving activity and the movement of construction equipment on the island. All construction activities in waters of the State will be conducted in accordance with Condition of Certification XI. Turbidity screens will be used, as necessary, to prevent turbidity in excess of 50 JTUs above background beyond 150 meters from the construction activity. However, any turbidity related to the pile driving is expected to be highly localized.

The piling structures will change the benthic substrate in the immediate area of the trestle, but the substrate surface area will be increased and afford new opportunities for colonization by benthic organisms once piling structures are erected.

Pile driving will normally be conducted during daylight hours only, thereby mitigating the noise effects of the pile-driving equipment.

IV.1.2 St. Johns River Back Channel Crossing

The environmental impacts from the proposed conveyor crossing will be limited to the placement of support pilings. No dredging activity will be required. Any impacts to water quality and/or biological resources will be minimal and short-term. The support structures will be installed at 110-foot intervals, aligned with every fifth support of the existing railroad bridge. The above-water vertical clearance for the proposed conveyor Back Channel Crossing will exceed that of the existing railroad bridge, allowing continued safe navigation of watercraft (see Figures IV-1 and IV-2).

The Back Channel construction will be accomplished primarily from the existing railroad bridge with some activities staged from barges. Construction activities will be scheduled around the normal operating routine of the railroad which serves Blount Island for the Jacksonville Port Authority. The construction of the conveyor crossing structure will be accomplished within the existing railroad dedication, granted to the Jacksonville Port Authority by the State of Florida in 1967.

IV.1.3 Heckscher Drive Crossing

The construction of the Heckscher Drive (SR 105) crossing will cause some occasional, temporary traffic constriction. This will be due to construction machinery and conveyor equipment being carried across or put in place above the highway right-of-way. The proposed crossing plans provide for supporting structures to completely span the highway right-of-way, with the conveyor aligned immediately eastward and parallel to the existing railroad crossing. The minimum vertical clearance will be 18 feet above the road surface (see Figure IV-3).

IV.1.4 Heckscher Drive to Power Park

From Heckscher Drive north to the Power Park, the conveyor structure will basically follow along the existing Jacksonville Port Authority

railroad tracks on the existing embankment across the wetlands. The centerline-to-centerline separation between the railroad tracks and the conveyor structure will be approximately 21 feet. Portions of the existing railroad berm through the wetlands north of Heckscher Drive are seriously eroded. Use of the service road along the railroad and placement of the westerly support pilings along this berm require that its eastern shoulder be widened approximately 4 feet eastward beyond the original berm perimeter. This would require the placement of approximately 2,500 cubic yards of fill in an area that appears to have been previously excavated during the original construction of the railroad berm. The easterly conveyor support structures will be pilings driven partly into the wetland substrate (see Drawing No. 94120-07, Section A-A). Although filling activity to widen the berm will impact the benthic community immediate to the construction area, no significant change to the benthic community is expected. It is anticipated that no construction mats will be required in the tidal marsh since construction activities can be staged from the railroad and the adjacent service road atop the embankment.

IV.1.5 Service Building

The construction of the 4,000-square-foot service building will require the simple clearing and grading of the site (a previously disturbed spoil disposal area). Vegetation, consisting of shrubs and grasses, will be removed from this area. Construction will also include an adjacent parking lot, swale system for stormwater management, and an unpaved service road. Runoff from the onsite construction area will be contained and controlled to minimize turbidity increases in waters of the state.

IV.1.6 Ground Water Well

Water usage of the dust suppression system requires the construction of one ground water well on Blount Island (see Drawing No. 94120-16). Information concerning the construction of this well has been submitted under separate cover to FDER for review and approval.

## IV.2 OPERATION

### IV.2.1 Emissions

The primary operational impact of this coal conveyance system will be the emission of particulates (coal dust). The existing PSD permit will be modified to reflect the totally enclosed, continuous belt conveyor system to transport coal from the unloading facility to the Power Park. Total enclosure, belt inversions, and belt cleaning will eliminate possible coal dust dribble to the water and ground surface along the route of the conveyor system.

The routine use of a dust suppression system and the use "as needed" of a vacuum system for cleanup of accumulated dust will greatly enhance the control of particulate emissions.

There will be some noise emission from the electric motors driving the conveyor belts. However, operational noise levels outside the conveyor right-of-way will not exceed the 75 A-weighted decibels (dBA) limit permitted for lands zoned industrial, waterfront (IW), and the 65 dBA limit at any point where the IW district adjoins a residential district.

### IV.2.2 Traffic

There will be a negligible increase in the traffic on/off Blount Island due to the presence of operating personnel for the waterfront operations. Coal can be continuously delivered across Heckscher Drive and Blount Island Boulevard with the belt conveyor system with no inconvenience to vehicular traffic.

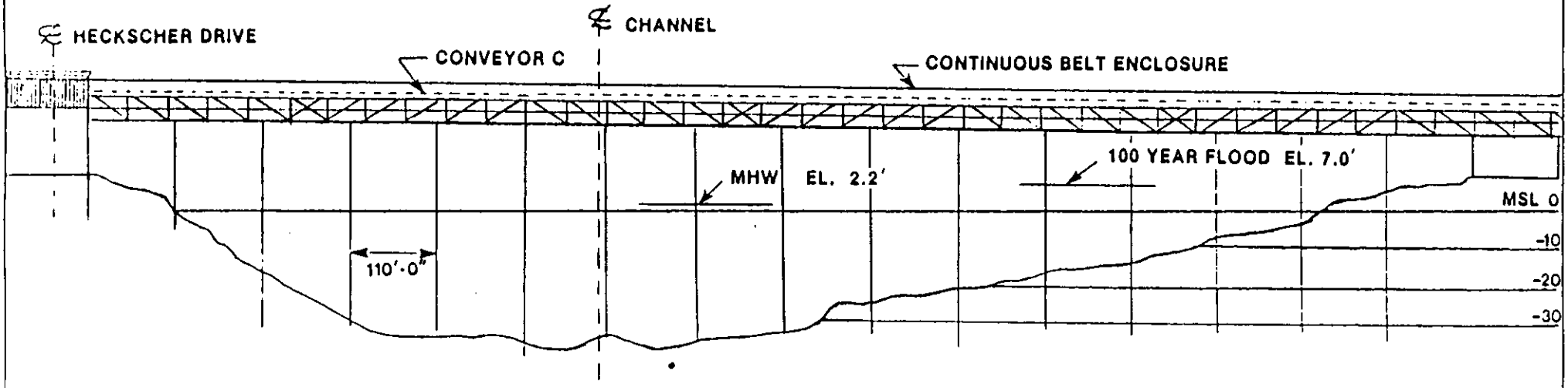
It should be noted that the conveyor structure crossing Heckscher Drive and Blount Island Boulevard is itself totally enclosed, including access walkways, to prevent any items such as maintenance tools from dropping onto the highway below.

IV.2.3 Stormwater Management

A stormwater management plan has been submitted under separate cover to the FDER subdistrict office and the St. Johns River Water Management District for review and approval in accordance with Condition of Certification IV.A.

IV.2.4 Ground Water Well

Information concerning the operation of a new ground water well on Blount Island has been submitted under separate cover to FDER for review and approval.

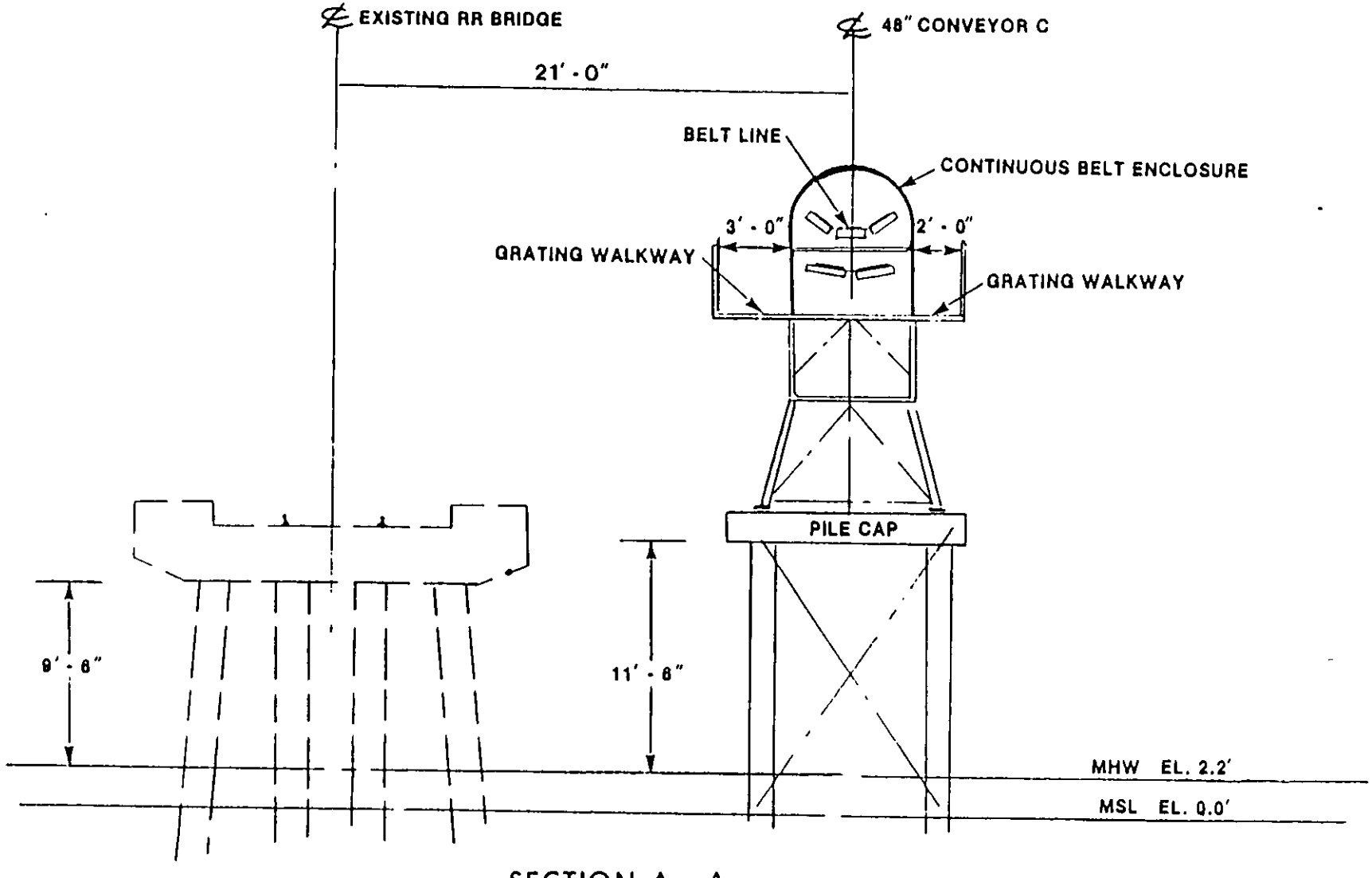



HORIZONTAL SCALE 1"=200'
VERTICAL SCALE 1"=40'

Figure IV-1

ST. JOHNS RIVER COAL TERMINAL:
CONVEYOR CROSSING OF ST. JOHNS RIVER
BACK CHANNEL/PROFILE

JACKSONVILLE ELECTRIC AUTHORITY (JEA)




SECTION A - A

Figure IV-2

ST. JOHNS RIVER COAL TERMINAL:
CONVEYOR CROSSING OF ST. JOHNS RIVER
BACK CHANNEL/CROSS SECTION

JACKSONVILLE ELECTRIC AUTHORITY (JEA)

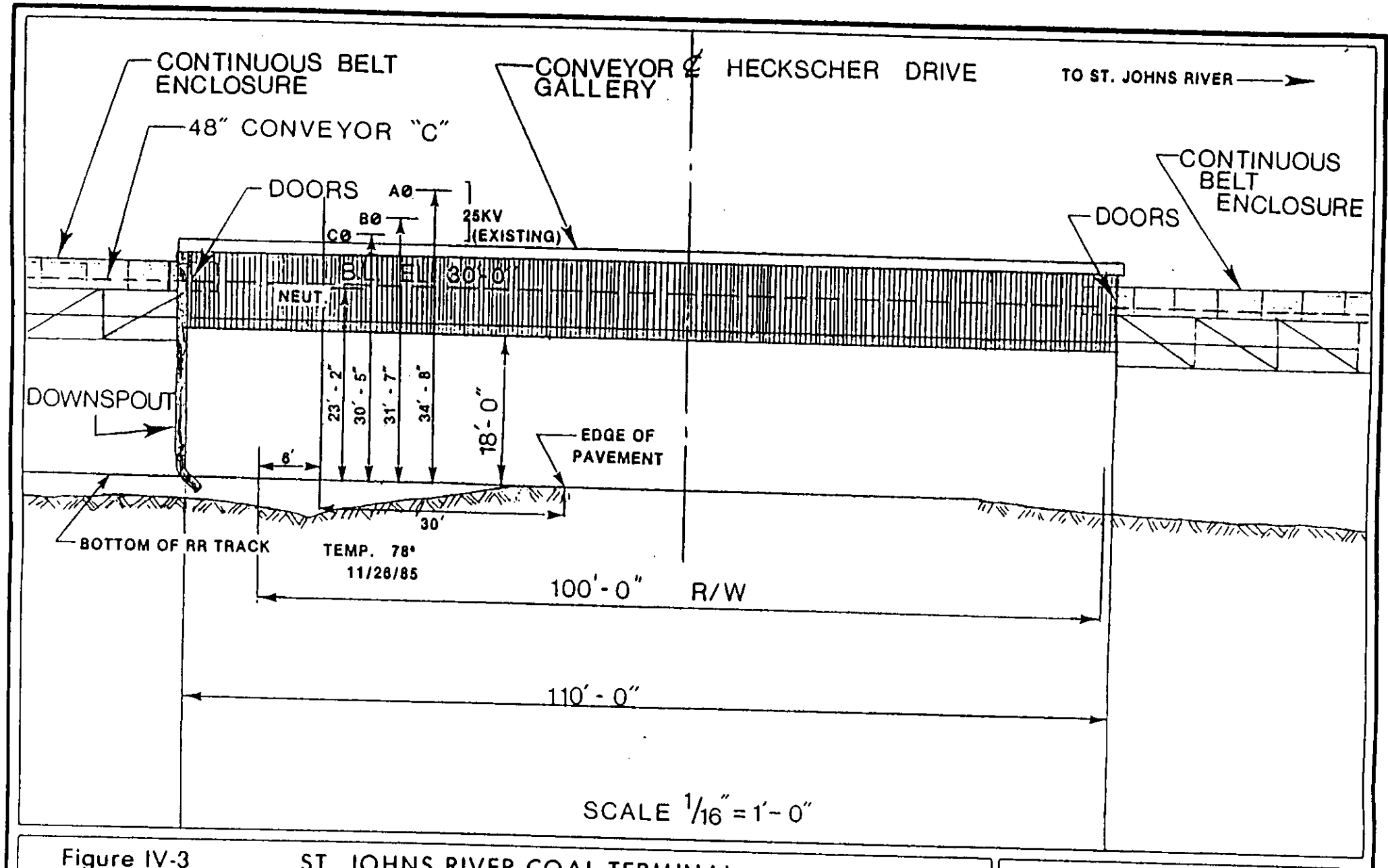
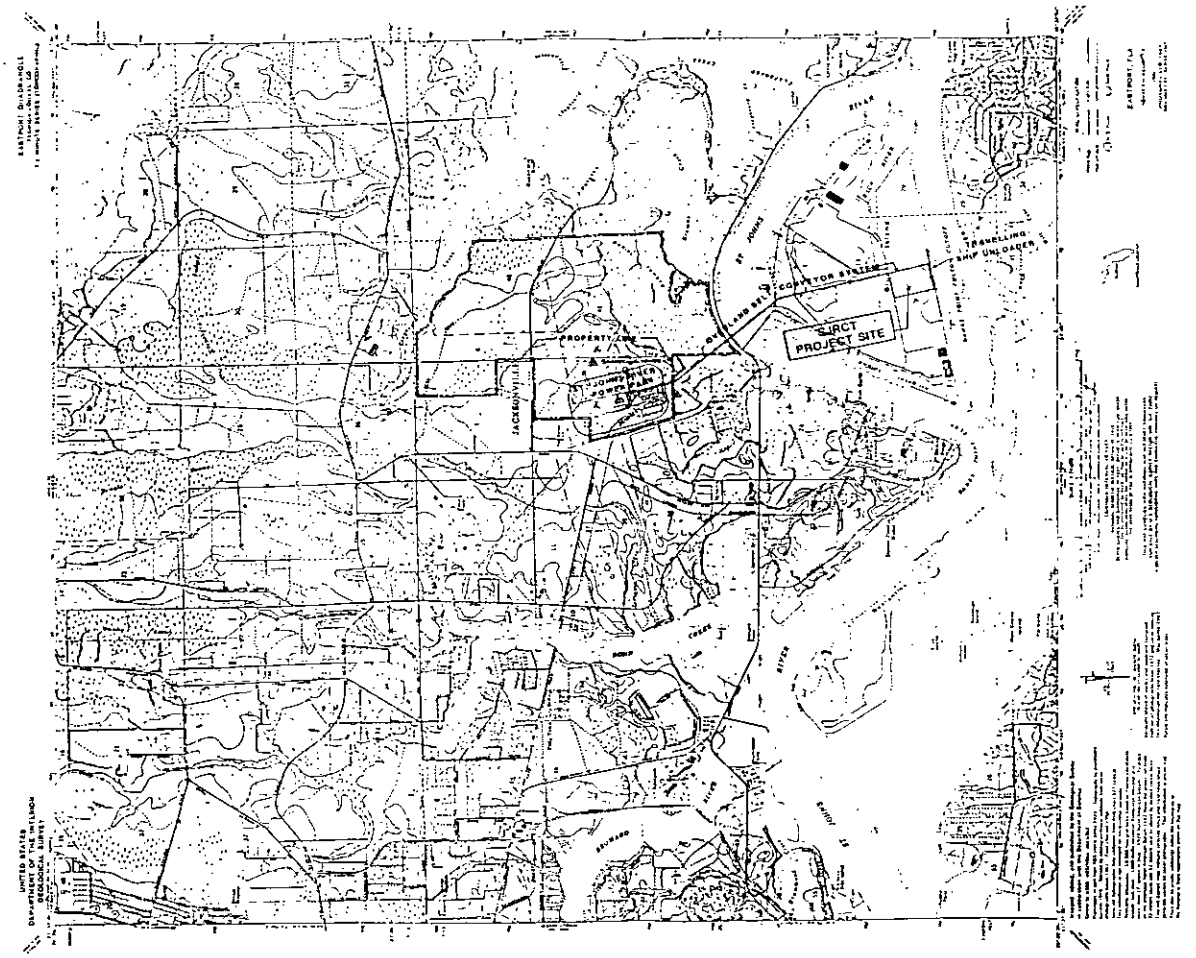
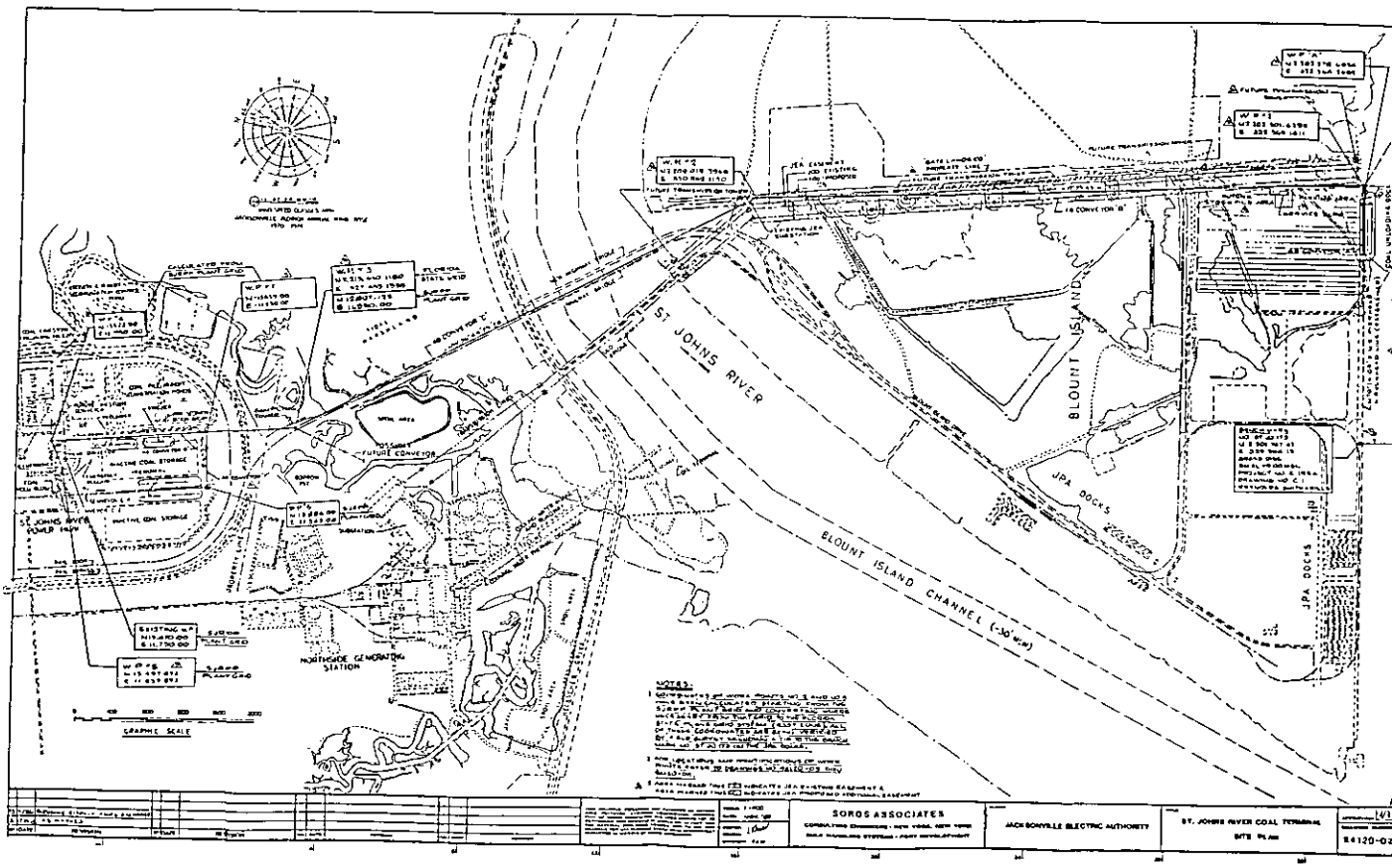
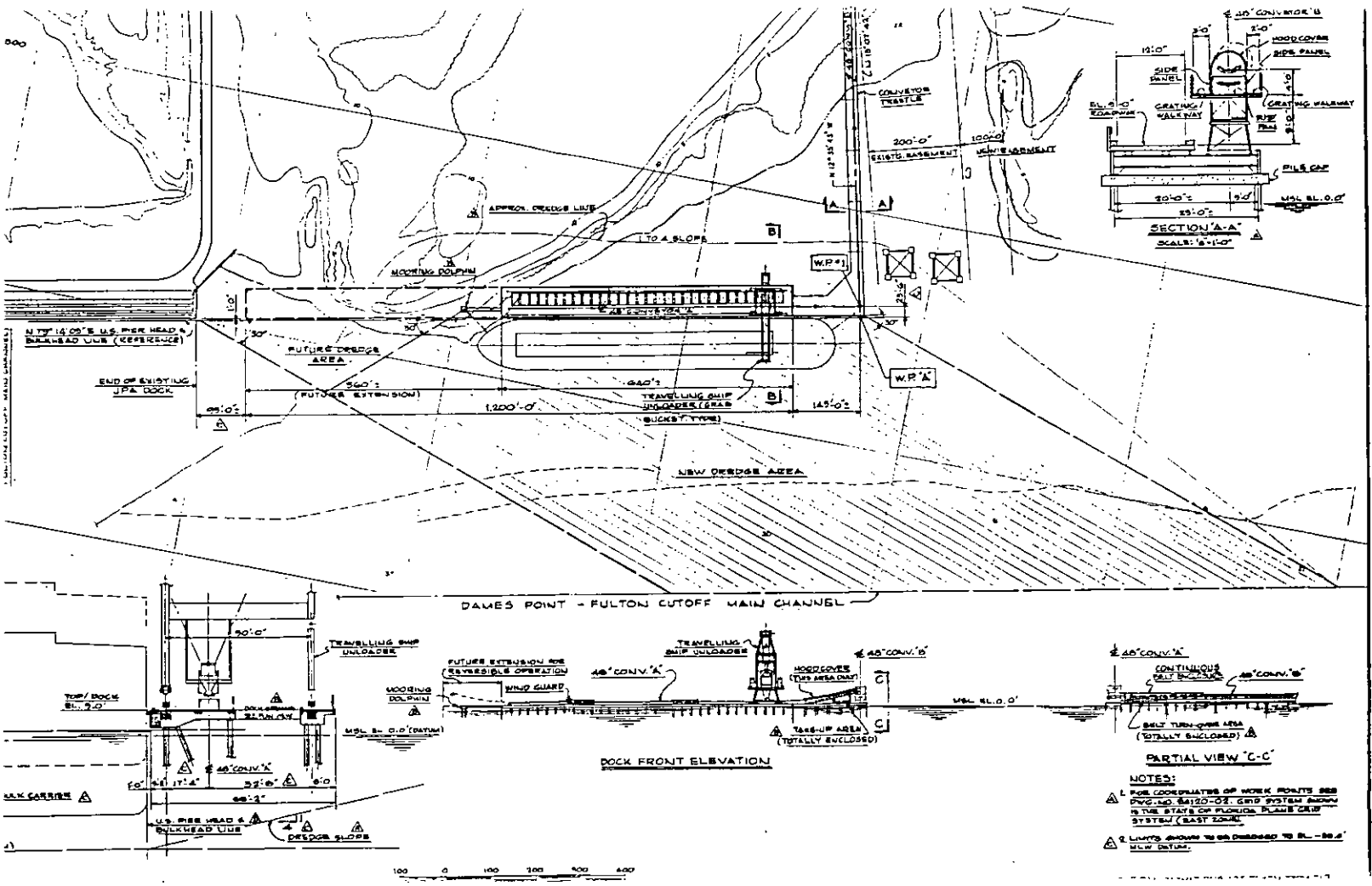



Figure IV-3 ST. JOHNS RIVER COAL TERMINAL: PROFILE OF HECKSCHER DRIVE CROSSING

JACKSONVILLE ELECTRIC AUTHORITY (JEA)

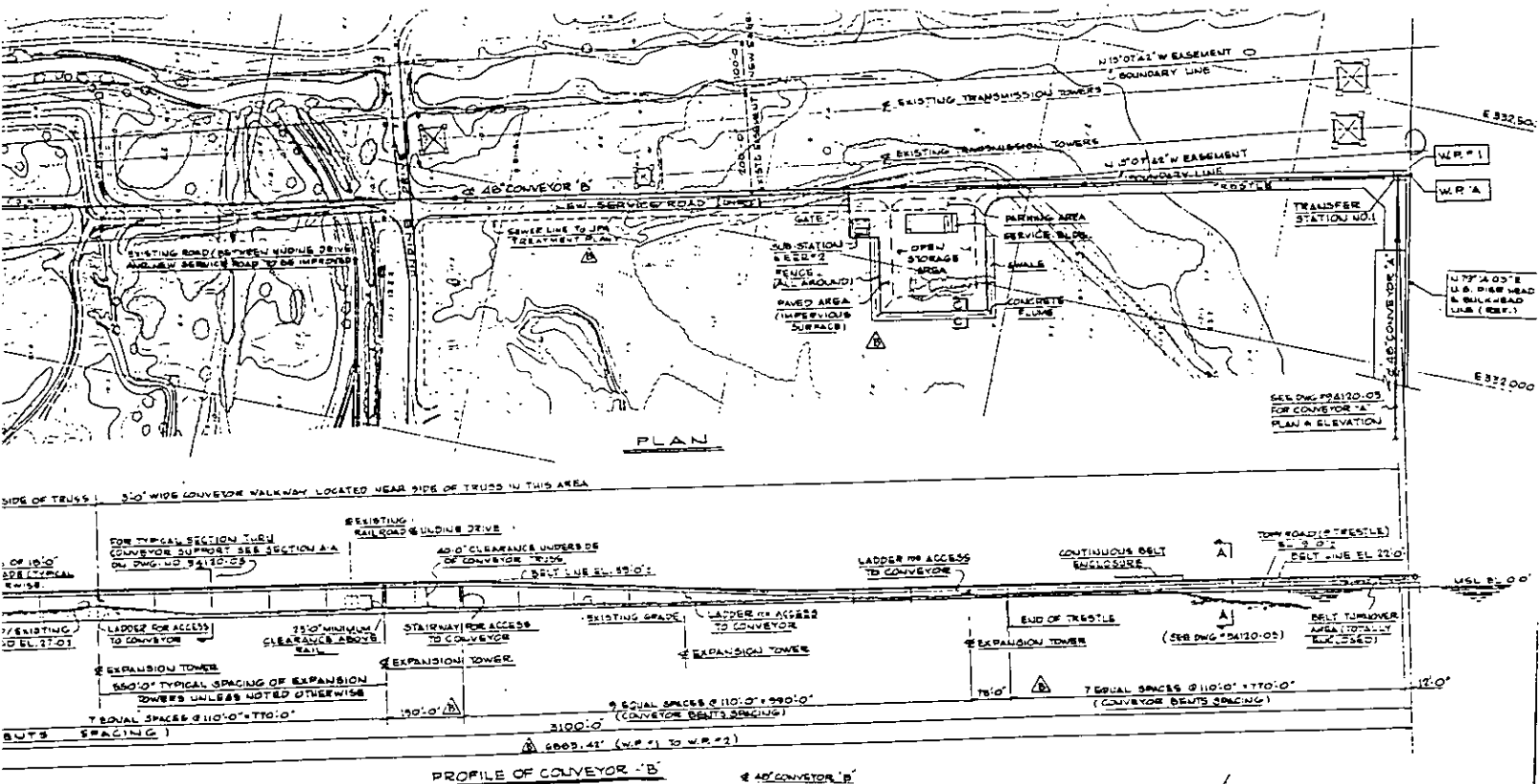

DIRECT
PROJECT SITE
PROPERTY LINE
TRANSMISSION LINE CORRIDOR
SOROS ASSOCIATES
JACKSONVILLE ELECTRIC AUTHORITY
ST. JOHNS RIVER COAL TERMINAL
SITE IDENTIFICATION
84120-01


ST JOHNS RIVER
BLOUNT ISLAND
BLOUNT ISLAND CHANNEL (-30' MLW)
JPA DOCKS
JPA DOCKS
FUTURE CONVEYOR
NORTHSIDE GENERATING STATION
ST JOHNS RIVER POWER PARK
GRAPHIC SCALE
NOTES:
SOROS ASSOCIATES
JACKSONVILLE ELECTRIC AUTHORITY
ST. JOHNS RIVER COAL TERMINAL

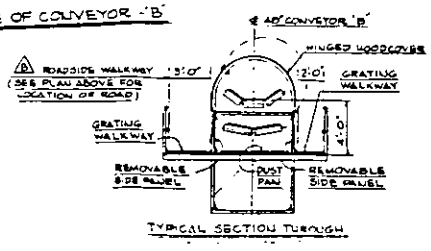



NOTES:

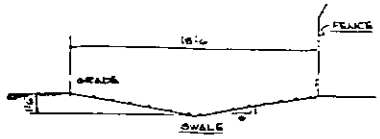
1. FOR COORDINATES OF WORK POINTS SEE DWG. NO. 84120-03. GRID SYSTEM SHOWN IS THE STATE OF FLORIDA PLANE GRID SYSTEM (EAST ZONE).
2. LIMITS SHOWN TO BE DREDGED TO EL. -38.0' MLW DATUM.




PROFILE OF CONVEYOR 'B'




TYPICAL SECTION THROUGH



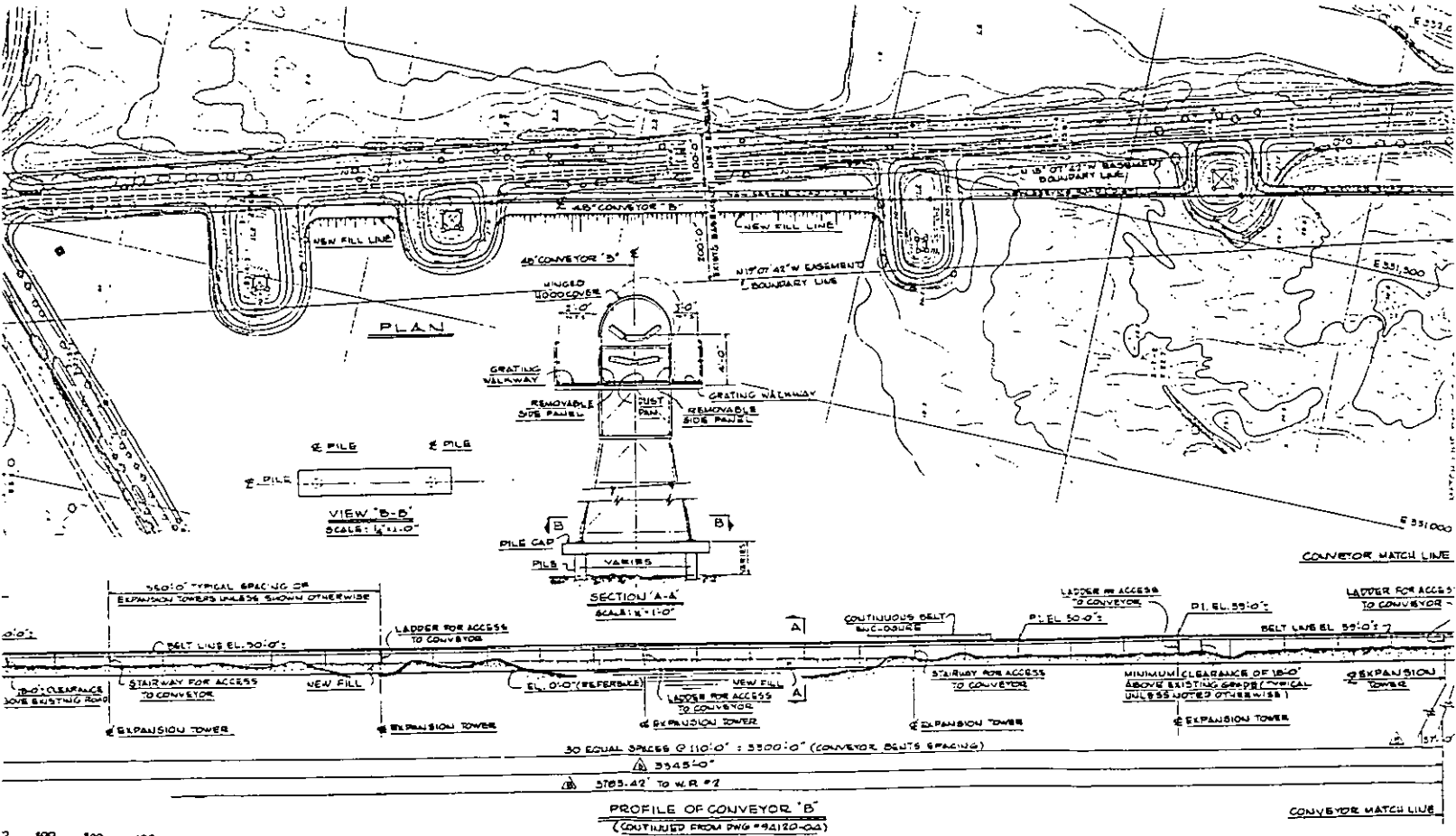

SECTION C-C
SCALE: 1"=1'-0"

200 0 200 400

SCALE - FEET

NOTE

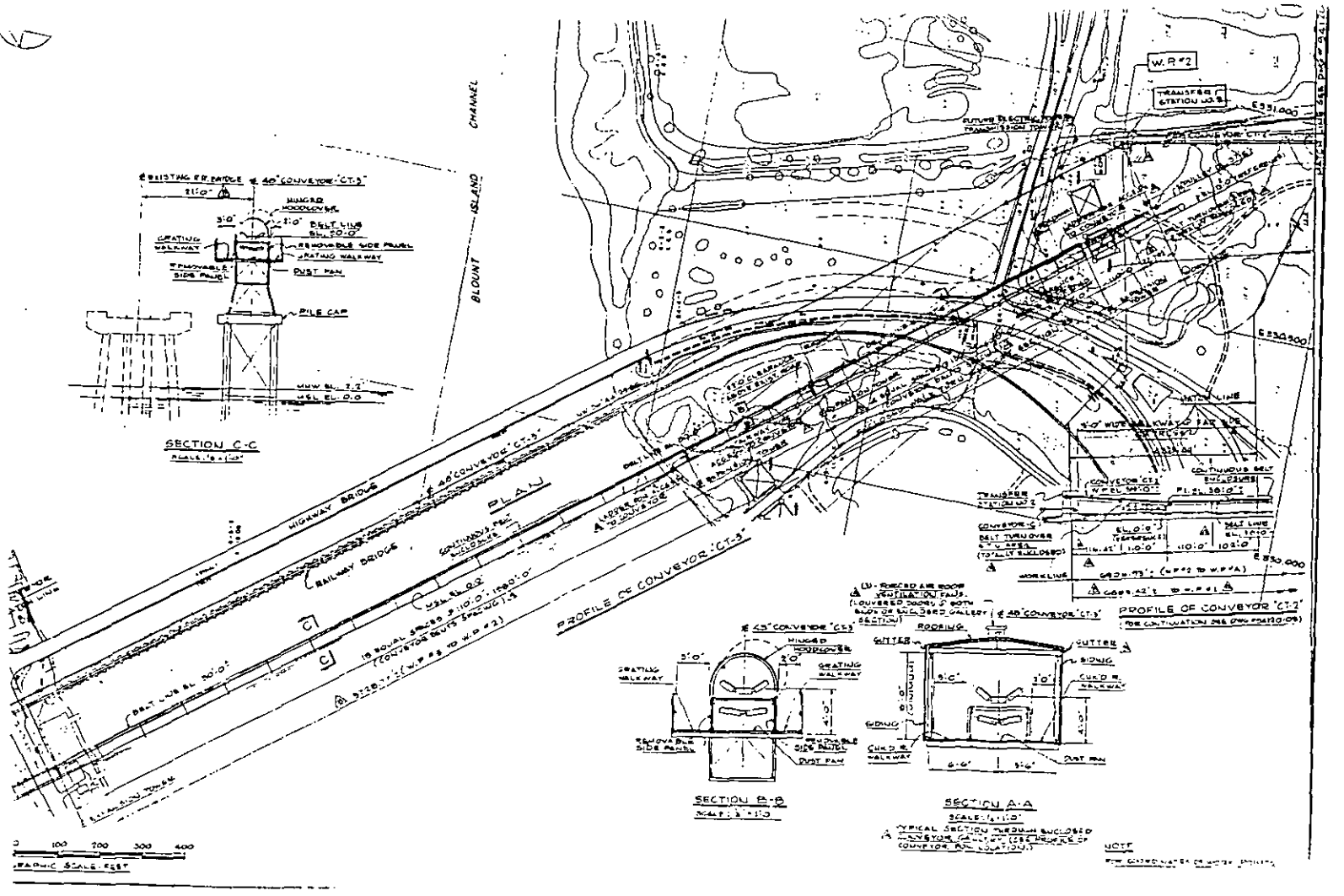
FOR COORDINATES OF WORK POINTS SEE DWG NO 94120-02.

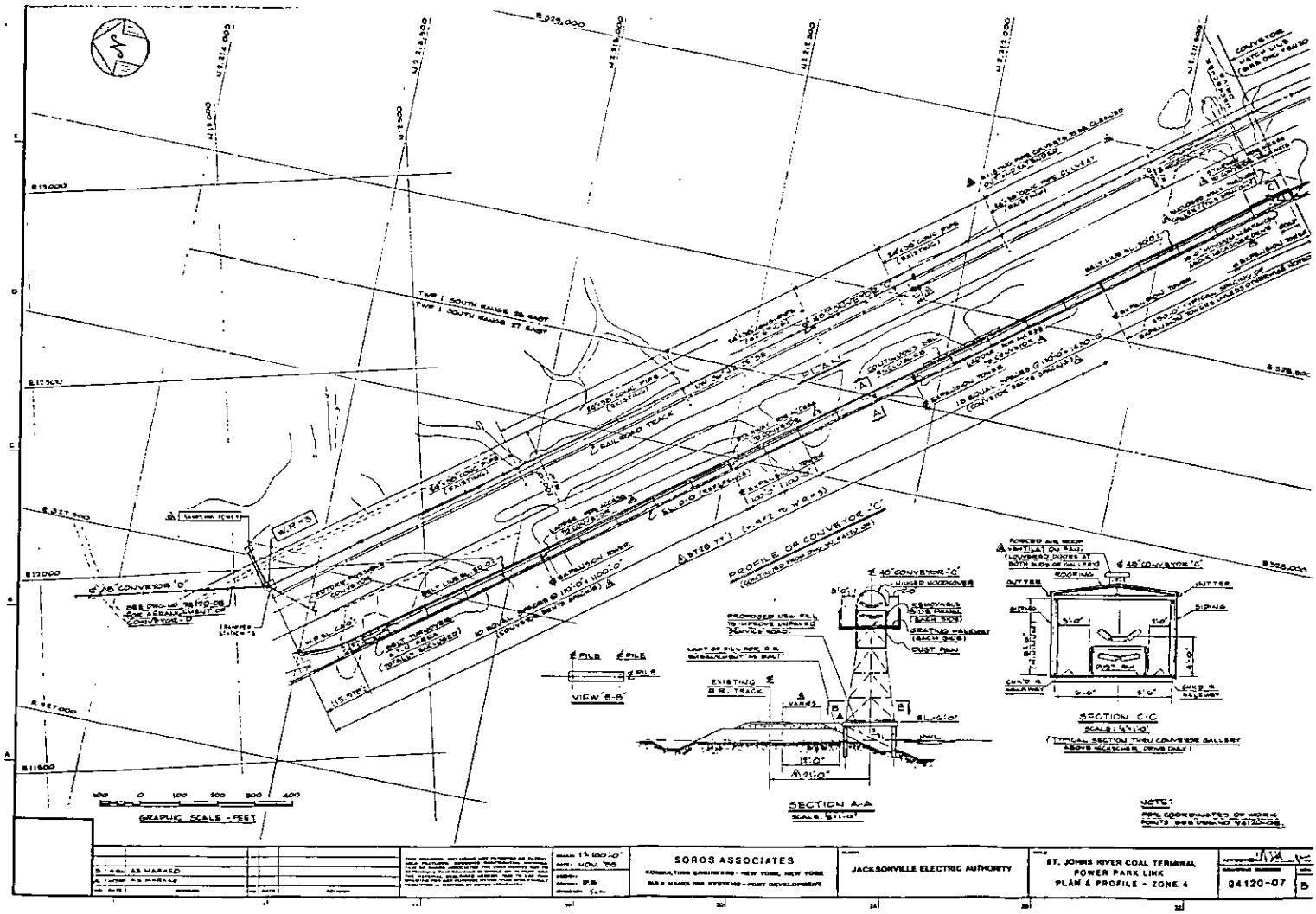


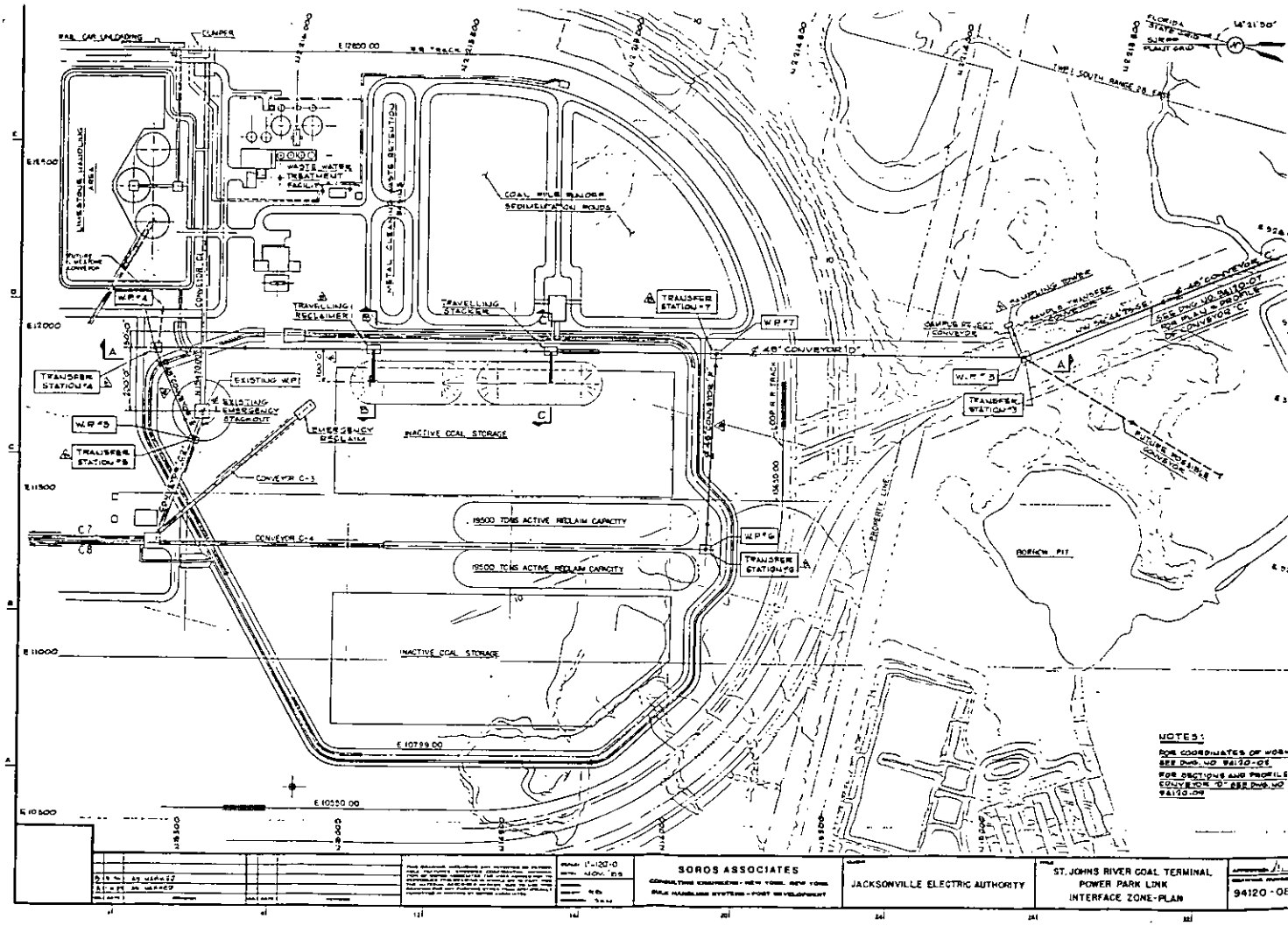


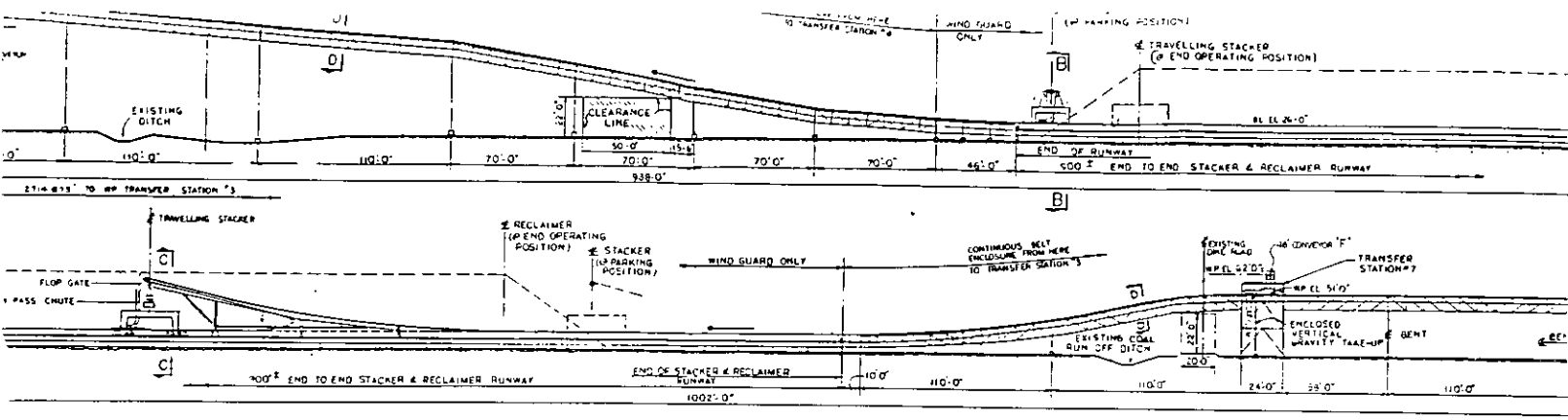


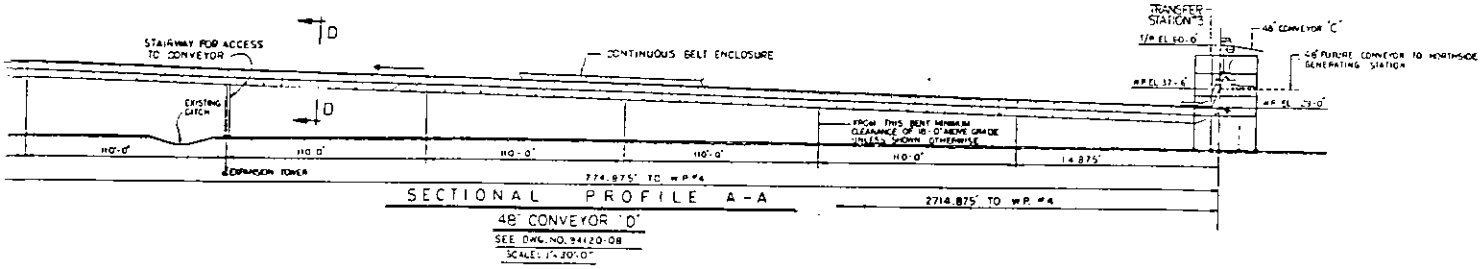
NOTE:
FOR COORDINATES OF WORK POINTS SEE DWG. NO. 94120-02.


PLAN
PROFILE OF CONVEYOR 'CT-3'
SECTION C-C
SECTION B-B
SECTION A-A
BLOUNT ISLAND CHANNEL
HIGHWAY BRIDGE
RAILWAY BRIDGE
W.P. #2
TRANSFER STATION NO. 2
GRAPHIC SCALE - FEET


PROFILE OF CONVEYOR 'C'
SECTION A-A
SECTION C-C
VIEW 'B-B'
GRAPHIC SCALE - FEET
SOROS ASSOCIATES
JACKSONVILLE ELECTRIC AUTHORITY
ST. JOHNS RIVER COAL TERMINAL
POWER PARK LINK
PLAN & PROFILE - ZONE 4
94120-07
B


RAIL CAR UNLOADING
CLAMPER
E 12800.00
POND
WASTE WATER TREATMENT FACILITY
LIMESTONE HANDLING AREA
COAL PILE RUNOFF SEDIMENTATION POND
TRAVELLING RECLAIMER
TRAVELLING STACKER
TRANSFER STATION #7
W.P. #7
W.P. #4
W.P. #5
W.P. #3
W.P. #6
TRANSFER STATION #4
TRANSFER STATION #5
TRANSFER STATION #6
EXISTING W.P.1
EXISTING EMERGENCY STACKOUT
EMERGENCY RECLAIM
INACTIVE COAL STORAGE
19500 TONS ACTIVE RECLAIM CAPACITY
19500 TONS ACTIVE RECLAIM CAPACITY
INACTIVE COAL STORAGE
CONVEYOR C-3
CONVEYOR C-4
48" CONVEYOR 10"
LOOP R.R. TRACK
PROPERTY LINE
BORROW PIT
FUTURE 500 KV LINE
E 10799.00
E 10550.00
E 11500
E 12000
E 10500
THIRD SOUTH RANGE 28 EAST
NOTES:
SOROS ASSOCIATES
JACKSONVILLE ELECTRIC AUTHORITY
ST. JOHNS RIVER COAL TERMINAL
POWER PARK LINK
INTERFACE ZONE-PLAN
94120 - 0E



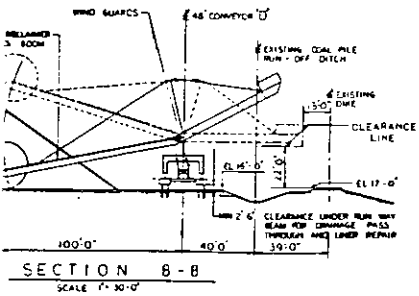




SECTIONAL PROFILE A-A

48" CONVEYOR 'D'

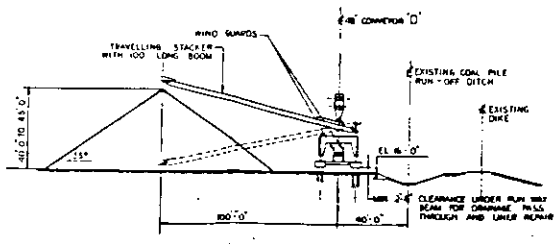
SEE DWG. NO. 94120-08

SCALE: 1"=30'-0"



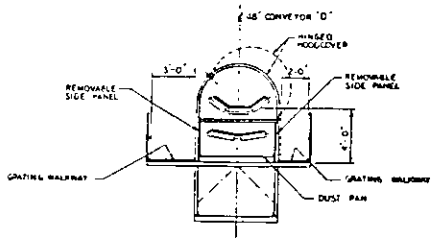

SECTION B-B

SCALE 1"=30'-0"



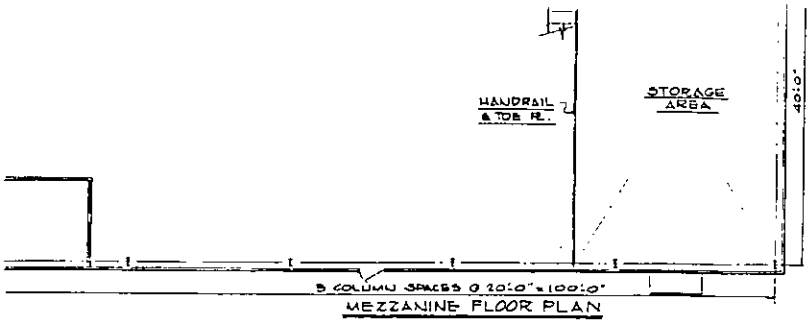

SECTION C-C

SCALE 1"=30'-0"

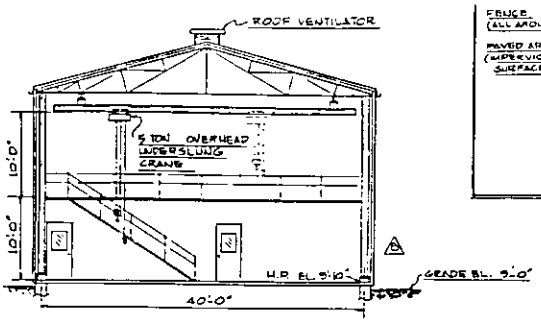



SECTION D-D

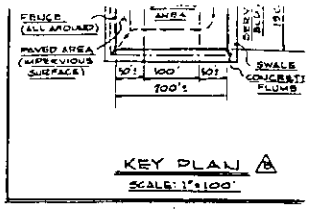
SCALE 1"=1'-0"




MEZZANINE FLOOR PLAN

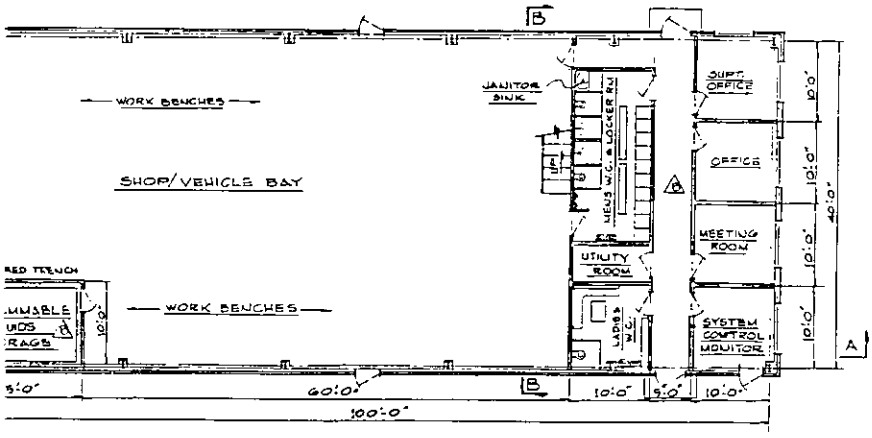



ELEVATION B-B

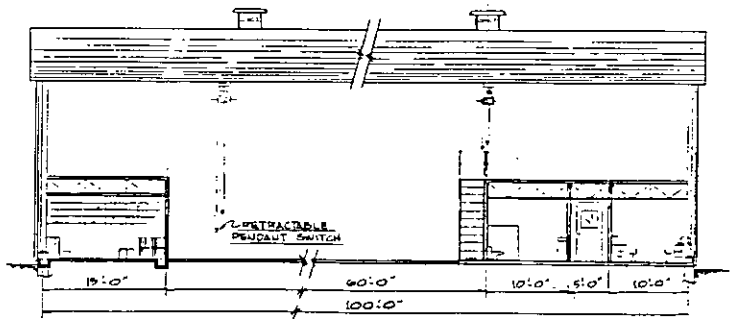



KEY PLAN

SCALE: 1" = 100'




FLOOR PLAN

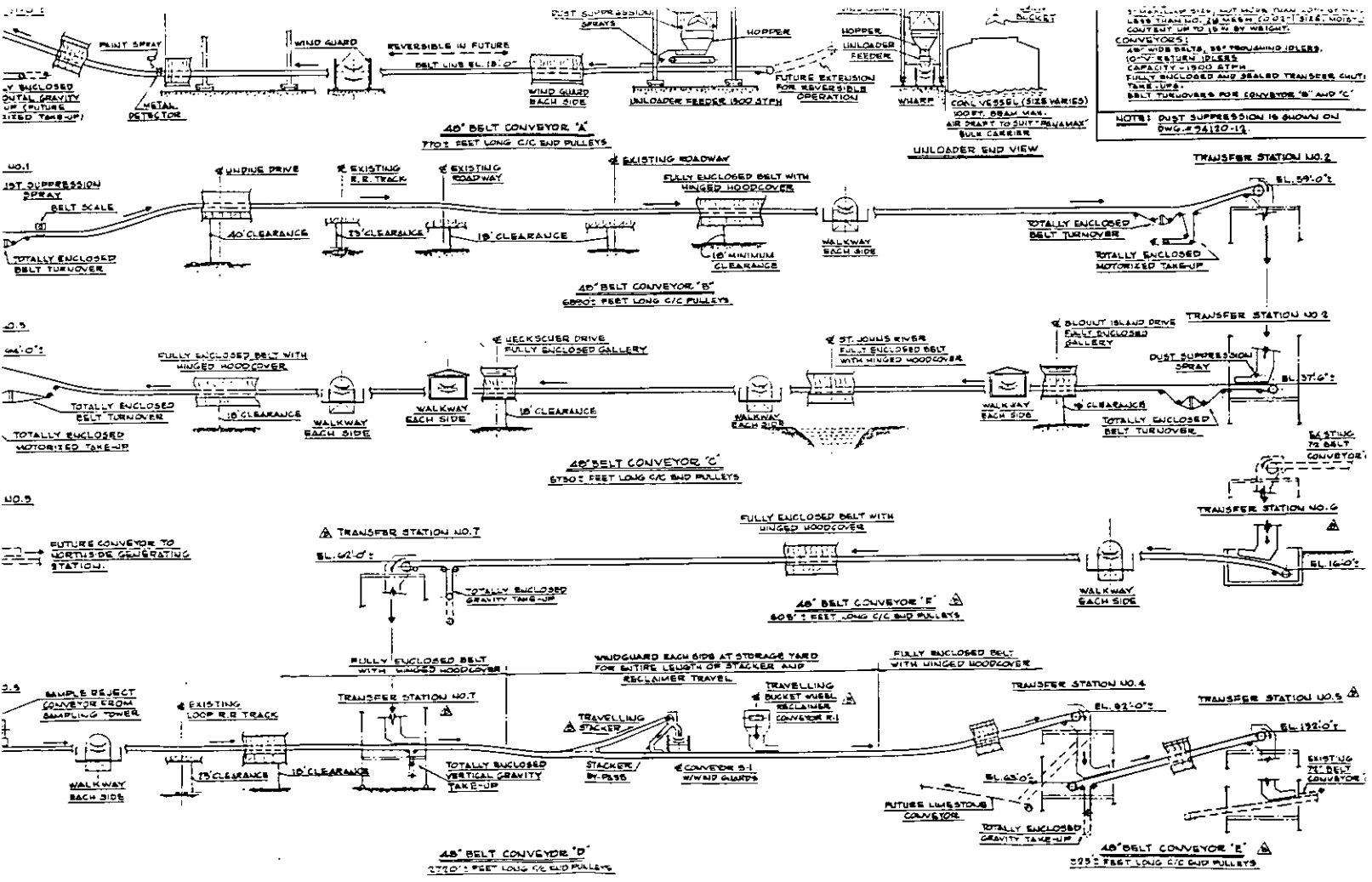


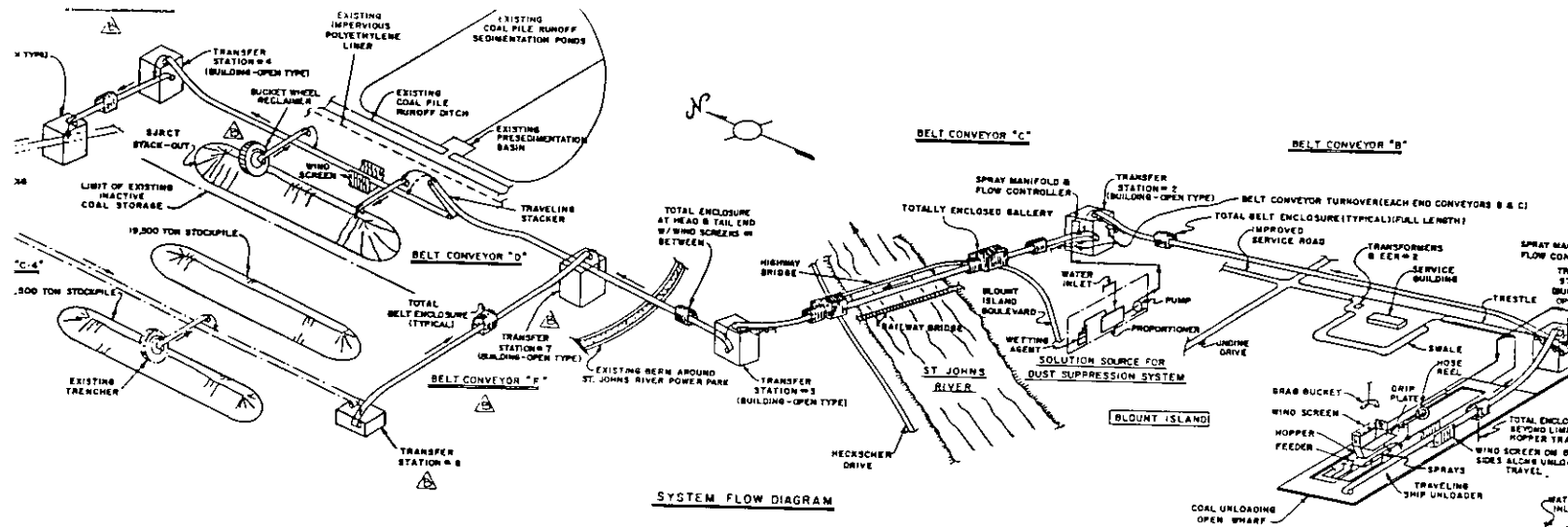

ELEVATION A-A

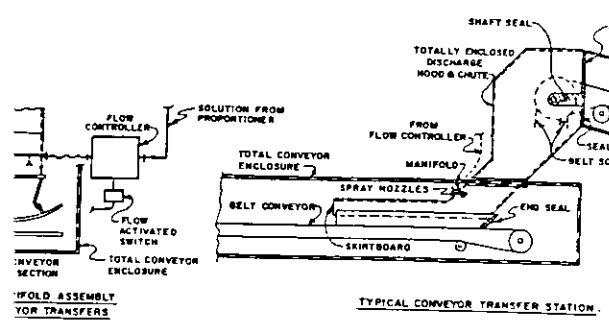
0 10 20 50

GRAPHIC SCALE - FEET

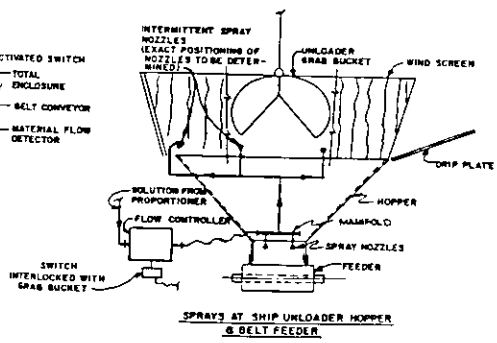
NOTE:
FOR LOCATION OF SERVICE BUILDI
SEE DWG. NO. 94120-04.


PRINT SPRAY
METAL DETECTOR
WIND GUARD
REVERSIBLE IN FUTURE
BELT LINE EL. 19'-0"
WIND GUARD EACH SIDE
DUST SUPPRESSION SPRAYS
HOPPER
UNLOADER FEEDER 1500 STPH
FUTURE EXTENSION FOR REVERSIBLE OPERATION
HOPPER
UNLOADER FEEDER
WHARF
BUCKET
COAL VESSEL (SIZES VARIES)
100 FT. BEAM MAX. AIR DRAFT TO SUIT "PANAMAX" BULK CARRIER
40" BELT CONVEYOR 'A'
7702 FEET LONG C/C END PULLEYS
UNLOADER END VIEW
CONVEYORS 1:
48" WIDE BELTS, 35° TROUGHING IDLERS,
10-0" RETURN IDLERS
CAPACITY - 1500 STPH
FULLY ENCLOSED AND SEALED TRANSFER CHUTES
TAKE-UPS:
BELT TURNOVERS FOR CONVEYOR 'B' AND 'C'
NOTE: DUST SUPPRESSION IS SHOWN ON DWG. # 94120-13
TRANSFER STATION NO. 2
EL. 59'-0"
UNDRIVE DRIVE
EXISTING R.R. TRACK
EXISTING ROADWAY
EXISTING ROADWAY
FULLY ENCLOSED BELT WITH HINGED HOODCOVER
DUST SUPPRESSION SPRAY
BELT SCALE
TOTALLY ENCLOSED BELT TURNOVER
40' CLEARANCE
15' CLEARANCE
19' CLEARANCE
18' MINIMUM CLEARANCE
WALKWAY EACH SIDE
TOTALLY ENCLOSED BELT TURNOVER
TOTALLY ENCLOSED MOTORIZED TAKE-UP
40" BELT CONVEYOR 'B'
6890 FEET LONG C/C PULLEYS
TRANSFER STATION NO. 3
EL. 37'-0"
BLOUIT ISLAND DRIVE FULLY ENCLOSED GALLERY
DUST SUPPRESSION SPRAY
CLEARANCE
TOTALLY ENCLOSED BELT TURNOVER
EXISTING 72" BELT CONVEYOR
FULLY ENCLOSED BELT WITH HINGED HOODCOVER
TOTALLY ENCLOSED BELT TURNOVER
TOTALLY ENCLOSED MOTORIZED TAKE-UP
18' CLEARANCE
WALKWAY EACH SIDE
JEEKSCUER DRIVE FULLY ENCLOSED GALLERY
WALKWAY EACH SIDE
18' CLEARANCE
ST. JOHNS RIVER FULLY ENCLOSED BELT WITH HINGED HOODCOVER
WALKWAY EACH SIDE
WALKWAY EACH SIDE
40" BELT CONVEYOR 'C'
8730 FEET LONG C/C END PULLEYS
TRANSFER STATION NO. 6
EL. 16'-0"
FUTURE CONVEYOR TO NORTHSIDE GENERATING STATION.
TRANSFER STATION NO. 7
EL. 62'-0"
FULLY ENCLOSED BELT WITH HINGED HOODCOVER
TOTALLY ENCLOSED GRAVITY TAKE-UP
WALKWAY EACH SIDE
40" BELT CONVEYOR 'E'
605' FEET LONG C/C END PULLEYS
SAMPLE REJECT CONVEYOR FROM SAMPLING TOWER
EXISTING LOOP R.R. TRACK
FULLY ENCLOSED BELT WITH HINGED HOODCOVER
TRANSFER STATION NO. 7
WINDGUARD EACH SIDE AT STORAGE YARD FOR ENTIRE LENGTH OF STACKER AND RECLAIMER TRAVEL
TRAVELLING STACKER
TRAVELLING BUCKET WHEEL RECLAIMER CONVEYOR R-1
FULLY ENCLOSED BELT WITH HINGED HOODCOVER
TRANSFER STATION NO. 4
EL. 92'-0"
TRANSFER STATION NO. 5
EL. 132'-0"
EXISTING 72" BELT CONVEYOR
WALKWAY EACH SIDE
75' CLEARANCE
19' CLEARANCE
TOTALLY ENCLOSED VERTICAL GRAVITY TAKE-UP
STACKER/RECLAIMER
CONVEYOR R-1 W/WINDGUARDS
EL. 63'-0"
FUTURE LIMESTONE CONVEYOR
TOTALLY ENCLOSED GRAVITY TAKE-UP
48" BELT CONVEYOR 'D'
2770' FEET LONG C/C END PULLEYS
48" BELT CONVEYOR 'E'
525' FEET LONG C/C END PULLEYS

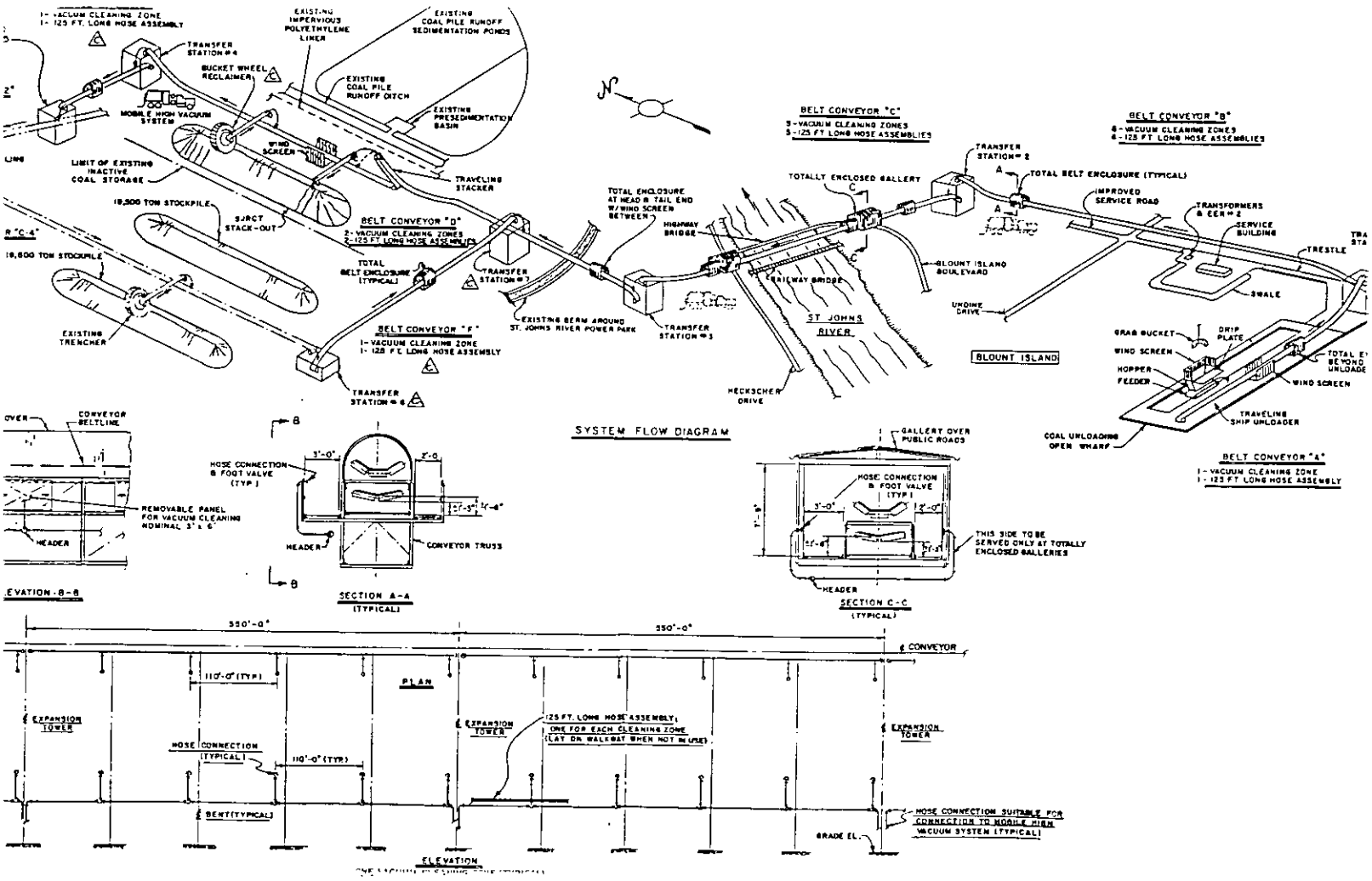



TYPICAL CONVEYOR TRANSFER STATION




SPRAYS AT SHIP UNLOADER HOPPER & BELT FEEDER




SYSTEM FLOW DIAGRAM




EVATION - B - B



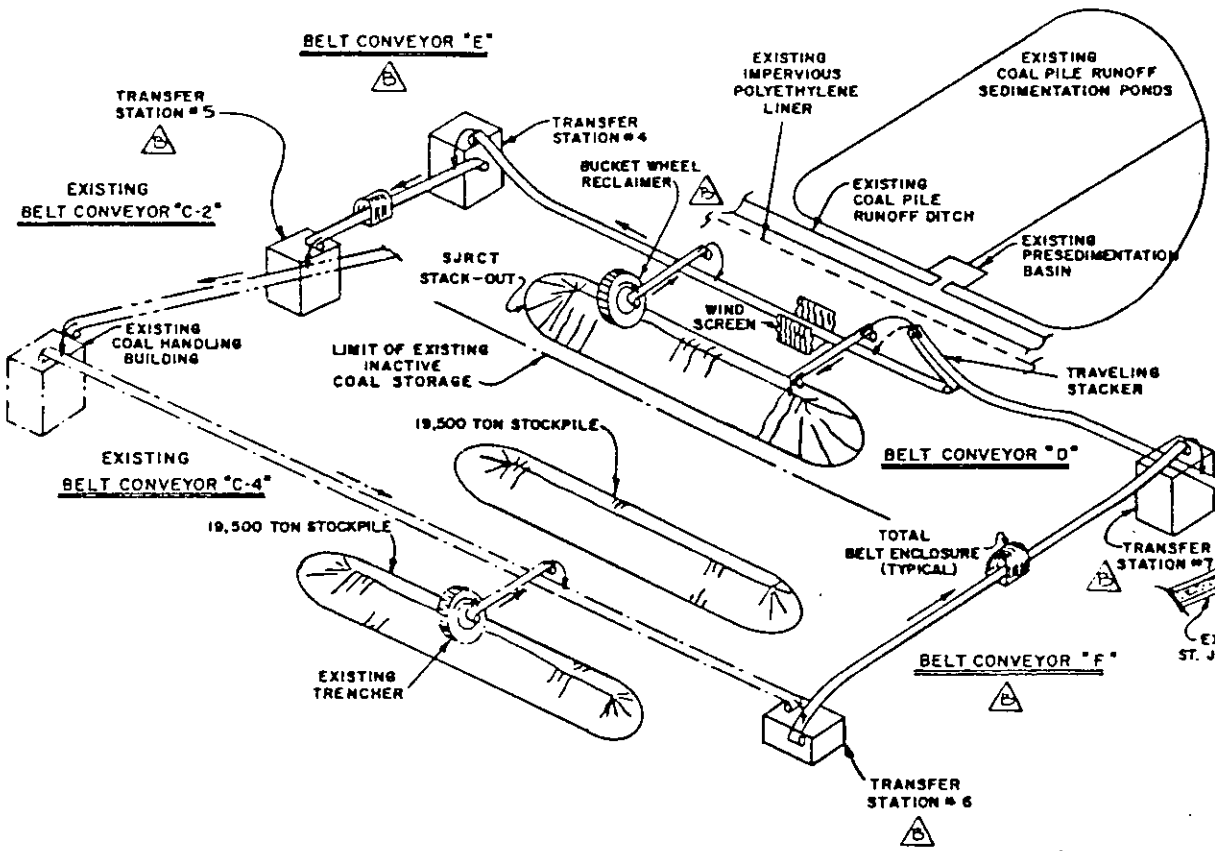

SECTION A-A (TYPICAL)



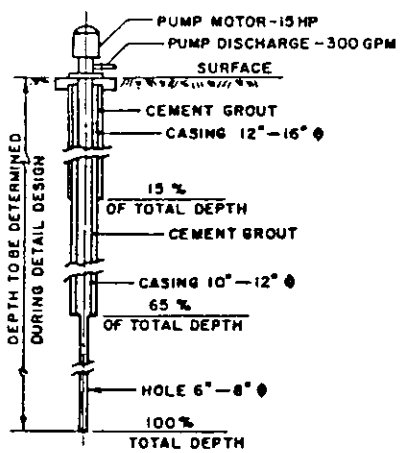

SECTION C-C (TYPICAL)



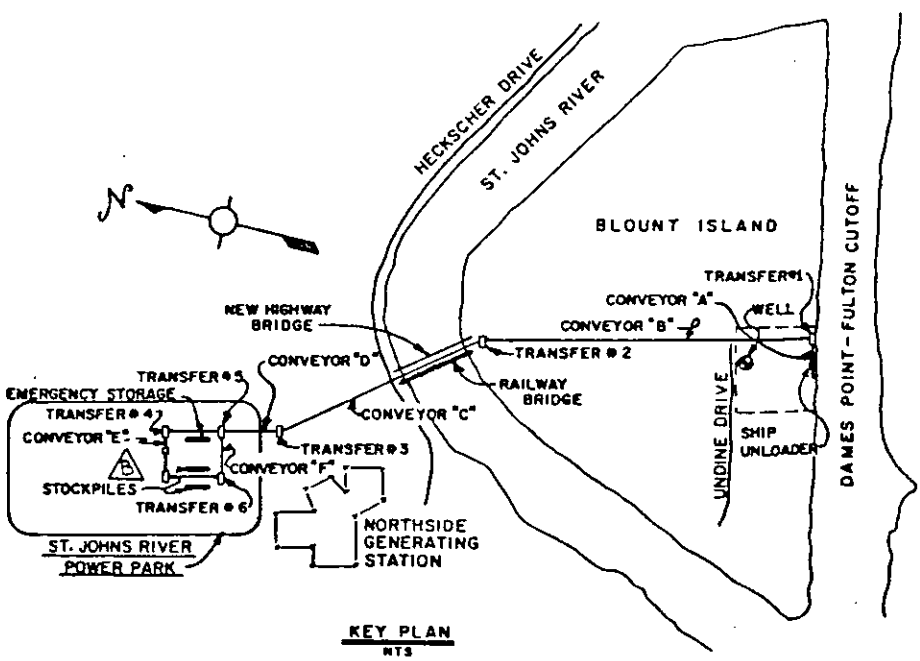

ELEVATION




SYSTEM FLOW DI




DRILLED WELL




KEY PLAN
NTS

| | | | |
|---|---|---|---|
| B | 2/66 | REDRAWN - BLENDING CIRCUIT ADDED | |
| A | 1/6/61 | AS MARKED | |



SCALE: NONE
DATE: 11/65
DESIGN: W.A.C.
DRAWN: J.M.R.

SORO
CONSULTING ENG
BULK HANDLING

# Attachment 2

JACKSONVILLE ELECTRIC AUTHORITY
P. O. BOX 53015
233 W. DUVAL STREET
JACKSONVILLE, FL 32201

st. johns river POWER PARK

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

The proposed activity complies with Florida's approved coastal management program and will be conducted in a manner consistent with such program.

Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

April 25, 1986