# WORK RELEASE MICRONIZED COAL REBURN DEMONSTRATION PROJECT DEMOLITION, RELOCATION AND TEMPORARY SUPPORTS

KODAK

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<u>SPEC. NO.</u>	TITLE	<u>REVISION</u>
W02	Demolition, Relocation and Temporary Sup	oports Const - 7/26/96
Discipline <u>Electrical</u>	Discipline Mech Dis	scipline Struc
Originator/Date		
Reviewer/Date		
Approval/Date		
	Project Manager/Date	
	CHECK PRINT	
	BY/DATE BY/DATE	
	BY/DATE	

### PART 1 - GENERAL

#### 1.01 WORK COVERED BY RELEASE DOCUMENTS

- A. Scope of Work
  - The Scope of Work comprises demolishing, relocating and/or providing temporary support structures for existing piping, structures, equipment, electrical circuits and conduits and in advance of new mechanical piping, structural additions, and electrical installations which will be performed as part of the Boiler #15 Micronized Coal Reburn demonstration project, Building 31, at Eastman Kodak Company, Kodak Park Utilities Division, Rochester N.Y.
  - 2. This Scope of Work does not cover demolition and/or relocation of existing electrical and control circuits and conduits which will be performed as part of the cutover to the new Distributed Control System during the Boiler #15 outage.
- B. General Requirements
  - 1. This work primarily relates to providing temporary support structures for electrical conduits and equipment located along the South wall of building number 31, on the Apron Feeder floor (el. 244'-8 1/4") and the Coal Crusher floor (el. 234'-6"), and miscellaneous work in the Building #31 area.
  - 2. The work to be completed under this package will be performed by Kodak Electrical Construction.
  - 2. Kodak Electrical Construction shall provide all materials, supplies, labor, services, supervision, tools, plant, apparatus, conveyances, equipment, transportation, information and reports, and incidentals for accomplishing the work covered by these Scope documents and the drawings, except for materials and services specifically named herein to be provided by Others.
  - 3. Kodak Electrical Construction shall verify all equipment dimensions and locations prior to installation.
  - 4. Kodak Electrical Construction shall verify and resolve interferences with existing plant facilities and/or future work to be provided as a part of this project.
  - 5. Execution of the work to be provided under this Scope of Work shall be in accordance with all applicable Kodak standards, specifications and construction practices, the drawings, the equipment manufacturers recommendations and instructions, and this Scope of Work. Kodak Electrical Construction shall identify and resolve any conflict between the work documents with the responsible Kodak project engineer.
- C. Work of this Release includes:

- 1. Provide temporary supports to existing coal handling motor starters located against wall of El. 244'-8 1/4", between columns 11 and 12, near the Apron Feeders, prior to removal of the girt steel and building wall for erection of the new building extension.
  - a. The following local motor starting equipment as indicated has been designated for demolition and replacement by new motor starters.
    - 1. East Cyclone Star Seal El. 244'-8 1/4"
    - 2. West Cyclone Star Seal El. 244'-8 1/4"
    - 3. East Cyclone Helical Distributor El. 244'-8 1/4"
    - 4. West Cyclone Helical Distributor El. 244'-8 1/4"
    - 5. East Cyclone Coal Feeder El. 244'-8 1/4"
    - 6. West Cycione Coal Feeder El. 244'-8 1/4"
    - 7. East Control Terminal Box
    - 8. West Control Terminal Box
  - b. This equipment will be replaced with new motor starting equipment, however, the existing equipment will be required to continue operating until cutover to the new equipment. The East and West Dynamatic equipment will not be demolished, but will be relocated during the outage and reused.
  - c. The equipment listed in (a.) above is currently mounted on a steel frame. The frame is supported against the lower girt steel line by welded steel braces as shown in Sketch W02-1. Cut the braces at the girt. Devise and install temporary braces from the equipment support frame to building column 12 (near the West Dynamatic).
  - d. A cable to existing page/party equipment is located along the lower girt iine of El 244'-8 1/4". The page/party equipment should be disconnected from it's current location and relocated as described in Work Release W05-C "Lighting, Receptacles and Communications"
  - e. Cut the braces supporting conduit at the girt. Devise and install temporary braces if required. (Rigid conduit may be self supporting after braces are cut)
  - f. Cut supports for vertical 1-1/4" conduit behind East Dynamatic. Temporarily support or relocate as required.

- 2. Provide temporary supports to existing coal handling motor starters, and relocate piping, located against wall of El. 234'-6", between columns 11 and 12, near the Apron Feeders, prior to removal of the girt steel and building wall for erection of the new building extension.
  - a. The following local motor starting equipment as indicated has been designated for demolition and replacement by new motor starters.
    - 1. East Coal Conditioner El. 234'-6"
    - 2. West Coal Conditioner El. 234'-6"
  - b. This equipment will be replaced with new motor starting equipment, however, the existing equipment will be required to continue operating until cutover to the new equipment.
  - c. The equipment listed in (a.) above is currently mounted on a steel frame. The frame is welded to the upper and lower girt steel, as shown on Sketch W02-2 and Sketch W02-3. Cut the frame at the girts. Devise and install temporary braces to support the frame to the building steel and the floor.
  - d. Existing page/party equipment and cabling is located along the upper girt line of El 234'-6". The page/party equipment should be disconnected from it's current location and relocated as described in Work Release W05-C "Lighting, Receptacles and Communications".
  - e. Relocate No. 16 Boiler Ash Term JIC Box as indicated on Sketches W02-3 and W02-9, and remove supports from girt steel. Re-route the 3/4" and 1-1/4" conduits and cable shown on Sketch 3 currently connected to the JIC Box to provide clear access from the Boiler Room to the new Micromill Room between columns A11 and A12.
  - f. Re-route the two 1" and one 1-1/2" piping headers, both horizontal and vertical, currently along the bottom girt line, to provide clear access from the Boiler Room to the new Micromill Room between columns A11 and A12. (Sketches W02-3 and W02-4).
- 3. Relocate the following control circuits, conduits, boxes and equipment in order to clear routes for new piping for the Micronizer systems.
  - a. 3 horizontal conduits at Column A, EL. 244'-8 1/4"
    - 1. 3/4" inch conduit from Distribution Panel CF to Disconnect Switch for No. 16 Fly Ash Water pump (Sketches W02-5 and W02-6)
    - 2. 1" conduit from Distribution Panel CF to JB above hand rail leading to Building 46 pipe bridge (Sketches W02-5 and W02-7)

- 1" conduit from Distribution Panel DF to JB above hand rail leading to Building 46 pipe bridge (Sketches W02-5 and W02-7)
- b. 3 vertical conduits at Column A, EL. 244'-8 1/4"
  - 1. 1-1/4" inch conduit to 16 Boiler Flyash Control Panel East of Existing Control Room (Sketches W02-5 and W02-8)
  - 1-1/4" inch conduit to 16 Boiler Flyash Terminal JIB Box on El. 234'-6" between windows (Sketches W02-5 and W02-9)
  - 3. 3/4" conduit to 16 Boiler Flyash control Panel on Column A-10, El. 234'-6" (Sketches W02-5 and W02-8)
- 4. Relocate or abandon as required, the following misc. circuits, conduits, boxes and equipment in order to clear routes for new piping and mechanical systems to the Micronizer.
  - a. **1" conduit for motor starter for Steam Valve 260-060-E on Southwest** Roof and along Southwest Wall of Boiler house. (Sketches W02-10 and W02-11)
  - b. Misc. lighting, conduit, and equipment as indicated on Sketches W02-12 through W02-18.
- 5. Grounding.
  - a. Perform all grounding in accordance with Kodak standards 16450 and 16451, and the National Electric Code.
  - b. Ensure that ground continuity on all relocated conduit and electrical systems are maintained.
- 6. Additional Work.
  - a. Furnish and install fireproof sealant materials for any penetrations of Building 31 or the Enclosure.
  - b. Furnish and install identification labels and tags for all relocated cable, conduit and electrical equipment.
  - c. Furnish all required unloading, storing, handling and installation of materials.
  - d. Perform<sup>3</sup> construction cleanup.
  - e. Furnish all required tools and/or safety equipment.

#### 1.02 CONTRACT METHOD

NOT APPLICABLE.

#### 1.03 RELEASE DOCUMENTS

The Release Documents consist of:

A. Reference Specifications

Execution of the work to be provided under this Scope of Work shall be in accordance with all applicable Kodak standards, specifications and construction practices, the drawings, and this Scope of Work. Kodak standard specifications applicable to this work include:

1.	Division 1 - General Requirements	
	Project Coordination	Section 01041
	Electrical Codes	Section 01066
	Temporary Power and Lighting	Section 01511
	Final Cleaning	Section 01710
2.	Divisions 16 - Electrical Specifications	
	Basic Electrical Requirements	Section 16010
	Rigid Conduit	Section 16110.1
	Flexible Conduit	Section 16110.4
	Pulling Cables	Section 16125
	Conduit Boxes, Bodies and Fitting	Section 16131
	Electrical Penetrations of Fire Rated Construction	Section 16135
	Circuit and Equipment Identification	Section 16196
	Grounding Systems	Section 16450
	Bonding Methods	Section 16451
Draw	rings	

Drawing/File Number	Rev - Date	Title
Sketch W02-1	Construction - 8/16/96	Apron Feeder Level - El 244'-8 1/4″

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Sketch W02-2	Construction - 8/16/96	Coal Crusher Level - El 234'-6" - Upper Girt
Sketch W02-3	Construction - 8/16/96	Coal Crusher Level - El 234'-6" - Lower Girt
Sketch W02-4	Construction - 8/16/96	Column A12 - View looking Northwest
Sketch W02-5	Construction - 8/16/96	Column A El 244'-8" - Conduits
Sketch W02-6	Construction - 8/16/96	- Fly Ash Disconnect Switch
Sketch W02-7	Construction - 8/16/96	Junction Box above Handrail
Sketch W02-8	Construction - 8/16/96	Fly Ash Control Panel
Sketch W02-9	Construction - 8/16/96	Fly Ash Junction Box
Sketch W02-10	Construction - 8/16/96	Steam Valve 260-060-E Local Starter
Sketch W02-11	Construction - 8/16/96	Boiler House South Wall convenience receptacle
Sketch W02-12	Construction - 8/16/96	Misc Lighting 1
Sketch W02-13	Construction - 8/16/96	Misc Lighting 2
Sketch W02-14	Construction - 8/16/96	Misc Lighting 3
Sketch W02-15	Construction - 8/16/96	Misc Lighting 4
Sketch W02-16	Construction - 8/16/96	Misc Lighting 5
Sketch W02-17	Construction - 8/16/96	Misc Lighting 6

Sketch W02-18	Construction - 8/16/96	Misc Lighting 7
	0/10/30	

2. Mechanical Drawings for Reference Only

#### 1.04 WORK BY OTHERS

A. Work of the Project which will be executed prior to the Work of this Release.

NOT APPLICABLE.

- B. Work of the Project which will be executed by other Contracts or Releases in conjunction with the Work of this Release.
  - 1. Installation of cable tray within the WDPF Enclosure, between the WDPF Enclosure and Building 31, and inside building 31 at El. 272'-3".
  - 2. Erection of Micro Fuel Mill Building addition.
  - 3. Installation of Power Conduit and cable in the Building #31, Boiler #15 area.

#### 1.05 FUTURE WORK

- A. Demolition of existing Coal handling starters, equipment, and conduit after installation and cutover of the new coal handling starters, equipment and circuits.
- B. Relocation of the East and West Dynamatic equipment.
- C. Installation of Micronizer mechanical equipment, piping, and ductwork.
- D. Installation of Micronizer electrical and control systems equipment, conduit and cable.
- E. Ensure that Work avoids encroachment into areas required for future work.
- 1.06 WORK SEQUENCE
  - A. Construct Work in accordance with schedule.
  - B. Construct Work to accommodate Owner's use of premises during construction.
- 1.07 CONTRACTOR'S USE OF PREMISES
- 1.08 OWNER OCCUPANCY

NOT APPLICABLE.

1.09 PARTIAL OWNER OCCUPANCY

NOT APPLICABLE.

- 1.10 PRE-ORDERED MATERIALS
  - A. Equipment and/or materials pre-purchased for this Release

NOT APPLICABLE

- B. Construction is to order the balance of the materials needed for work ca this release.
- C. Construction Manager shall provide for ordering of material per this Release, and referenced drawings and Bills of Material except as noted above.
- D. Construction Manager's Responsibilities
  - 1. Arrange for and deliver necessary work release specifications and drawings, Sketches, product data and installation instructions to the installation crew.
  - 2. Arrange and pay for pre-purchased material deliveries to the site, in accordance with the Construction Schedule.
  - 3. Deliver Supplier's Bills of Material to installation crew.
  - 4. Inspect deliveries jointly with installation crew.
  - 5. Submit claims for transportation damage.
  - 6. Arrange for replacement of damaged, defective, or missing items.
  - 7. Arrange for manufacturer's warranties, bonds, service, inspections, as required.
- E. Installation Crew Responsibilities
  - 1. Coordinate execution work and manpower availability with the project's Construction Schedule.
  - 2. Review work release specifications and drawings, and installation instructions.
    - a. Submit to Construction Manager a notification of any discrepancies or problems anticipated in the use of information or materials furnished or required for work on this Release.
  - 3. Receive and unload products at the site.
  - 4. Promptly inspect products, jointly with Construction Manager, record shortages, damaged, or defective

- 5. Handle products at the site, including uncrating and storage.
- 6. Protect products from exposure to elements and damage.
- Assemble, install, connect, adjust, and finish products, as stipulated in the respective Section of specifications and per the manufacturers instructions..
- 8. Repair or replace items damaged by the installation crew.

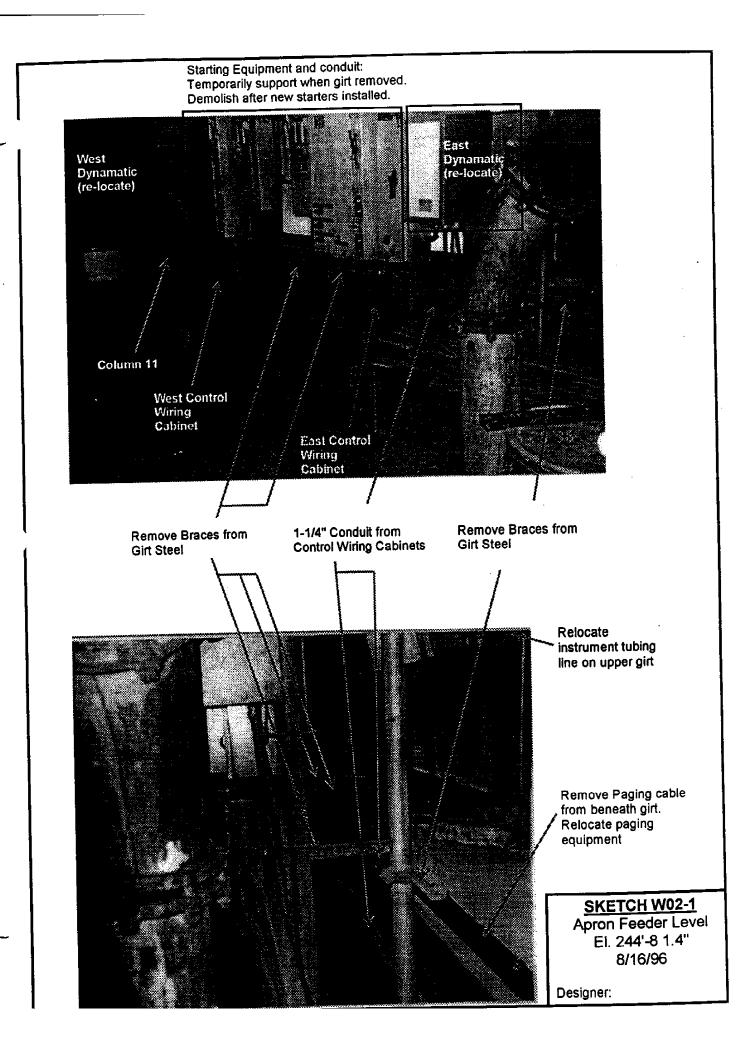
# PART 2 - PRODUCTS

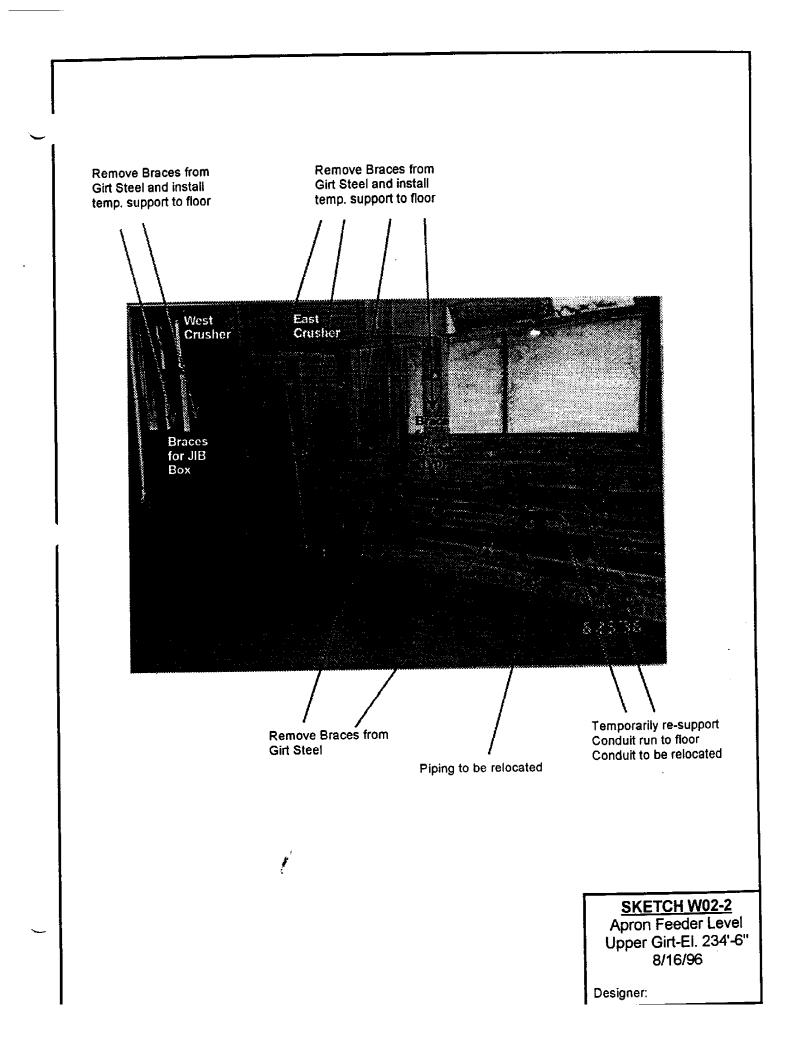
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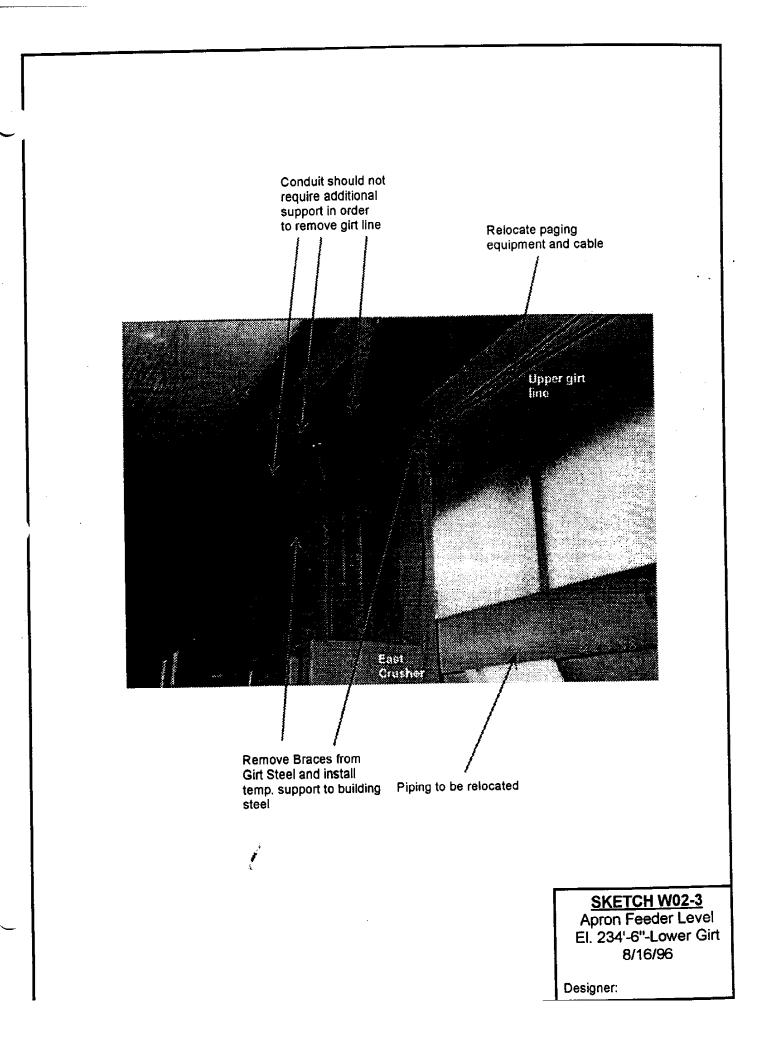
# PART 3 - EXECUTION

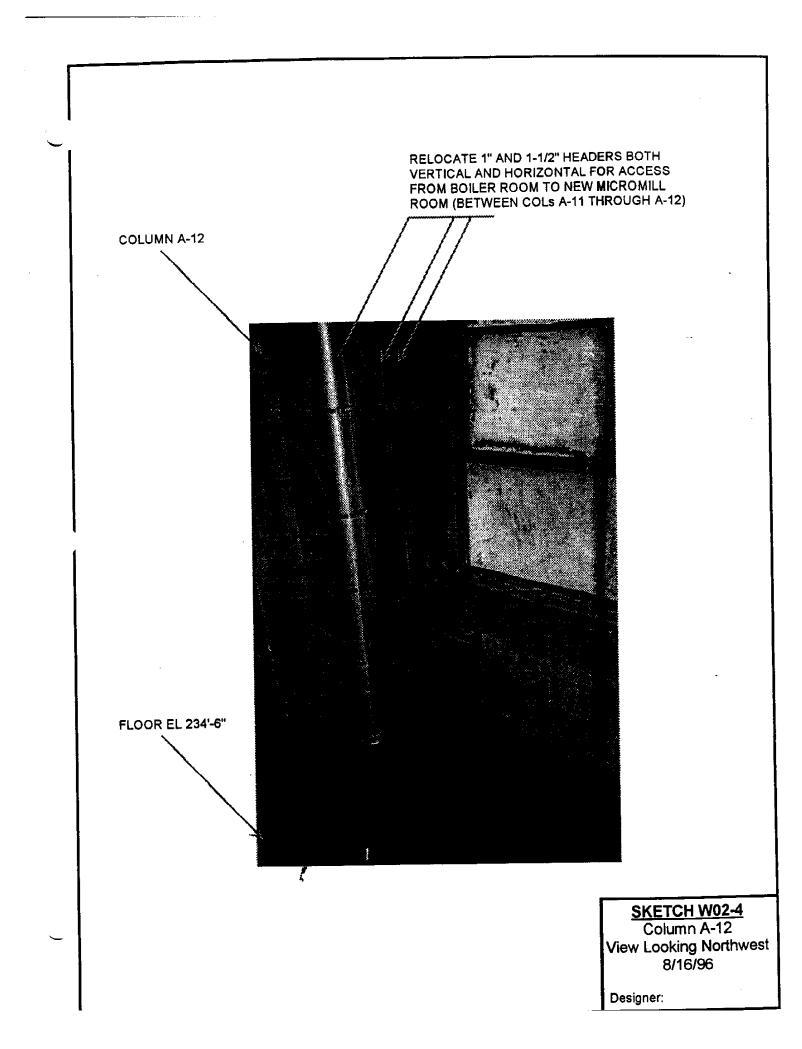
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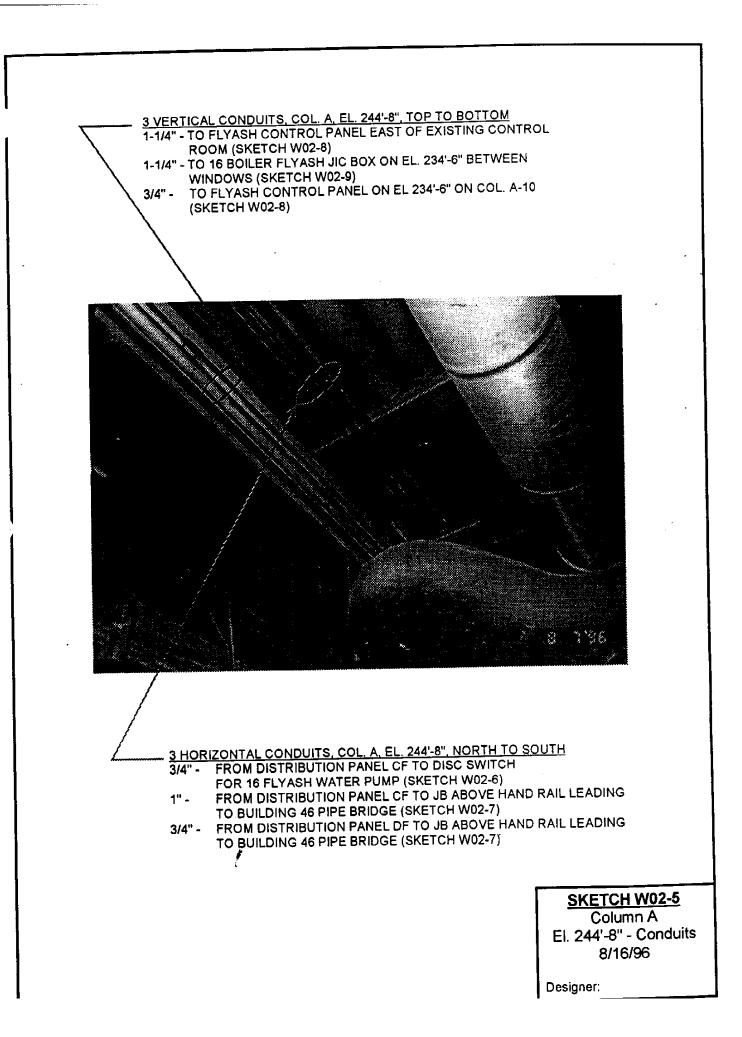
#### END OF SECTION

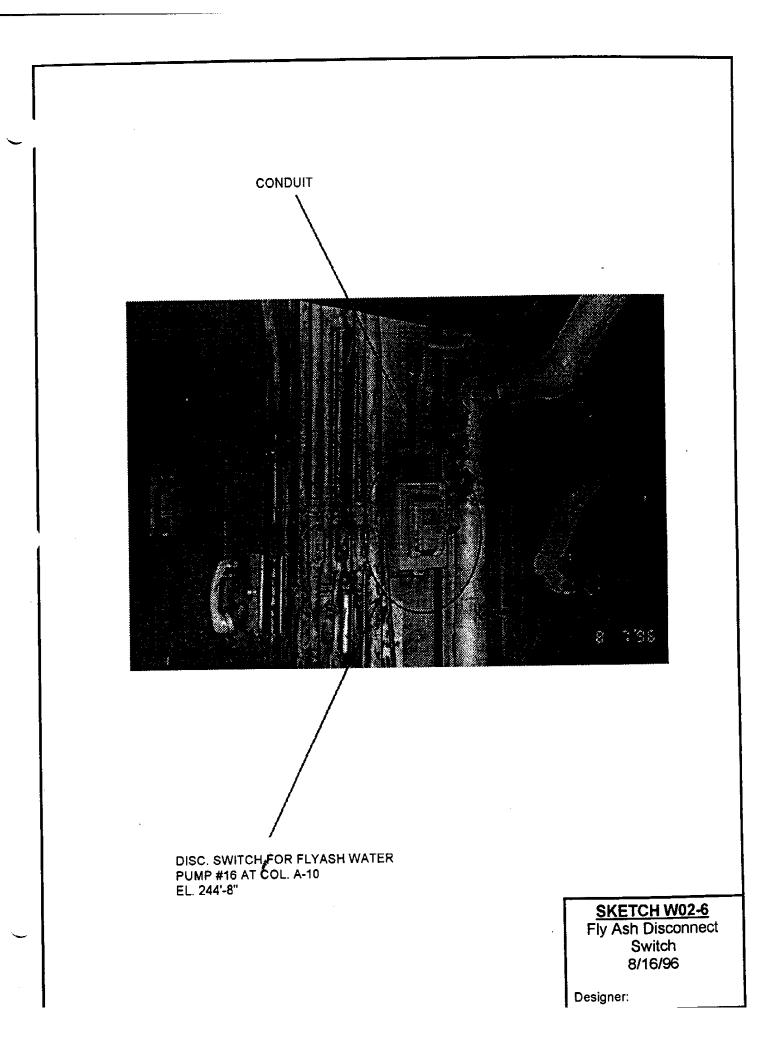


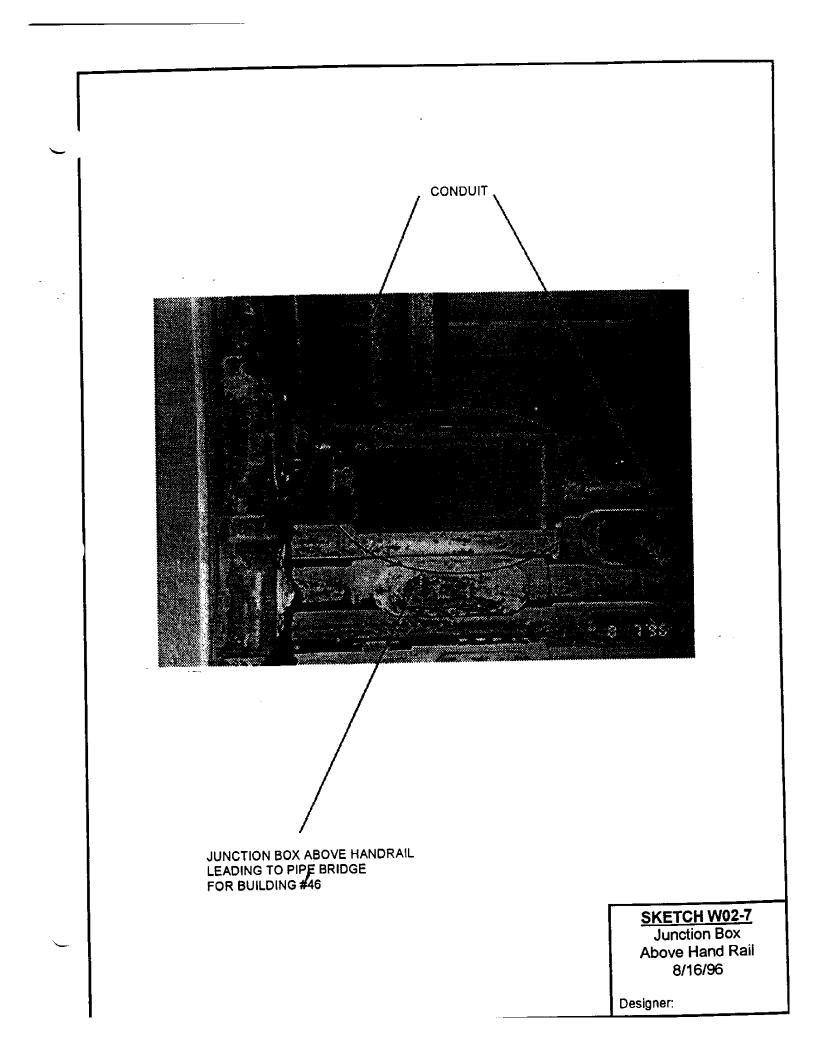


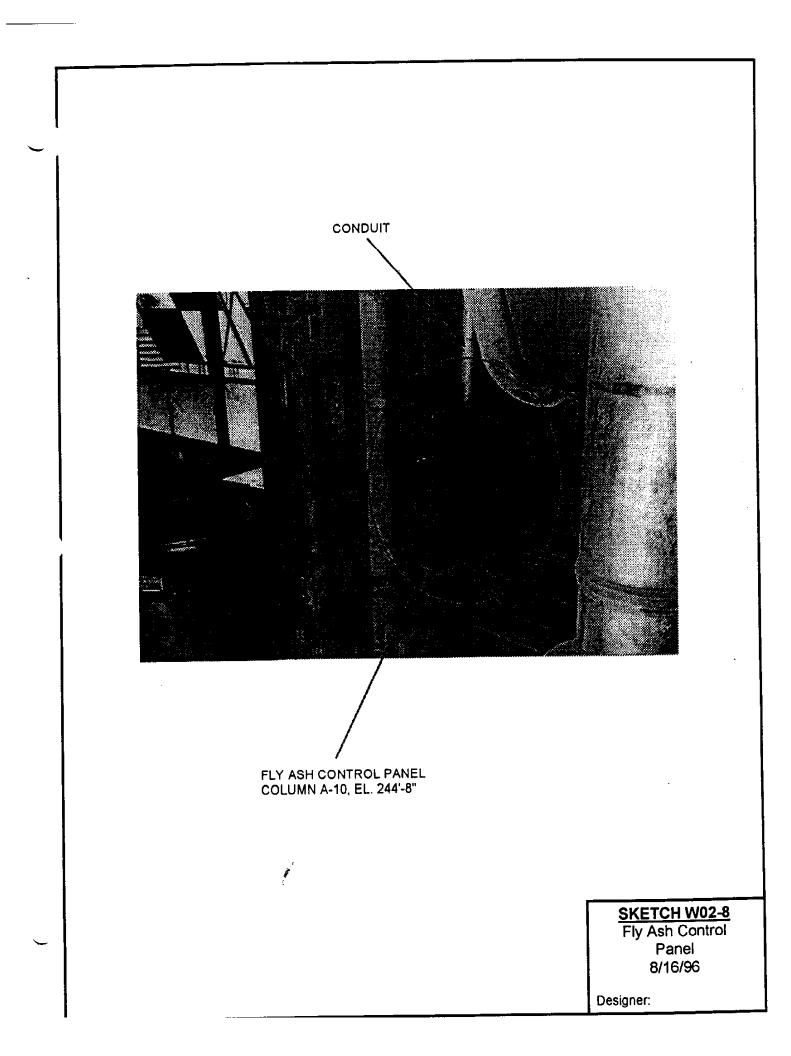


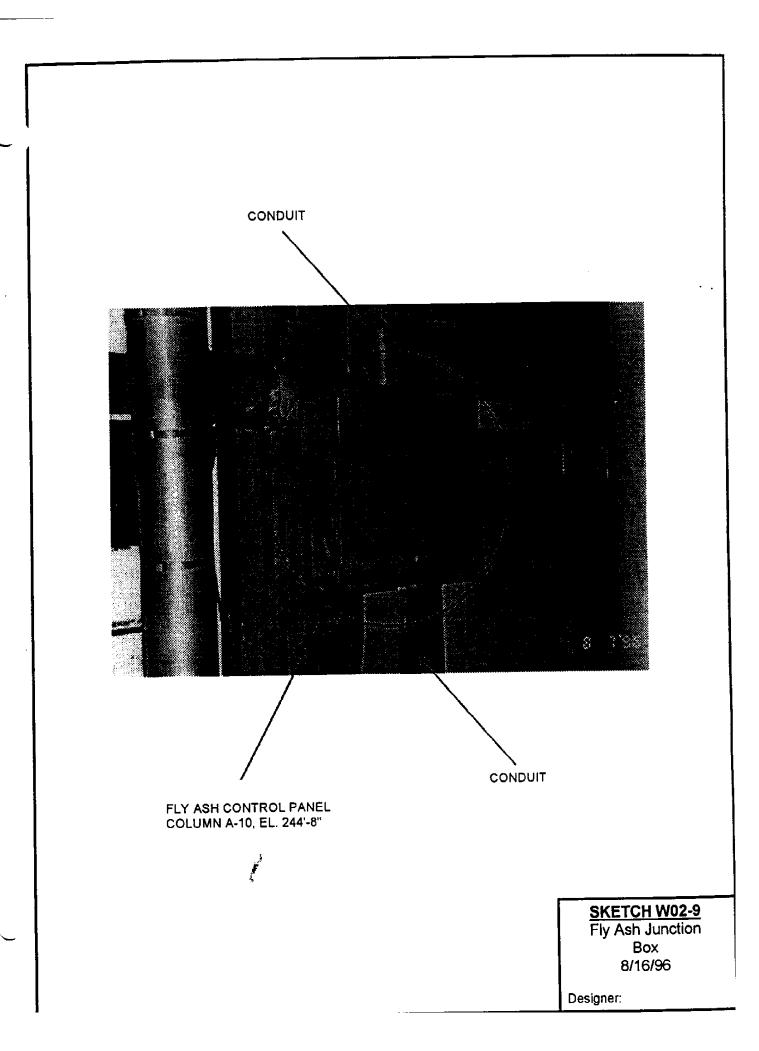


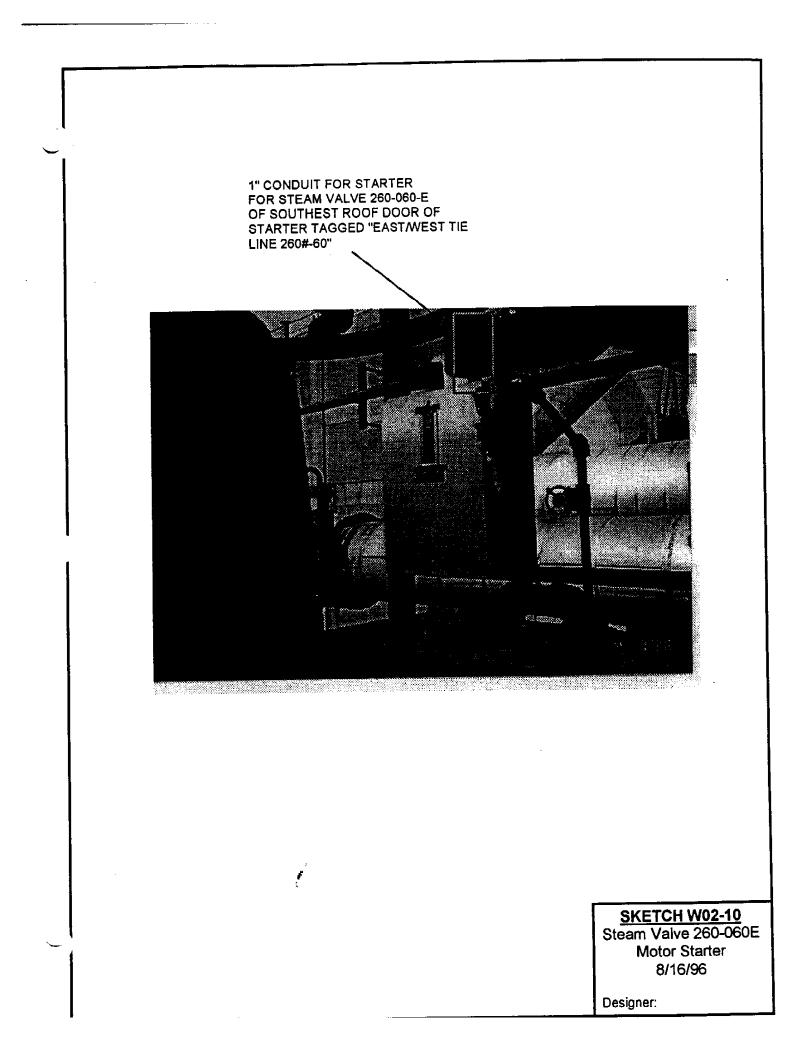


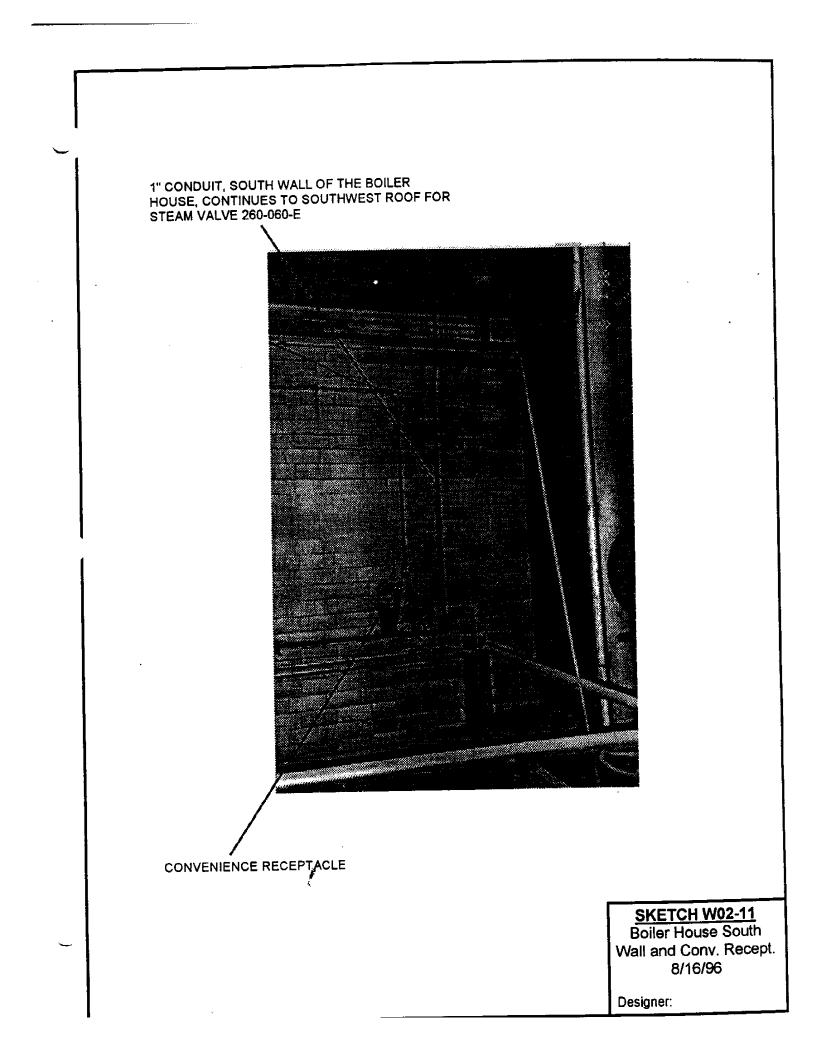


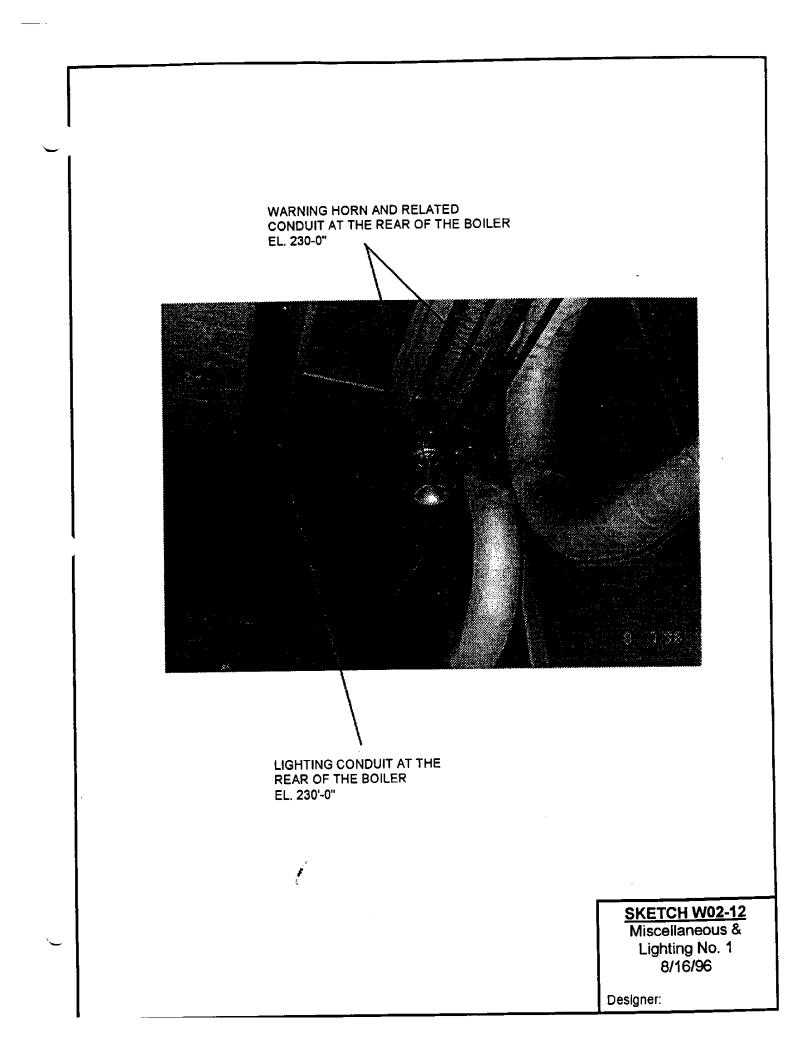


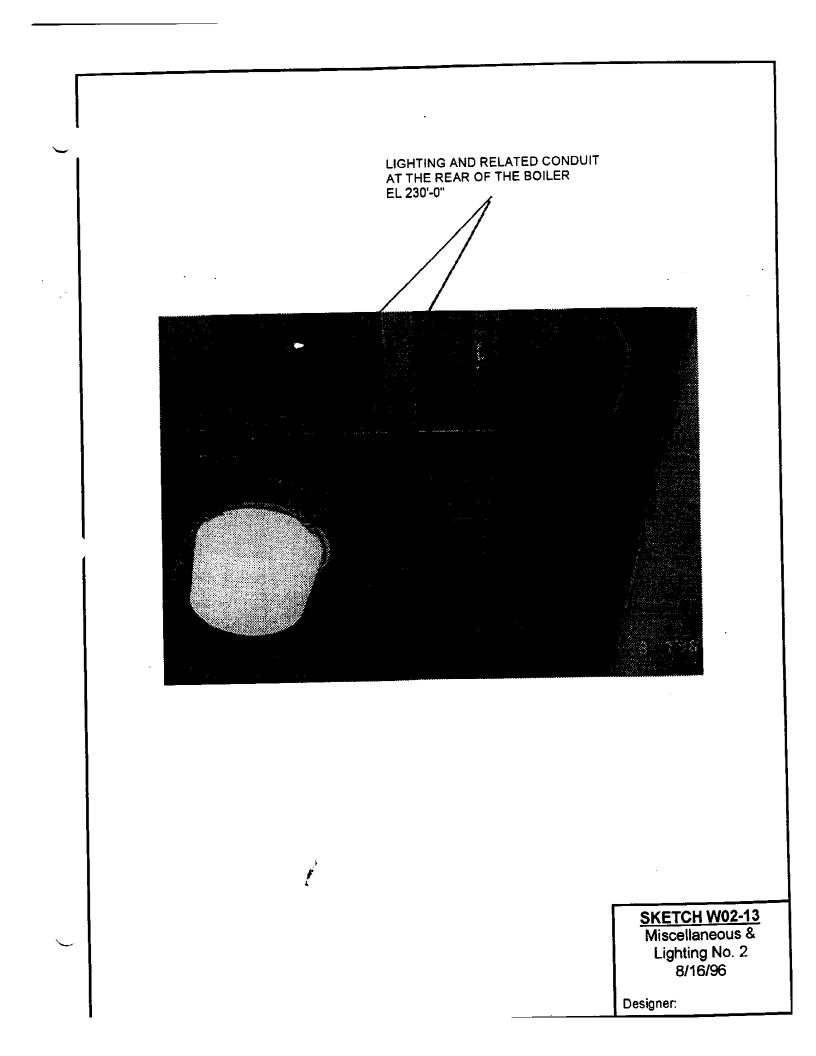


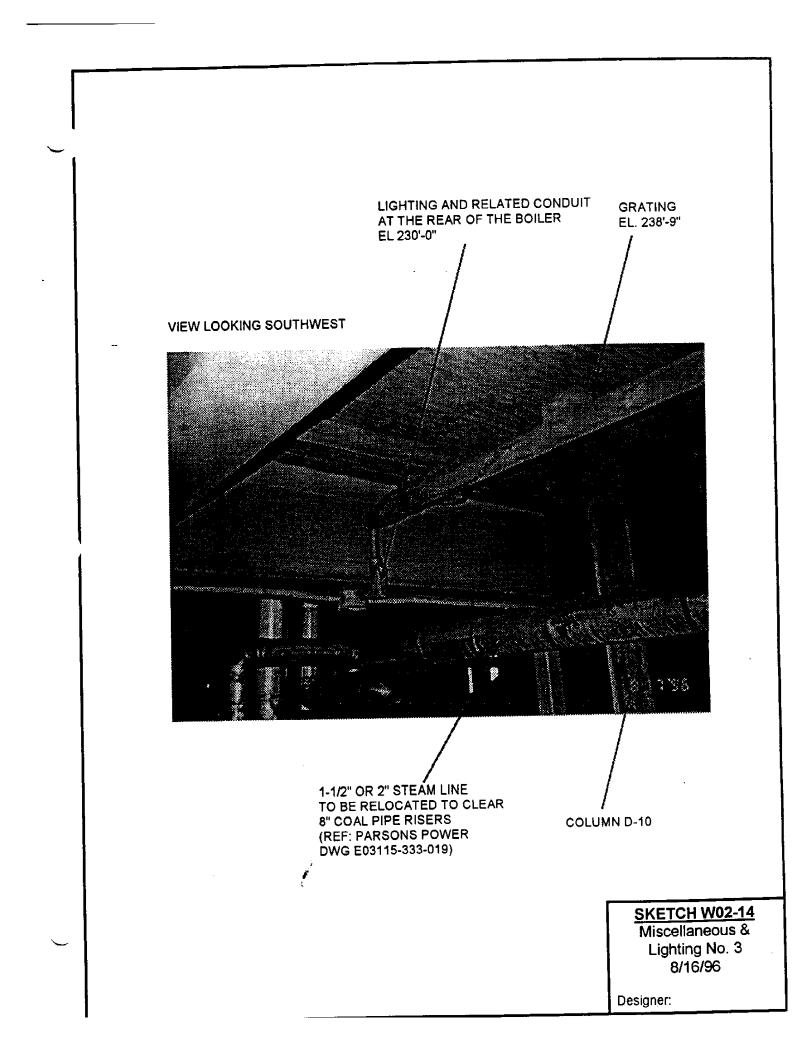


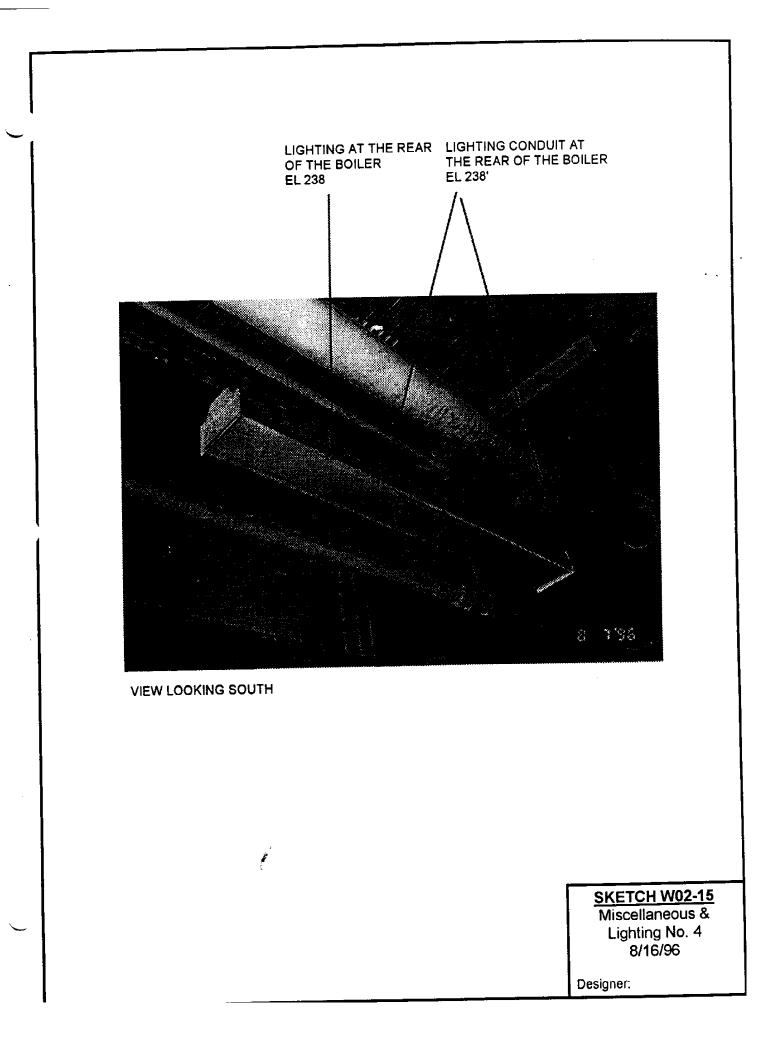


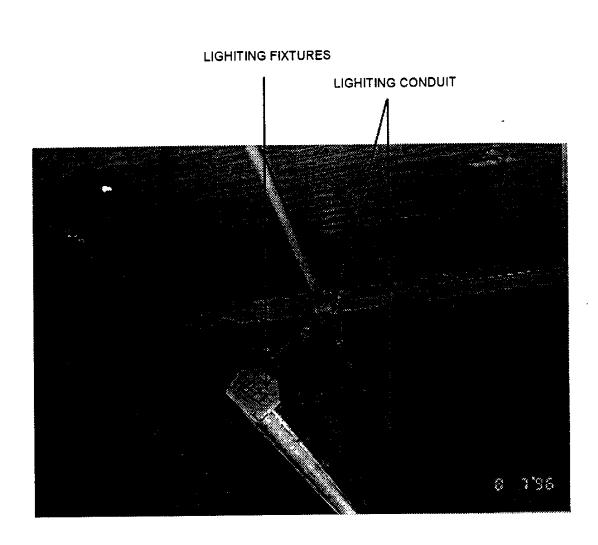








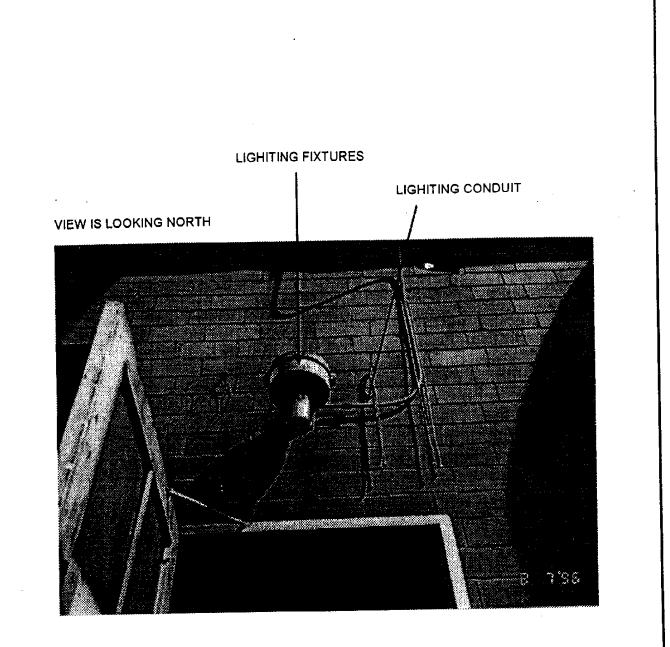




CONDUIT AND LIGHTING LOOKING UP FROM EL. 249'-8" TO THE UNDERSIDE OF EL. 260'-8" IN THE BOILER AREA

> SKETCH W02-16 Miscellaneous & Lighting No. 5 8/16/96

Designer:

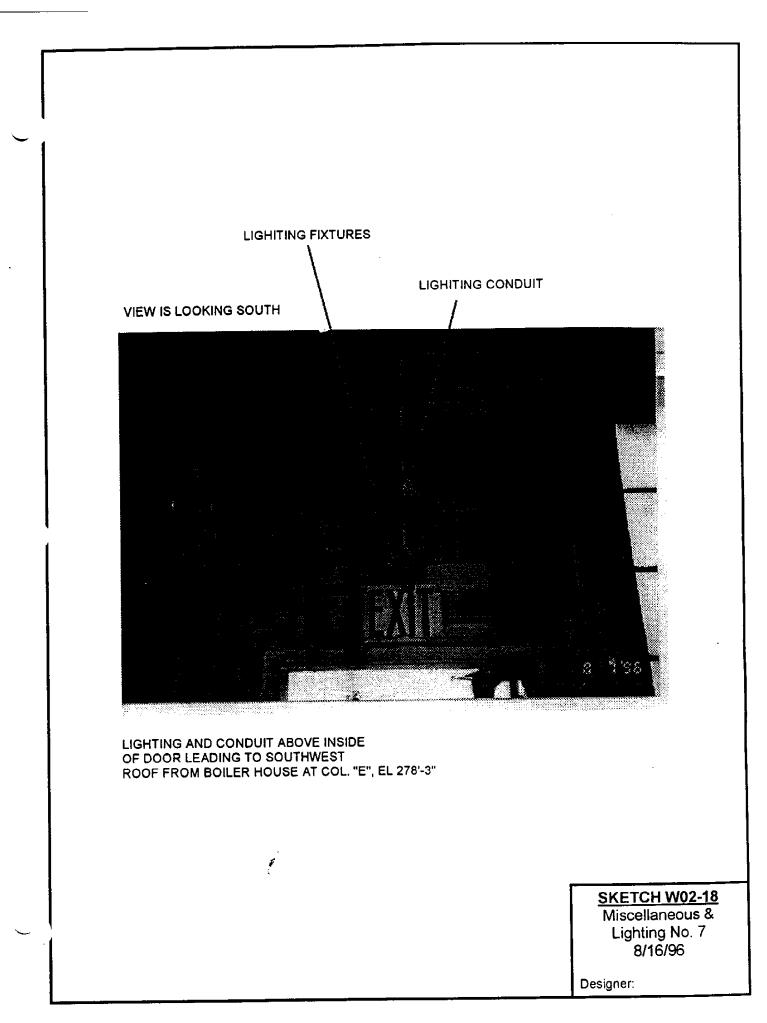


LIGHITING AND CONDUIT ABOVE OUTSIDE OF DOOR LEADING FROM SOUTHWEST ROOF TO BOILER HOUSE AT COL. "E", EL 278'-3"

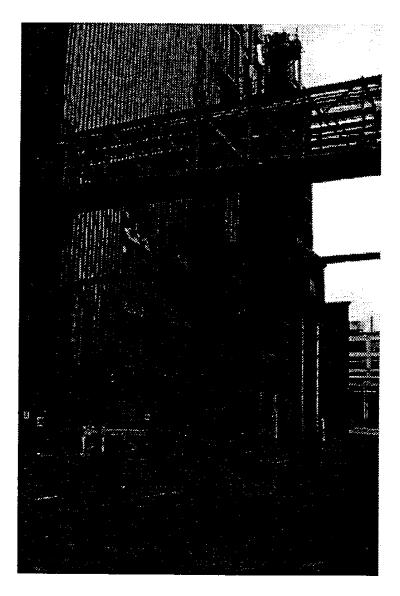
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SKETCH W02-17 Miscellaneous & Lighting No. 6 8/16/96

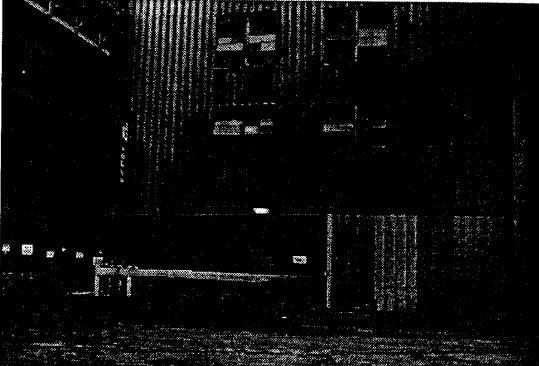
Designer:

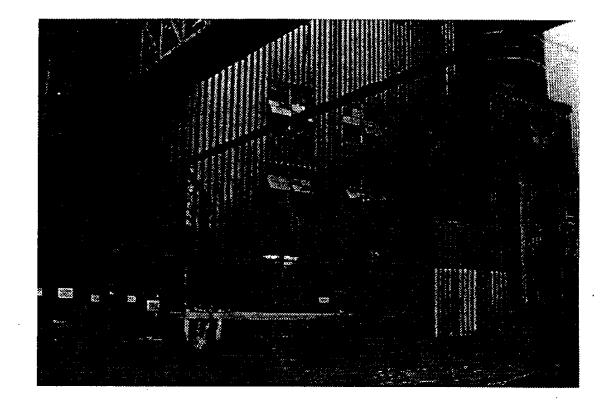


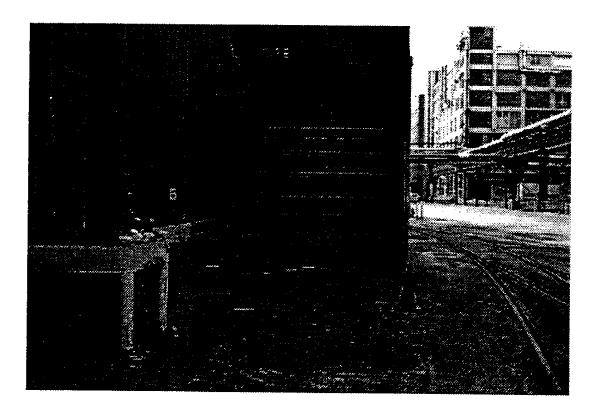
NEW BUILDING ADDITION LOCATION (LOOKING SOUTH)



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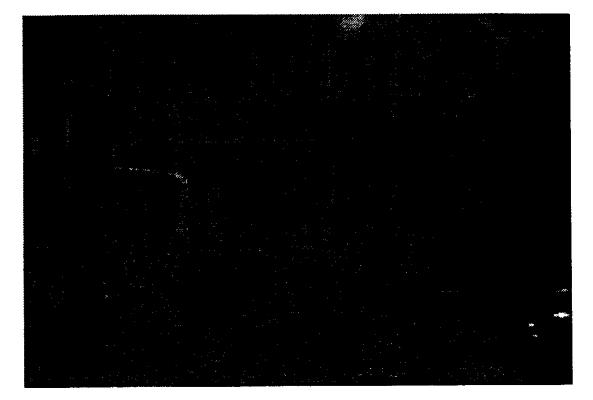






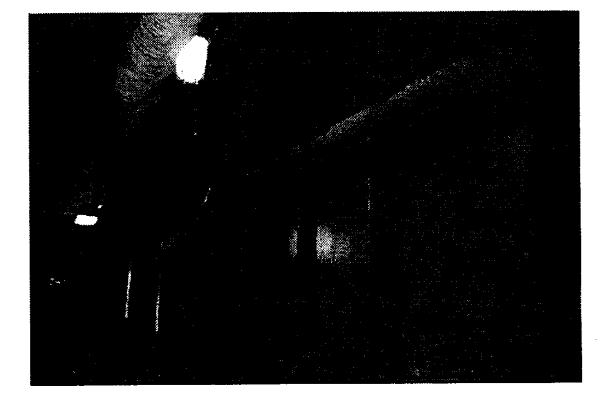
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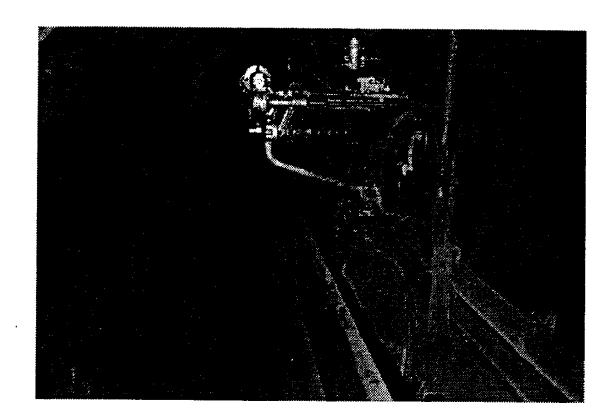
Boiler REAR (INJECTOR LOCATIONS)

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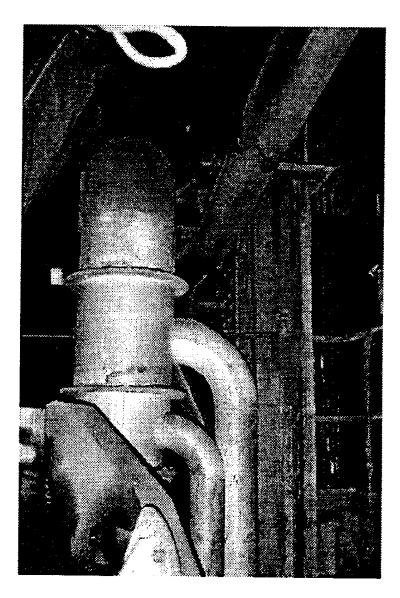


# Boiler REAR (INJECTOR LOCATIONS)

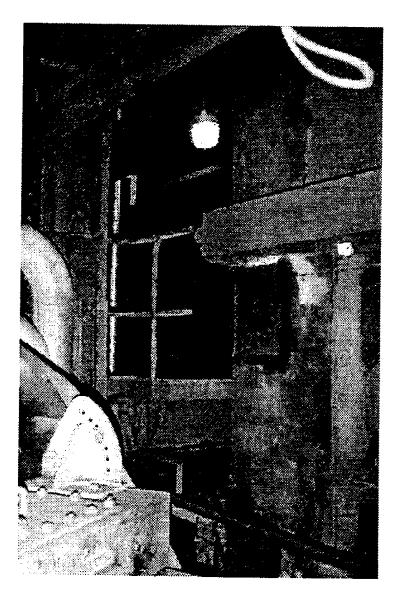
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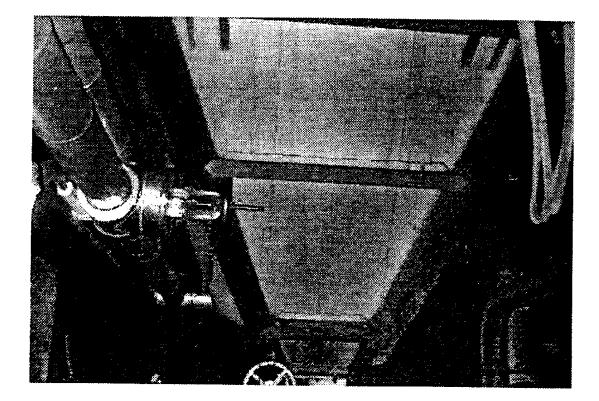
BoilER REAR © IK SOOTBLOWER CATWALK (LOOKING EAST)



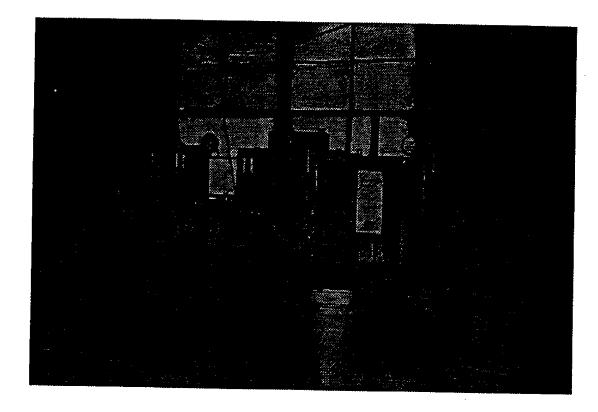
FEEDER FLOOR, LOOKING EAST@ TEMP. Air Duct



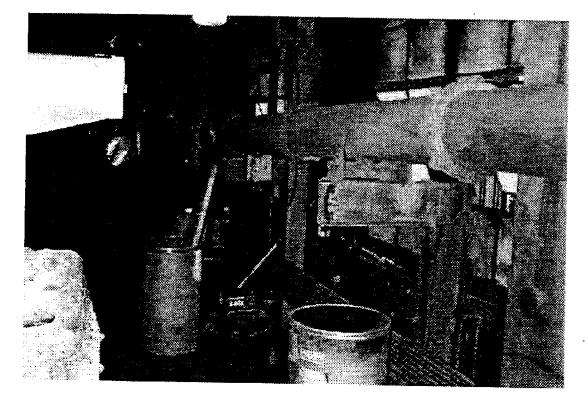
FEEDER FLOOR, EAST END, LOOKING SE.



## FEEDER FLOOR, EAST Hopper, Looking East

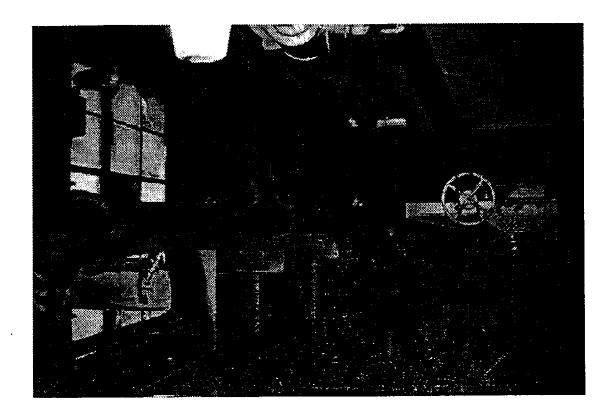


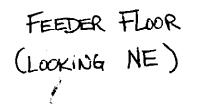
FEEDER FLOOR, Looking North.

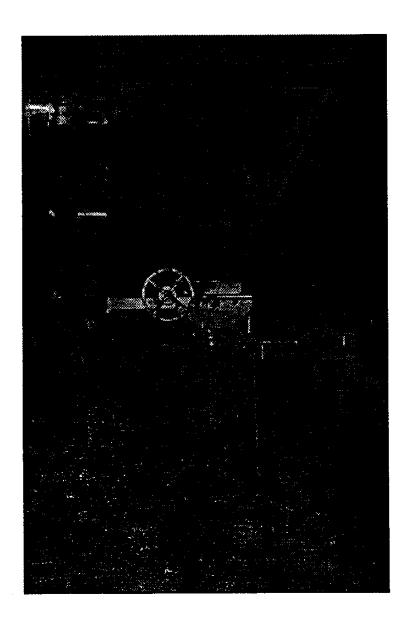


FEEDER FLOOR, Looking NW

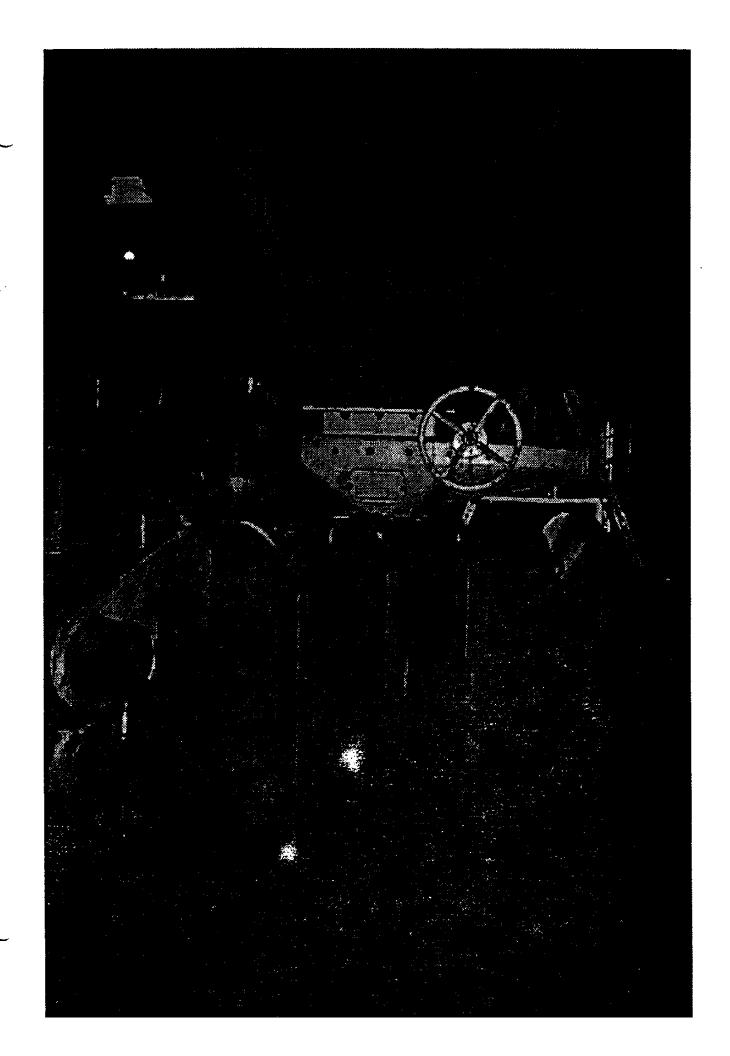
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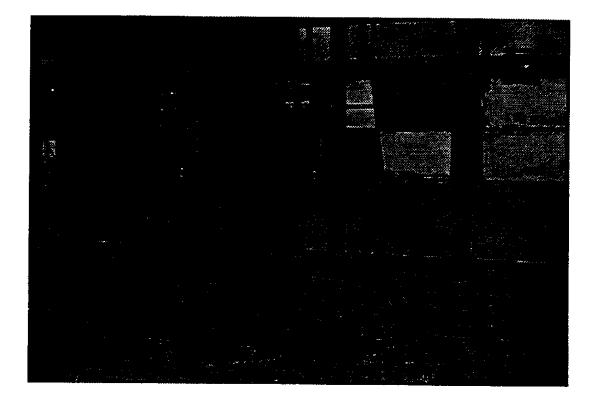




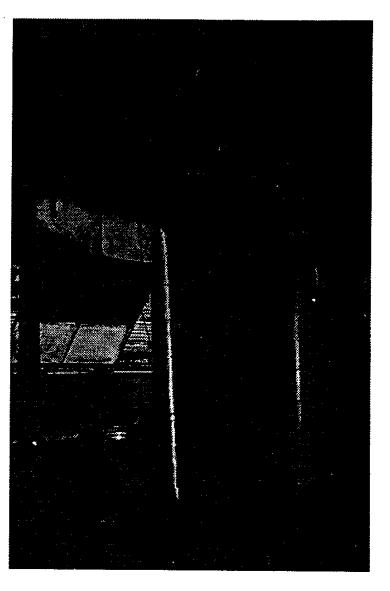


FEEDER FLOOR EAST FEEDER (LOOKING EAST)

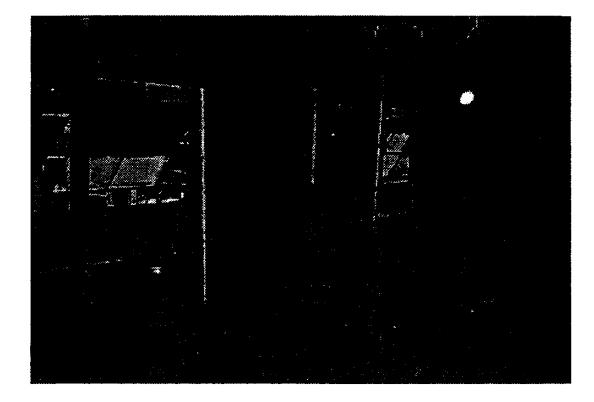




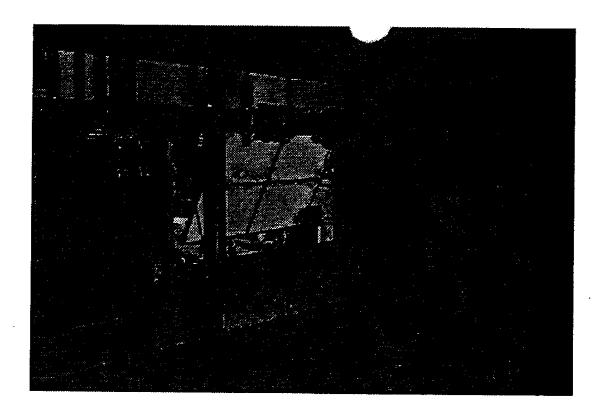
CRUSHER FLOOR, STAR SEAL CABS, LOOKING NORTH



CRUSHER FLOOR, LOOKING NORTH



CRUSHER FLOOR, LOOKING NE



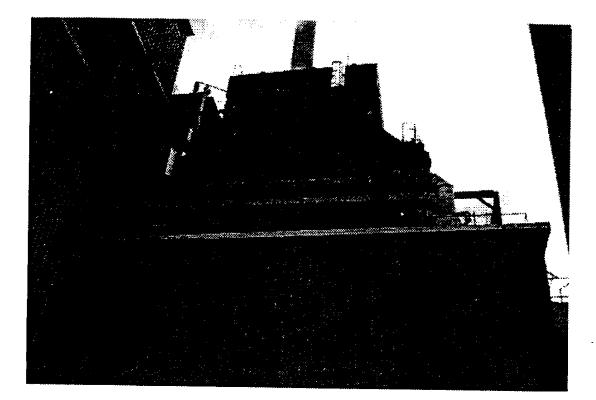
CRUSHER FLOOR, STAR SEAL CABINET, LOOKING NE



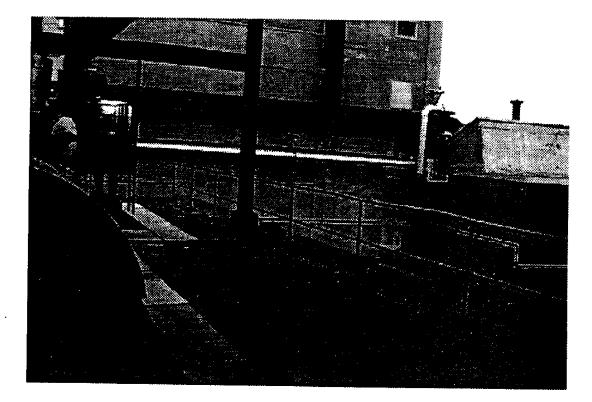
CRUSHER FLOOR (LOOKING NE)



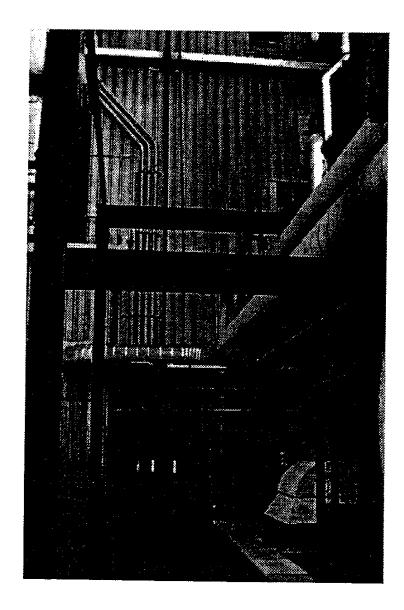




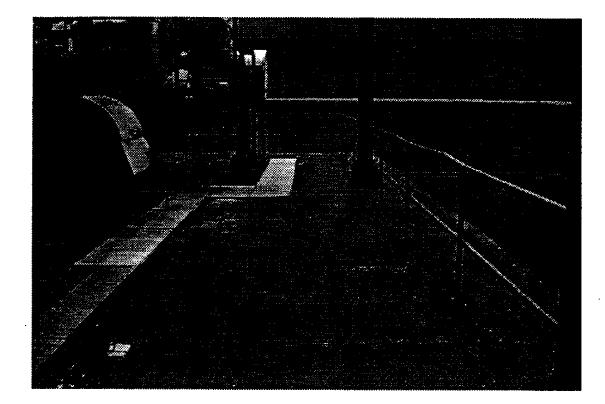
WEST END TB, LOOKING UP AND EAST (WHERE ENCLOSURE GOES)



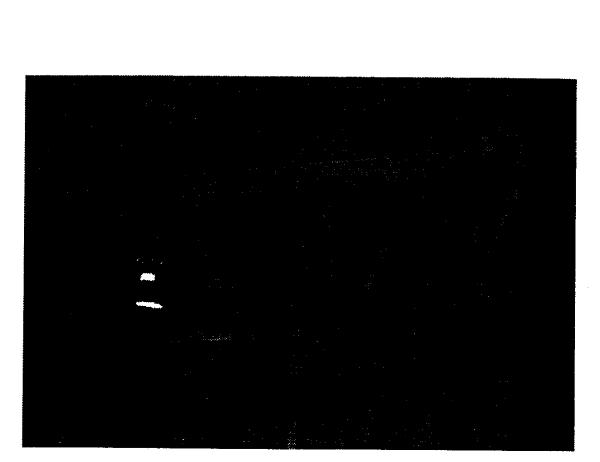
WEST END TB ROOF LOOKING SW WHERE ENCLOSURE GOES



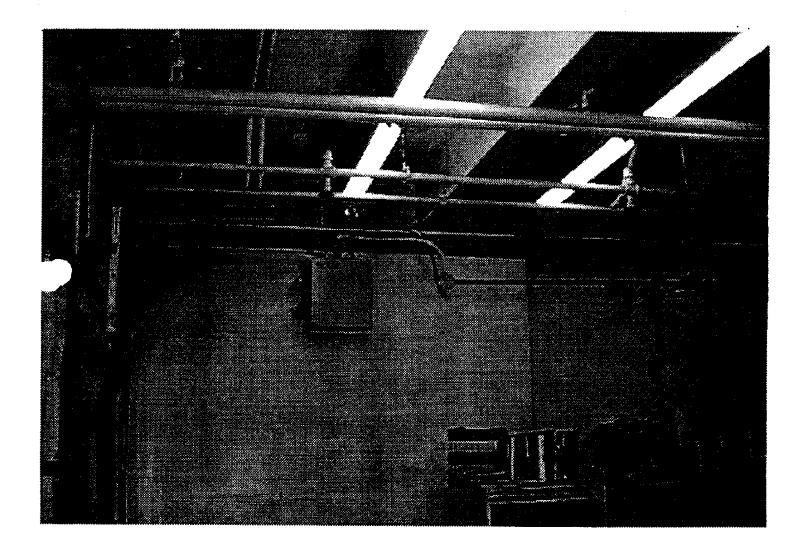
WEST END TBROOF, LOOKING NORTH



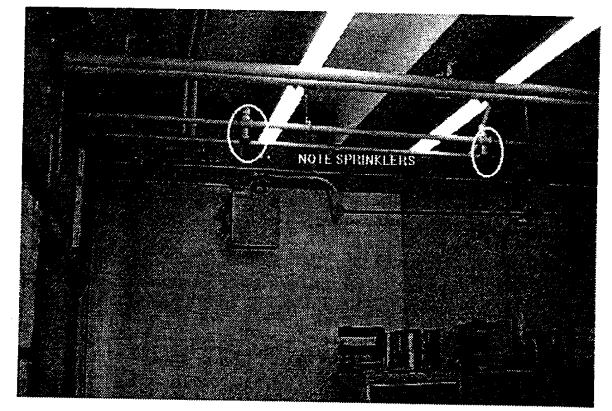
## WEST END TB ROOF (LOOKING SOUTH)



WEST END TB ROOF UNDER WDPF ENCLOSURE (LOOKING SW)



CONTROL ROOM LOCATION (Shop)



2.

