Asbestos & Lead-Paint Survey Report

USIBWC Amistad Power Plant and Warehouse
Del Rio, Texas

Request for Proposal (RFP) #12-05
IDIQ Fixed Price Proposal Contract IBM09D0010

Prepared for:

U.S. International Boundary and Water Commission
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EXECUTIVE SUMMARY

TRC Environmental Corporation (TRC) was contracted by the United States International Boundary and Water Commission (IBWC) to conduct an asbestos and a lead-based paint survey at the Amistad Power Plant and Warehouse Building located at 670 Texas Spur 349, Del Rio, Texas. The asbestos survey comprised of surveying the accessible interior and exterior building materials at the Power Plant and the Warehouse buildings. The survey consisted of identification of suspect building materials, collection of bulk samples of suspect asbestos containing materials, material condition assessments, and laboratory analysis of samples collected. The lead-based paint survey comprised of the assessment and testing of painted surfaces using a X-ray Fluorescence (XRF) Lead spectrum analyzer for the detection of lead based paint. The survey was performed on April 10- 11, 2012 by Mr. Sam Seneviratne, and assisted by Mr. Hector Gonzalez.

Asbestos Findings

Results of the asbestos survey indicated the presence of detectable asbestos in the following materials:

Power Plant

- Vinyl Sheet Flooring Blue, Green and White Square Pattern-Office Areas on the 4th Floor and Employee Lunch room, Locker room, and Toilets on the 3rd Floor-90% Chrysotile
- Roof Parapet Wall Metal Flashing Caulking- Upper and Lower Roofs-5% Chrysotile
- Flange Gasket-1st Floor Chemical Storage Tank Side Flange-90% Chrysotile
- Gasket Materials-3rd Floor Mezzanine Parts Storage Area-80% Chrysotile
- Sink Countertop-4th, Floor Battery Room- Assumed to Contain Asbestos
- Gray-Metal Slider Door Core-1st Floor Chemical Storage- Assumed to Contain Asbestos

Warehouse Building

- No asbestos materials found.

Lead-Based Paint Findings

The results of the lead-based paint investigation indicates that some of the painted components and fixtures tested in the Power Plant structure were found to contain lead at concentrations above the Federal lead-based paint level of 1.0 milligram per square centimeter (mg/cm^2), as identified by XRF analyzer.

Power Plant

- Black-Metal Gantry Crane Frame and Platform-Exterior Southwest
- Beige-Metal Elevator Door Frame on floors 1 thru 4
- White-Glazed Metal Sink-Custodian Closet 4th and 3rd, floors
- Orange-Metal Powerhouse Crane Frame, 20 and 125 Ton Hooks-Erection Floor
- Cream-Metal Cable Tray and Support-Exterior North side
- Yellow-Metal Flammable Storage Cabinet- Exterior North side
- Yellow-Metal 2 ton Crane Boom- 3rd Floor Machine Shop

- Black-Metal-Handrail-3rd, Floor Parts Storage Area
- Yellow-Concrete Floor stripping-3rd Floor Elevator lobby
- Black-Metal Elevator Gate 1st, thru 4th, floors
- Red-Metal Hitachi Tool Rack-Generator Bay
- Blue-Metal Step and Riser-Stairs to Turbine Pit from Generator Bay
- Blue-Metal Wall-Inside Turbine Pit
- Blue-Metal Servo Linkage- Inside Turbine Pit
- Gray-Metal Shim-Upper Roof Parapet wall flashing fastener
- Gray-Metal Slider Door-1st Floor Chemical Storage area
- Gray-Metal Clean Oil Storage Tank 1st Floor Chemical Storage area
- Gray-Metal Dirty Oil Storage Tank 1st Floor Chemical Storage area
- Gray-Metal Spiral Case and Access Hatch 1st Floor Piping Gallery
- Black-Metal Handrail-Stairs to Penstock Gallery
- Green-Metal Piping-Penstock Drain/Fill #2
- Gray-Metal Draft Tube and Access Hatch-Penstock Gallery

Warehouse Building

No lead-based paint found

1.0 Introduction

TRC Environmental Corporation (TRC) was contracted by the United States International Boundary and Water Commission (IBWC) to conduct an asbestos and a lead based paint survey at the Amistad Power Plant and Warehouse Building located at 670 Texas Spur 349, Del Rio, Texas. The survey was performed on April 10-11, 2012, by Mr. Sam Seneviratne, and Mr. Hector Gonzalez, both EPA Accredited AHERA Asbestos Building inspectors and EPA Lead Inspectors employed by TRC. The survey included the inspection and assessment of accessible interior and exterior construction materials associated with the building structures on site.

The asbestos and lead-based paint survey findings will be used to effectively manage asbestos-containing materials (ACM) and Lead-Based Paint (LBP) in the scope areas of the Power Plant and Warehouse building structures (the "Site"). The accumulated assessment information may be used in operations and maintenance plans for the facility designed to prevent accidental disturbance to ACM and LBP.

2.0 Building Descriptions

The following provides a summary of the Power Plant Building and Warehouse Building areas defined as the scope of work areas under Contract # IBM09D0010. Both of the building structures are located on federal land, were considered non-public buildings, are secured by fencing/locked gates, and have industrial processes. A description of the building structures are as follows:

Power Plant Structure: This is a 27,786 Square foot of building, built of concrete with steel framed roof. This building has four levels. The top level (Elevation 930 or 4th Floor) has offices, switchgear rooms, and an HVAC fan room. The 4th floor is actually at ground level as you enter the building from the roadway. The 3rd level (Elevation 910, down one level from the 4th floor) houses the maintenance shops, parts room, lunch room and restrooms. The 2nd level (elevation 891) houses the control panels, the Turbine room, and pump area. The 1st level (elevation 876) houses the oil room, compressors, and piping galleries.

Warehouse: The warehouse building is located just east of the dam up-gradient from the power plant. The building is of metal frame construction built slab on grade with metal panel siding and metal panel roof. The main storage area of the warehouse is unfinished with concrete floors and the metal siding/roofing. The southern portion of the building has a meeting/conference room a kitchen, two offices, restrooms, and a small closet/storage area. The warehouse comprises approximately 10,200 square feet of area and is single-story with a high ceiling/roof.

3.0 Background

Asbestos Containing Materials

The Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) define an asbestos-containing material (ACM) as any material containing more than one percent (>1.0%) asbestos by weight. In addition, ACM are designated by the EPA into one of three characteristic categories as follows:

- Friable asbestos - material which can be crumbled, pulverized or reduced to powder by hand pressure, a.k.a. Regulated Asbestos Containing Materials (RACM)

- Category I Non-friable - includes resilient floor coverings, asphalt roofing products, gaskets and packing. These materials may become friable if degraded or damaged to the point where the material can be crumbled, pulverized or reduced to powder by hand pressure.

- Category II Non-friable - any non-friable ACM that is not in Category I (i.e. Asbestos-cement (Transite®) siding or roofing mastics).

Asbestos Sampling and Analytical Procedures

Representative bulk samples of suspect asbestos-containing building materials were randomly collected from the identified homogenous building material applications. Homogenous material determination was based on the following criteria:

- Similar physical characteristics (same appearance, age, color and texture, etc.),
- Application (e.g. sprayed or trowel-on, assembly into a system, etc.),
- Material function (e.g. thermal insulation, floor tile, wallboard system, etc.).

Laboratory services were provided by TRC's laboratory located in Windsor, Connecticut. TRC's analytical laboratory is a National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory (NVLAP code # 101424-0).

Bulk samples were analyzed by polarized light microscopy (PLM) utilizing the EPA's Test Methods: Methods for the Determination of Asbestos in Bulk Building Materials (EPA 600/R-93/116, July 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as method references.

Analysis by PLM was performed by visual observation of the bulk sample and by microscopic analysis using dispersion staining PLM methodology. The samples were analyzed for asbestiform minerals (Chrysotile, Amosite, Crocidolite, Anthophyllite, Actinolite, and Tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimates the relative amounts of each constituent by determining the estimated area of the asbestos compared with the area estimate of the total sample.

4.0 Asbestos Findings

Suspect Asbestos-Containing Materials (ACM), including building materials/finishes, insulated wire, and equipment/machinery components, e.g., gaskets, packing, dampening materials and insulation were inspected, sampled and analyzed for asbestos. Typical suspect building materials include finishes (e.g. drywall systems, suspended ceiling panels, glued ceiling tiles, floor tiles, vinyl sheet flooring, floor finish adhesives, cove base, cove base adhesive, textured coatings, roofing materials, caulks, sealants, and plasters. Non-suspect asbestos materials are items purely composed of glass, metal, concrete, rubber, brick, ceramic, grouts, fiberglass, foam, Styrofoam, and paper.

According to federal regulations, regulated ACM are ACMs containing greater than 1% asbestos by weight.

4.1 *Asbestos Containing Materials (>1%)*

Asbestos was either detected in concentrations exceeding one percent in the following materials sampled during the asbestos survey or the listed component/materials was presumed to have asbestos, based on limitations of sampling feasibility. Results of the asbestos survey indicated the presence of detectable asbestos in the following materials:

Power Plant

Material	Location	Percentage/ Type	Approx Quantity*	NESHAP Category	Condition
Vinyl Sheet Flooring (Blue, Green and White Square Pattern)	Power Plant-4th Floor Office Areas and 3rd Floor Employee Lunch room, Locker room and Toilets	90% Chrysotile	1,400 SF	RACM	Poor
Roof Parapet Wall Metal Flashing Caulking White	Power Plant – Upper and Lower Roofs	5% Chrysotile	850 SF	CAT II	Poor
Flange Gasket	Power Plant 1st Floor Chemical Storage Tank Side Flange	90% Chrysotile	40 Linear Feet	CAT I	Good
Gasket Materials	Power Plant 3rd Floor Mezzanine Parts Storage Area	80% Chrysotile	200 SF	CAT I	Good
Various Flange and Valve Gasket	On Piping and Equipment on Floors 1-4 Power Plant	Presumed to Contain Asbestos	1,000 LF	CAT I	Good
Sink Countertop	Power Plant 4th, Floor Battery Room	Presumed to Contain Asbestos	25 SF	CAT II	Good
Gray Metal Slider Door core	1st Floor Chemical Storage Area	Presumed to Contain Asbestos	200 SF	CAT II	Good

*Estimated quantities of ACMs listed are provided as a guide to the building owner. The material quantities listed in the table are approximations and TRC is not responsible for the accuracy of the quantities and measurements provided.

Warehouse Building

Material	Location	Percentage/Type	Approx Quantity	NESHAP Category
Asbestos was **not** detected in any of the sampled materials				

4.2 *Negative Materials*

Samples of the following suspect materials were collected in the locations noted below and were reported with no detectable asbestos, as indicated by laboratory PLM analysis:

Power Plant Negative Materials	
Material	**Sample Locations**
2' x 2' Drop Ceiling Panels	Maintenance/Tool Storage, Supervisor & Records Office, Hallways and Electrical Room
Duct Sealant Caulk (White)	Maintenance/Tool Storage, Supervisor & records Office, Hallways, Electrical Room and HVAC room
4" Cove Base (Black) & Associated Mastic (Brown)	Maintenance/Tool Storage, Supervisor & Records Office, Hallways, Electrical Room and 3rd Floor Employee Lunch room,
Wall board & Joint Compound	Maintenance/Tool Storage, Supervisor & records Office, Hallways, Electrical Room and 3rd Floor Employee Lunch room, Locker room and Toilets
Vinyl Sheet Floor Mastic (Brown)	4th Floor Office Areas and 3rd Floor Employee Lunch room, Locker room and Toilets
Ceramic Tile (Green) and Grout (Gray)	4th, and 3rd Floor Restrooms
Textured Paint	Walls of the Erection Floor
Wall Texture Coat	Walls of the Erection Floor
Concrete Panel and Block Wall Caulk	Interior and exterior walls and roof
Pipe Insulation Glue/ Mastic	Pipe Insulation on exterior north side and interior floors 1-4
Duct Insulation Paper And Glue	4th Floor HVAC room
Roof Mastic Sealant (Black & with Silver Paint)	Upper and lower roofs, Parapet walls
Poured in place Concrete walls	Roof parapets and exterior walls
Mastic at Roof Penetrations	Lower roof penetrations
Fiberglass Pipe Insulation end cap caulk	4th floor, HVAC room, 3rd Floor Maintenance Shop & 2nd Floor Turbine room
Electric Wire Insulation-various colors	3rd Floor Mezzanine storage area
9" OD Gaskets	2nd Floor Turbine room

Warehouse Building Negative Materials	
Material	**Sample Locations**
Interior Panel Insulation	Metal roof and walls
12" Floor Tile (Tan with white and gray specks) and Mastic (Yellow)	Conference room floor
4" Cove Base (Black) & Associated Mastic (Dark Brown)	Conference room walls
Wall board & Joint Compound	Conference room and offices
Floor leveling /filler compound (Brown)	Storage room under floor tile
2' x 2' Drop Ceiling Panels	Conference room and offices
Roof Sealant on metal seams	Warehouse roof

4.3 *Asbestos Recommendations*

Results of bulk sample analysis confirmed that asbestos was identified in regulated concentrations within some of the building materials sampled. The ACM was found to be in fair to good condition at the time of the inspection. If damaged ACM is encountered, it should be repaired, encapsulated, or removed as soon as feasible. Access to the damaged ACM by building occupants should be restricted in the areas of damage until abatement response actions can be completed. Such abatement methods should be performed by a qualified/licensed asbestos abatement contractor, and ACM should be handled, stored, and disposed of according to all local, state, and federal regulations.

Persons performing construction or maintenance work in the Site should be aware of the types and locations of ACM and that additional materials (not identified in this report), which are either inaccessible or hidden, may exist at the Site. Care should be used when performing work that disturbs building materials. Any suspect asbestos containing materials uncovered during maintenance, renovation, or demolition activities that are not addressed in this inspection report, or presumed asbestos containing materials (e.g. fire doors with asbestos laden cores), must be sampled by an accredited asbestos inspector prior to disturbance, or they must otherwise be assumed and treated as asbestos containing.

5.0 Lead-Based Paint Inspection

TRC conducted a lead-based paint (LBP) inspection for the determination of LBP and/or lead-based components at the Power Plant and Warehouse building structures (the "Site"). The LBP inspection was conducted in accordance with the United States Housing and Urban Development (HUD) guidance document, entitled "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing," 1997 Revision.

The general purpose of this investigation was to document the general condition of interior and exterior painted building surfaces and to characterize the composition of painted surfaces with regard to lead content. Information derived from this investigation may be used to further refine the scope of LBP abatement activities in support of future procurement activities and to establish baseline conditions for other portions of the property with regard to LBP. The scope of work associated with this investigation included the following elements:

- Visual inspection of interior and exterior building painted surfaces and components and
- Field testing of painted surfaces and components using an X-Ray Fluorescence (XRF) analyzer

The lead based paint testing was conducted by Sam Seneviratne, an EPA; Department of Housing and Urban Development (HUD) certified Lead-Based Paint Building Inspector/Assessor, Project Monitor. The inspection was conducted on April 10 and 11, 2012. Assistance was provided by Hector Gonzalez, an EPA/HUD Lead-Based Paint Sampling Technician.

Definition of Lead-Based Paint

The United States Department of Housing and Urban Development (HUD), and United States Environmental Protection Agency define lead-based paint as a paint or other surface coatings that contain an amount of lead equal to, or in excess of:

- One milligram per square centimeter (1.0 mg/cm^2); or
- One-half of one percent (0.5%) by weight.

Sampling and Analytical Procedures

All lead-based paint testing was performed using a RMD Model LPA-1B, X-ray Fluorescence (XRF) spectrum analyzer, serial #1124. Assessment activities and XRF testing were performed in accordance with the United States HUD guidance document, entitled "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing," 1997 Revision.

The RMD Model LPA-1B XRF uses a 12 milicurie Cobalt 57 sealed radioactive source which has a half life of 18 months. The XRF measures the L & K electron shell energy released by the excited atoms of the test material such as the painted and/or coated surface location to calculate the concentrations of a specific metal on the surface coating

down to the substrate. The RMD Model LPA-1B XRF does not have an inconclusive range such as the older generation XRF machines.

At the beginning and end of each work day and at various times during the day, the XRF was calibrated in order to ensure that the instrument was functioning properly. A series of three calibrated readings were obtained using a 1.9 mg/cm^2 NIST Paint Film Standard in accordance with the instrument manufacturer's protocol. In all cases, the instrument was functioning within the standard deviation as defined by the manufacturer and the Performance Characteristic Sheets. All validation readings were recorded in a logbook, which accompanies the instrument. A total of fifteen calibration tests were performed during the course of this investigation.

During this investigation, a total of one-hundred and seventy six (176) painted or coated substrate measurements were obtained using the XRF. The XRF field test data sheets with the results of the paint test measurements are presented in Appendix B-Lead-Based Paint XRF Field Data sheets.

5.1 Summary of Lead-Based Paint Testing Results

The XRF test results indicate that select painted surfaces and building components were found to be containing lead above the United States Department of Housing and Urban Development, and United States Environmental Protection Agency definition of lead-based paint. A summary of paints/coatings determined to be LBP by XRF analysis is provided below:

Power Plant

Component(s)	Color	Location(s)	Lead XRF Result (mg/cm^2)	Approximate Quantity	Paint Condition
Metal Gantry Crane Frame and Platform	Black	Exterior Southwest	3.0 to 2.4	400 SF	Poor
Metal Elevator Door Frame	Beige	Floors 1 thru 4	4.0-7.5	4 Doors x 20 SF each	Intact
Glazed Metal Custodian sink	White	Custodian Closets 4th and 3rd, floors	>9.9	2 sinks	Intact
Metal Powerhouse Crane Frame, and 20 & 125 Ton Hook	Orange	Erection Floor	4.2	1,500 SF (Crane) 50 SF (Hooks)	Intact
Metal Cable Tray Support	Cream	Exterior North side	>9.9	6,000 SF	Fair
Metal Flammable Storage Cabinet	Yellow	Exterior North side	1.2	50 SF	Poor
Metal 2 ton Crane Boom	Yellow	Machine Shop	>9.9	20 SF	Intact
Metal-Handrail	Black	3rd, Floor Parts Storage	2.1	100 SF	Poor
Concrete Floor stripping	Yellow	3rd Floor Elevator lobby	2.9	16 SF	Poor
Metal Elevator Gate	Black	1st,-4th Floors-Elevator Door	1.0	200 SF	Intact
Metal Tool Rack	Red	Generator Bay Hitachi Tool Rack	9.8	60 SF	Intact

Component(s)	Color	Location(s)	Lead XRF Result (mg/cm²)	Approximate Quantity	Paint Condition
Metal Step and Riser	Blue	Stairs to Turbine Pit from Generator Bay	>9.9	160 SF	Intact
Metal Wall	Blue	Inside Turbine Pit	>9.9	600 SF	Intact
Metal Servo Linkage	Blue	Inside Turbine Pit	>9.9	1,000 SF	Intact
Metal Shim	Gray	Upper Roof Parapet Wall Flashing fastener	>9.9	40 SF	Poor
Metal Slider Door	Gray	1st Floor Chemical Storage	>9.9	200 SF	Intact
Metal Clean Oil Storage Tank	Gray	1st Floor Chemical Storage	>9.9	300.SF	Intact
Metal Dirty Oil Storage Tank	Gray	1st Floor Chemical Storage	9.2	300 SF	Intact
Metal Spiral Case and Access	Gray	Floor Piping Gallery	>9.9-7.1	12,000 SF	Intact
Metal Handrail	Black	Stairs to Penstock Gallery	2.1	60 LF	Intact
Metal Piping	Green	Penstock Drain/Fill #2	2.3	150 SF	Intact
Metal Draft Tube	Gray	Penstock Gallery	>9.9	10.000 Sf	Poor
Metal Access Hatch to Draft Tube-	Gray	Penstock Gallery	3.2	16 SF	Poor

Warehouse Building

Component(s)	Color	Location(s)	Lead XRF Result (mg/cm²)	Approx. Quantity	Condition
Lead-based paint components were **not** found in the Warehouse building.					

5.2 *Lead-Based Paint Conclusions*

Visual assessment of the lead-based paint identified in the Power Plant building identified painted surfaces in conditions other than "intact" in multiple areas of the interior and/or exterior of the buildings. The lead paint in poor condition (i.e., less than intact) must be stabilized or abated prior to demolition or repainting activities to prevent environmental contamination and worker exposure from lead paint.

5.3 *Lead-Based Paint Recommendations*

Disturbance of lead based paint should be performed by a contractor who has experience and expertise in LBP, abatement, handling and disposal and who can protect the employees of IBWC Amistad Power Plant, and the environment from lead exposure hazards. For construction work where an employee may be occupationally exposed to lead in any amount, the workers and contractor must comply with Federal Occupational Safety and Health (OSHA) worker lead exposure regulations 29 CFR 1910.1025 and 1926.62 (lead in construction). Additionally, lead containing waste must be characterized and profiled for proper disposal according to applicable federal State and local regulations.

TRC recommends that interior and exterior painted surfaces containing lead at concentrations greater than or equal to 1.0. Mg/cm2 and that are in poor condition be abated and/or stabilized. Based on the results of this assessment, the following materials meet the criteria for abatement and/or stabilization:

Power Plant

Component(s)	Color	Location(s)	Lead XRF Result (mg/cm^2)	Approximate Quantity	Condition
Metal Gantry Crane Frame and Platform	Black	Exterior Southwest	3.0 to 2.4	400 SF	Poor
Metal Flammable Storage Cabinet	Yellow	Exterior North side	1.2	50 SF	Poor
Metal-Handrail	Black	3rd, Floor Parts Storage	2.1	100 SF	Poor
Concrete Floor stripping	Yellow	3rd Floor Elevator lobby	2.9	16 SF	Poor
Metal Shim	Gray	Upper Roof Parapet Wall Flashing fastener	>9.9	40 SF	Poor
Metal Draft Tube	Gray	Penstock Gallery	>9.9	10,000 SF	Poor
Metal Access Hatch to Draft Tube-	Gray	Penstock Gallery	3.2	16 SF	Poor

5.4 *Lead-Based Paint General Recommendations*

Lead is a hazardous substance and its condition, handling and disposal are regulated by Federal, State and local agencies. Lead-containing materials, Lead-based paint, and Lead-Containing Paint generally do not pose a health risk unless the material is disturbed or sufficiently deteriorated to produce dust, which may become airborne and inhaled or ingested. Future site maintenance activities, including surface preparation and painting, may involve practices that could disturb lead-containing materials. The following paragraphs provide a general overview of applicable regulatory standards that relate to the management and/or disposal of lead-based paint:

- The Federal Occupational Safety and Health (OSHA) 29 CFR 1910.1025 and 1926.62 (lead in construction) do not provide a definition for "lead-based paint". Rather, the Lead Construction Standard provides a Permissible Exposure Limit (PEL) for worker exposure to airborne lead particles of 50 micrograms per cubic meter of air (50 $\mu g/m^3$ for an 8-hour time-weighted average). All employees (workers) and supervisors, who are engaged in lead-related construction activities and shown to be exposed to lead at or above the Permissible Exposure Limit, shall be trained by state-accredited training providers and certified by the Environmental Protection Agency. The OSHA Lead in Construction Standard states that "negative" readings i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2), "DO NOT" relieve contractors from performing exposure assessments (personal exposure monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative" result or lead concentration, concentrations of airborne lead may still exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity.

- Future site maintenance activities, including repair, surface preparation and painting, sand/shot blasting, and sanding, in areas where lead-based paint has been identified may result in the liberation of lead at concentrations in excess of the OSHA PEL. TRC recommends the removal and/or stabilization of building materials during planned renovation. Lead-based painted materials should only be removed, handled or stabilized by lead trained personnel in accordance with all applicable federal, state, and local regulations. These requirements include, but are not limited to, the following: Exposure Assessments; Methods of Compliance including work practices, administrative, and engineering controls; Respiratory Protection; Protective Clothing and Equipment; Housekeeping; Hygiene Facilities; Medical Surveillance; and Employee Information and Training. The waste materials generated must be segregated accordingly and must be subjected to waste characterization testing and disposed of according to applicable regulations.

- Lead containing waste must be disposed of in accordance with all applicable federal, state, county or local regulations and guidelines. It is the sole responsibility of the Contractor to assure compliance with all laws and regulations relating to the disposal. The abatement contractor should comply with the requirements of the Resource Conservation and Recovery Act (RCRA). Waste materials shall be segregated into separate waste streams (i.e. paint chips, personal protective equipment, plastic, etc.) and placed into labeled, leak-tight containers. Wastewater from the washing facilities should be captured, filtered, and sampled for lead content prior to disposal into the sanitary sewer system. Additional details regarding waste characterization sampling and analysis are provided in the following section.

5.5 Waste Characterization Recommendations

Wastes that are generated during demolition and/or building maintenance activities may contain concentrations of lead that would render the waste material as a hazardous waste. In order to determine whether the wastes are to be classified as non-hazardous

solid or hazardous waste as defined by the RCRA, a Toxic Characterization Leaching Procedure (TCLP) test must be performed. If any of the waste characterization test samples are at or above the 5.0 mg/liter threshold criteria, the Contractor shall dispose of the waste material as hazardous waste.

The contractor should check in advance with the intended landfill to inquire about the testing requirements of that landfill. Testing for other hazards may be required. Segregation of waste materials and representative characterization analysis for the disposal of wastes as provided herein shall be the responsibility and be required of the Contractor.

6.0 DISCLAIMER

The content presented in this report is based on data collected during the site inspection and survey, review of pertinent regulations, requirements, guidelines and commonly followed industry standards, and information provided (if any) by the property owner, their clients, agents, and representatives.

The work has been conducted in an objective and unbiased manner and in accordance with generally accepted professional practice for this type of work. TRC believes the data and analysis to be accurate and relevant, but cannot accept responsibility for the accuracy or completeness of available documentation or possible withholding of information of other parties. Structures or components thereof surveyed may contain hidden surfaces or materials requiring destructive access to inspect and/or sample. It is possible that additional materials could be discovered during destructive or demolition activities. In the event additional materials (not identified herein) are discovered during such activities, additional investigation and sampling may be necessary.

This asbestos survey and lead-based paint inspection report is designed to aid the property owner, architect, construction manager, general contractor, and asbestos or LBP abatement contractor in locating ACM and/or LBP . This report is not intended for, and may not be utilized as, a bidding document or as an abatement project specification document.

7.0 SIGNATORY

This asbestos and lead-based paint survey activities and report of the findings were provided by TRC, was conducted by a licensed professional, experienced in the inspection and survey for asbestos containing materials and lead-based paint in building structures and associated components thereof. If there are any questions concerning information contained in this report, you may contact one of the undersigned in our Irvine, California office, phone # 949.727.9336.

Sincerely,
TRC Environmental Corporation

Sam Seneviratne, CAC, REA
Project Manager
AHERA Building Inspector
Certification # 211-206-BIR
Exp: December 8, 2012

Douglas W. Coburn, CAC, REA
Senior Project Manager

Appendix A

Bulk Asbestos Sample Laboratory Analytical Report

And Chain of Custody

TRC
Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: U.S. International Boundary & Water Company

Site: Amistad Power Plant
Lab Log #: 40603
Project #: 192271.0000.0000
Date Received: 04/12/12
Date Analyzed: 04/13/12

RESULTS

Sample No.	Color	Homogeneous	Multi-Layered	Layer No.	Other Matrix Mat'ls	Asbestos %	Asbestos Type
1	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
2	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
3	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
4	White	Yes	No	--	--	ND	None
5	White	Yes	No	--	--	ND	None
6	White	Yes	No	--	--	ND	None
7	White	Yes	No	--	--	ND	None
8	White	Yes	No	--	--	ND	None
9	White	Yes	No	--	--	ND	None
10	White	Yes	No	--	--	ND	None
11	White	Yes	No	--	--	ND	None
12	White	Yes	No	--	--	ND	None
13	Black	Yes	No	--	--	ND	None
14	Black	Yes	No	--	--	ND	None
15	Black	Yes	No	--	--	ND	None
16	Brown	Yes	No	--	--	ND	None
17	Brown	Yes	No	--	--	ND	None
18	Brown	Yes	No	--	--	ND	None
19	Blue/Green/White/Grey	Yes	No	--	--	90%	Chrysotile
20	--	--	--	--	--	NA/PS	--
21	--	--	--	--	--	NA/PS	--
22	Brown	Yes	No	--	--	ND	None

23	Brown	Yes	No	--	--	ND	None
24	Brown	Yes	No	--	--	ND	None
25	Green	Yes	No	--	--	ND	None
26	Green	Yes	No	--	--	ND	None
27	Green	Yes	No	--	--	ND	None
28	Grey	Yes	No	--	--	ND	None
29	Grey	Yes	No	--	--	ND	None
30	Grey	Yes	No	--	--	ND	None
31	Beige	Yes	No	--	--	ND	None
32	Beige	Yes	No	--	--	ND	None
33	Beige	Yes	No	--	--	ND	None
34	Beige	Yes	No	--	--	ND	None
35	Beige	Yes	No	--	--	ND	None
36	Beige	Yes	No	--	--	ND	None
37	White	Yes	No	--	--	ND	None
38	White	Yes	No	--	--	ND	None
39	White	Yes	No	--	--	ND	None
40	White/Yellow/Silver	Yes	No	--	40% cellulose	ND	None
41	White/Yellow/Silver	Yes	No	--	40% cellulose	ND	None
42	White/Yellow/Silver	Yes	No	--	40% cellulose	ND	None
43	Dark Yellow	Yes	No	--	60% cellulose 30% fiberglass	ND	None
44	Dark Yellow	Yes	No	--	60% cellulose 30% fiberglass	ND	None
45	Dark Yellow	Yes	No	--	60% cellulose 30% fiberglass	ND	None
46	Grey/White/Black	Yes	No	--	10% fiberglass	ND	None
47	Grey/White/Black	Yes	No	--	10% fiberglass	ND	None
48	Grey/White/Black	Yes	No	--	10% fiberglass	ND	None
49	Grey	Yes	No	--	--	ND	None
50	Grey	Yes	No	--	--	ND	None
51	Grey	Yes	No	--	--	ND	None
52	Black/Grey	Yes	No	--	20% cellulose	ND	None
53	Black/Grey	Yes	No	--	20% cellulose	ND	None
54	Black/Grey	Yes	No	--	20% cellulose	ND	None
55	Black	Yes	No	--	20% cellulose	ND	None
56	Black	Yes	No	--	20% cellulose	ND	None
57	Black	Yes	No	--	20% cellulose	ND	None
58	Grey	Yes	No	--	--	ND	None

59	Grey	Yes	No	--	--	ND	None
60	Grey	Yes	No	--	--	ND	None
61	White	Yes	No	--	--	5%	Chrysotile
62	--	--	--	--	--	NA/PS	--
63	--	--	--	--	--	NA/PS	--
64	Black	Yes	No	--	20% cellulose	ND	None
65	Black	Yes	No	--	20% cellulose	ND	None
66	Black	Yes	No	--	20% cellulose	ND	None
67	Black/Tan	Yes	No	--	--	ND	None
68	Black/Tan	Yes	No	--	--	ND	None
69	Grey	Yes	No	--	--	90%	Chrysotile
70	White/Yellow	Yes	No	--	10% fiberglass	ND	None
71	White/Yellow	Yes	No	--	10% fiberglass	ND	None
72	White/Yellow	Yes	No	--	10% fiberglass	ND	None
73	Grey	Yes	No	--	--	80%	Chrysotile
74	--	--	--	--	--	NA/PS	--
75	--	--	--	--	--	NA/PS	--
76	Black	Yes	No	--	60% synthetic	ND	None
77	Black/White	Yes	No	--	60% synthetic	ND	None
78	Black/Orange	Yes	No	--	60% synthetic	ND	None
79	Black/Red	Yes	No	--	60% synthetic	ND	None
80	Black/Green	Yes	No	--	60% synthetic	ND	None
81	Brown	Yes	No	--	90% cellulose	ND	None
82	Grey	Yes	No	--	--	ND	None
83	Red/Orange	Yes	No	--	--	ND	None
84	Black/Grey	Yes	No	--	--	ND	None
85*	--	--	--	--	--	--	--
86	Brown/Silver	Yes	No	--	--	ND	None
87	Grey	Yes	No	--	--	ND	None
88	Brown/Silver	Yes	No	--	--	ND	None
89	Tan	Yes	No	--	--	ND	None
90	Tan	Yes	No	--	--	ND	None
91	Tan	Yes	No	--	--	ND	None
92	Light Yellow	Yes	No	--	--	ND	None
93	Light Yellow	Yes	No	--	--	ND	None
94	Light Yellow	Yes	No	--	--	ND	None
95	Black	Yes	No	--	--	ND	None

96	Black	Yes	No	--	--	ND	None
97	Black	Yes	No	--	--	ND	None
98	Dark Brown	Yes	No	--	--	ND	None
99	Dark Brown	Yes	No	--	--	ND	None
100	Dark Brown	Yes	No	--	--	ND	None
101	White	Yes	No	--	--	ND	None
102	White	Yes	No	--	--	ND	None
103	White	Yes	No	--	--	ND	None
104	White	Yes	No	--	--	ND	None
105	White	Yes	No	--	--	ND	None
106	White	Yes	No	--	--	ND	None
107	Brown	Yes	No	--	--	ND	None
108	Brown	Yes	No	--	--	ND	None
109	Brown	Yes	No	--	--	ND	None
110	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
111	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
112	White/Grey	Yes	No	--	40% cellulose 40% mineral wool	ND	None
113	Grey	Yes	No	--	--	ND	None
114	Grey	Yes	No	--	--	ND	None
115	Grey	Yes	No	--	--	ND	None

NA/PS- Not Analyzed/Positive/Stop

* No sample

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace- asbestos was observed at level of less than 1%

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2012. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2012. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

This report shall not be reproduced, except in full, without the written approval of TRC. This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the items tested.

Analyzed by _____
Kathleen Williamson, Laboratory Manager

Reviewed by _____ QM
Kathleen Williamson, Laboratory Manager
or other approved signatory

Date Issued: 04-16-12

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

International Boundary & Water Co.

LAB ID #. 40603

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
192271	US IBWC - Amistad Power Plant		PLM: 8hr 24hr 48hr ~~5day~~ ✓
			TEM: 24hr 48hr 3day ~~5day~~

SIGNATURE: Sam Senevirathne

INSPECTOR: CAC#93-0886 SAM SENEVIRATNE

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
	2/10 & 11/12	All day		✓	See Attached logs	✓					See attached logs

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
Sam Senevirathne	2/11/12	4/12/12			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
SAM SENEVIRATNE	3:00pm	0930			

Remarks:

Condition of Samples: OK
Acceptable: Yes ✓ No ____
Comments:

40603

ASBESTOS INSPECTION FIELD DATA SHEET

Project #:192271
Name: US IBWC-Amistad Power Plant
Location: 670 Texas Spur 349, Del Rio, TX 78840
Attach sample location drawing to ALL inspection forms

Inspector Name and License #: Sam Seneviratne CAC # 93-0886
Date of Inspection: 4/10/12
Inspector Signature: Sam Seneviratne

Sample #	Material Description	Material Location	Quantity (SF or LF)	Friable (NF or F)	Damage (ND, D, SD)	Photo #
1	2'x2' Drop Ceiling Panel	Maintance / Tool Storage	300	F		5
2	↓	Corridor, Sup + Records office	800 ft	↓		
3		Elec Equip Rm	900			
4	Duct Sealant Caulk	Ret loc #1	30 ft	NF		6
5	↓ (white)	Sup. office.	60 ft	↓		
6		Ret loc #3	80 ft			
7	Wallboard	Ret loc #1	20,000 ft	NF		7
8	↓	Super Storage Closet	↓	↓		↓
9		Elec Equip rm				
10	Joint Compound	Ret loc #1	↓	NF		↓
11	↓	Ret loc. #8		↓		
12		Ret " #9				
13	9" Base cove (Blk)	Ret loc #1	80 LF	NF		
14	↓	Elec Equipment rm (SCADA)	120 LF	↓		
15		" " "	"			
16	BCM (Brown)	Ret loc #1	↓	NF		
17	↓	Ret loc #14		↓		
18						↓
19	Vinyl sheet Fl (Blue, Green + white Sq pattern)	Superintendent office	720			8
20		office Area Entry	"	↓		
21		Emp lower rm	670			
22	VSF - Mastic (Brown)	Ret loc. 19	720			↓
23	↓	" " 20	"			
24		Emp lower rm	670	↓		
Assume Acm Not Sampled	Sink Counter top	4' x 2' Butler rm Sink	25 ft	NF.		9

Rec'd by: [illegible] 4/12/12 0930

40603

ASBESTOS INSPECTION FIELD DATA SHEET

Project #:192271
Name: US IBWC-Amistad Power Plant
Location: 670 Texas Spur 349, Del Rio, TX 78840
Attach sample location drawing to ALL inspection forms

Inspector Name and License #:Sam Seneviratne CAC # 93-0886
Date of Inspection: 4/10/12
Inspector Signature Sam Seneviratne

Sample #	Material Description	Material Location	Quantity (SF or LF)	Friable (NF or F)	Damage (ND, D, SD)	Photo #
25	Ceramic tile 6"x12" (green)	4th Fl restroom	224 sf	NF	ND	16
26		"	"			
27		3rd Fl	1,548 sf			
28	Ceramic tile Grout (gray)	Ref Loc 25	224 sf			
29		26	"			
30		27	"			
31	Textured Paint	Erection Fl South Wall	3,000 sf	NF	ND	11
32		East "			D	
33		North "			ND	
34	Wall texture coat	Ref Loc 31				
35		32				
36		33				
37	Conc wall Caulk	Caulk between wall / Floor	15,000 lf	NF	ND	18
38	" / Block wall Caulk	" " Conc Block / Conc Wall	5,000 lf			18
39		" " " " " "	"			
40	Duct insulation paper wrap	4th Fl HVAC Room	400 sf	F		17
41						
42						
43	Duct Insulation Paper Glue (brown)					
44						
45						
46	Pipe insulation (mud)	Pipe on 2nd floor [illegible]	18 lf	NF	ND	15
47						
48						
49	Caulk between [illegible]	North east wall 3rd Deck	200 lf	NF	ND	21
50						
51						

Read by: [illegible] 4/12/12 0930

40603

ASBESTOS INSPECTION FIELD DATA SHEET

Project #:192271
Name: US IBWC-Amistad Power Plant
Location: 670 Texas Spur 349, Del Rio, TX 78840
Attach sample location drawing to ALL inspection forms

Inspector Name and License #:Sam Seneviratne CAC # 93-0886
Date of Inspection: 4/10, 11/12
Inspector Signature Sam Seneviratne

Sample #	Material Description	Material Location	Quantity (SF or LF)	Friable (NF or F)	Damage (ND, D, SD)	Photo #
52	Mastic Sealant w silver paint	Upper roof parapet	100 SF	NF	ND	34
53		Cap Sheet Seams	)	)	)	)
54						
55	Mastic Sealant - Blk.	Upper roof parapet wall	25 SF			35
56	)	Conc. joints	)			
57		Lower roof	10 SF			
58	Concrete (poured-in place)	Parapet wall	10,000 SF.			
59			)			
60						
61	Parapet wall / metal flashing mastic (white)	parapet wall upper roof	380 LF			36
62		" " "	"			
63		" " lower roof	450 LF			
64	Mastic around roof penetration (Blk)	Lower roof penetration	50 #			37
65		)	)	)	)	
66						
67	Flange Gasket	1st Fl Chemical Storage Top flange	65x2 LF	NF	ND	45
68		) " "	"	)	)	"
69	)	) side "	20x2 LF			46
70	Fiberglass Insul. End cap Caulk	3rd Fl Maintenance shop	25 ea	NF	ND	47
71		)	)	)	)	
72		2nd Fl Turbine room				
73	Gasketing / Packing	3rd Fl Mez Parts Storage - 1500 - Blk	50 #	)	)	48
74		) 1500 - White	100 #			49
75	)	Johnson # 60	25 #			50
76	Elec wire Insulation	Blk	50 LF	)	)	51
77		white	)			)
78	)	Orange				

Read by: [illegible] 4/12/12 0930

406003

ASBESTOS INSPECTION FIELD DATA SHEET

Project #:192271
Name: US IBWC-Amistad Power Plant
Location: 670 Texas Spur 349, Del Rio, TX 78840
Attach sample location drawing to ALL inspection forms

Inspector Name and License #:Sam Seneviratne CAC # 93-0886
Date of Inspection: 4/12/12
Inspector Signature Sam Seneviratne

Sample #	Material Description	Material Location	Quantity (SF or LF)	Friable (NF or F)	Damage (ND, D, SD)	Photo #
79	Elec. Wire Insulation	3rd Fl Mezz Red	↓	NA	ND	51
80	↓	↓ Green	↓	↓	↓	"
81	Ebonite ↓ (Brn)	Brown	2 units			52
82	Gaskets 9" OD	2nd Fl Turbine Rm	50 ea	↓	↓	53
83	↓	↓ ↓	25"			↓
84						
86	Metal Roof Interior Insulation	Warehouse Bldg Ceiling				54
87	↓ ~~Wall~~ " " "	↓ "				"
88	Wall Siding " "	↓ Wall				55
89	FT 12" Tan w/ white & gray specks	↓ Conf. Rm Floor	1650 ft			56
90	↓	↓ ↓	↓			↓
91						
92	FT Master Lt. yellow	↓	↓			↓
93	↓	↓	↓			
94						
95	Base Cove (Blk) 4"	↓ Conf. Room Wall	250 LF			57
96	↓	↓ ↓	↓			↓
97						
98	BCM (Dk Brown)	↓	↓			↓
99	↓	↓	↓			
100						
101	wall board	↓	4500			↓
102	↓	↓ ↓	↓			
103						
104	Joint Compound	↓	↓			↓
105	↓	↓ ↓	↓			
106						

Read by: [illegible] 4/12/12 0930

40603

ASBESTOS INSPECTION FIELD DATA SHEET

Project #:192271
Name: US IBWC-Amistad Power Plant
Location: 670 Texas Spur 349, Del Rio, TX 78840
Attach sample location drawing to ALL inspection forms

Inspector Name and License #:Sam Seneviratne CAC # 93-0886
Date of Inspection: 4/11/12
Inspector Signature Sam Seneviratne

Sample #	Material Description	Material Location	Quantity (SF or LF)	Friable (NF or F)	Damage (ND, D, SD)	Photo #
107	Floor leveling/ filling	Warehouse Bldg storage rm	50 ft	NF	NA	58
108	compound	under FT				
109						
110	2'x2' Drop ceiling panel	Ceilings	1650			
111						
112						
113	Roof Sealant caulk	Roof	350 ft	NF		59
114	on metal roof					
115						

Sam Seneviratne 4/11/12

Rec'd by: [illegible] 4/12/12 0930

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: U.S. International Boundary & Water Company

Site: Amistad Power Plant, 670 Texas Spur 349, Del Rio, TX
Lab Log #: 40714
Project #: 192271.0000.0000
Date Received: 05/03/12
Date Analyzed: 05/03/12

RESULTS

Sample No.	Color	Homogeneous	Multi-Layered	Layer No.	Other Matrix Mat'ls	Asbestos %	Asbestos Type
74	White	Yes	No	--	90% synthetic	ND	None
75	Black	Yes	No	--	--	90%	Chrysotile

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace- asbestos was observed at level of less than 1%

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2012. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2012. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

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Analyzed by _____
Kathleen Williamson, Laboratory Manager

Reviewed by _____
Kathleen Williamson, Laboratory Manager
or other approved signatory

Date Issued: _____

Appendix B

Lead-Based Paint XRF Field Data Sheets

TRC

Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date: 4/10/12
XRF Serial Number: 1124_____

Page 1 of 10

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity
1		Start-up	NA	Self Calibrate	NA		Okay	
2	Std	Cal. Block	Yellow	"	I	1.8		
3						2.0		
4						1.8		
5	metal	Roll-up door frame	Gray	South Main Entry	F	0.1	N	
6	"	Sign	white	South East Gate	I	0.0	P	
7	"	Door	Gray	" Entry	I	0.2	N	
8	"	" Frame	"	" "	I	0.2	N	
9	"	Crane frame	Blk	SW Crane Frame	P	3.0	P	
10		" platform	"	" " " platform	P	2.4	P	400 ft
1		Lifting Beam	"	" a Lifting Beam		0.3	N	
2		Ladder	"	" " " Ladder		0.4	N	
3		Draft tube gate	Gray	Draft tube Gate #3	F	0.40	N	
4	"	Door	Beige	Main Entry South	I	0.0	N	
5	"	" Frame	"	" " "		0.0	N	
6	Conc	Wall	"	4th Fl South wall		0.3	N	
7	metal	Switch Box	Red	" " " "		0.1	N	
8		" "	Gray	" " "		0.4	N	
9		Roll up door Frame	"	" " "		0.0	N	
20		" " "	"	" " "	"	0.0	N	

Photo #

14

TRC
123 Technology Drive, Irvine, CA 92618
Ph 949.727.9663, Fax 949.727.7346

TRC

Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date: 4/10/12
XRF Serial Number: 1124_____

Page 2 of 10

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity
2 1	metal	Elev Door	Beige	Freight Elevator Door	I	0.4	N	
2	"	" " Frame	"	" " " frame		2.5, 4.0	P	20 sf x 4
3	Conc	wall	"	4th Fl		0.6	N	
4	metal	Door		" " to offices		0.6		
5	"	" ~~Frame~~ Frame		" " " "		0.5		
6		"		Stair well		0.4		
7		" frame		" "		0.0		
8	Conc	wall	white	offices Hallway		0.0		
9	" ~~Basket~~ Black	"		" "		0.0		
3 0	WB	"	yellow	" Closet		0.0		
1		"	white	Supv. offices wall west		0.0		
2		"	"	Recep " " south		0.0		
3	metal	Door	Green	Custodian Closet		0.5		
4	"	" Frame	"	" "		0.8, .4,	N	
5	Ceramic 8x12	wall	"	" "		0.0	N	
6	Cast metal	Cust Sink	white	" "	I	9.9	P	1 sink
7	metal	Shelf	Green	" "		0.0	N	
8	Porcelain	Sink	white	Rest room		0.5		
9	"	Toilet	"	" "		0.0		
0	metal	"	White	" " Ceiling Hatch		0.0		

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123 Technology Drive, Irvine, CA 92618
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TRC

Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date: 4/10/12
XRF Serial Number: 1124

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity
41	Wood	Door	~~Beige~~ Gray	Elec. Panel	I	0.0	Neg	
2	"	"	Beige	Pump Rm	I	0.2		
3	"	" Frame	"	" "		0.4		
4	WB	Wall	Green	" " South		0.0		
5	metal	Door	Green	" " Storage Rm		0.9		
6	"	" Frame	"	" " " "		0.0		
7	"	Double Door	Lt "	SCADA Rm		0.2		
8	"	" " Frame	"			0.0		
9	WB	Wall	"			0.0		
50	metal	HVAC Register	"	"		0.1		
1	"	Tel Equip	Blk	" Tel Equip. Cabinet		0.0		
2	"	Cabinet	Gray	" storage		0.0		
3	"	"	Green	" "		0.0		
4	Granite	Counter	Blk	Batting Rm Sink Counter		0.0		
5	Conc Block	Wall	Yellow	" " wall		0.8		
6	metal	HVAC Duct	"	" " SE		0.3		
7	"	" "	"	" " round		0.3		
8	Conc	Floor	Gray	" " Floor	F	0.5		
9	metal	Door	Beige	" "	I	0.0		
60	"	" Frame	"	" "	I	0.0		

TRC
123 Technology Drive, Irvine, CA 92618
Ph 949.727.9663, Fax 949.727.7346

TRC

Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date:
XRF Serial Number: 1124_____

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity
61	metal	Crane	Orange	Crane Framing	I	> 9.9	1500 ⊕	
2	"	"	"	" "		> 9.9		
3		" Hooks	orange	30 ton hook		> 9.9	20 ⊕	
4			Red	Harness		0.0		
5			Orange	125 ton hook		5.5	50 ⊕	
6	"	12" web	Cream	Steel Girder (Small) East	I	0.0		
7		8" Flange		" "		0.0		
8		24" web		" " Large Center		0.0		
9		12" Flange		" " "		0.0		
70		24" "		West		0.0		
1		12" "				0.0		
2		Door	Beige	Air Handler HVAC rm		0.5		
3		" Frame	"	" " "		0.0		
4	Conc	Wall	"	" " " (S)		0.6		
5	metal	Elec Breaker	Gray	" " "		0.0		
6	"	" "		" " " DC Switch		0.0		
7	"	" "		HVAC-Distribution Panel		0.0		
8	Conc. Block	Wall	Beige	" Wall S		0.0		
9	metal	Pipe Cover	Red	Def. " North side	F	0.0		
80	"	" " Frame	Blk	" " "	F	0.0		

Pick 15

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date: 4/10/12
XRF Serial Number: 1124_____

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity	Photo #
81	Metal	Cable Tray Support	Green	Ext North side East	F	>9.9	P	1,000 x 6	20
2				Center		"			
3				West		"			
4	"	Flammable Storage	Yellow	Ext North	I	1.2	P	150 ft	22
5	"	Generator Cover	Gray	3rd Fl		0.0	N		
6	"	Brush housing	"	"		0.2	N		
7	"	Ducting HVAC	Yellow	" Switch Gear rm (Pb-2)		0.9, 0.5	N		23
8	"	Crane (mini)	Gray	" " " "		0.0	N		
9	"	Transfer Gear Box	Green	" " " "		0.0	N		
90	Conc Block	Wall	Beige	Machine Shop		0.1	N		
1	" "	"	Green	" "		0.1	N		
2	Metal	2 Ton Crane (boom)	Yellow	" "		>9.9	P	20 ft	24
3	"	Kit. Cabinet	White	3rd Fl Lunch rm		0.0	N		
4	Gl metal	" " Sink	"	" " "		0.0	N		
5	CT 8"x12"	Wall	Green	" " " Wall		0.0	N		
6	Conc	Ceiling	White	" " " Ceiling		0.4	N		
7	Metal	Lockers	Blue	" Locker rm	"	0.3	N		
8	Porcelain	Toilet	White	" Restroom	"	0.1	N		
9	"	Urinal	"	" " "	"	0.0	N		
100	Terrazzo	Sink	Gray	" " "	"	0.0	N		

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date:
XRF Serial Number: 1124_____

Page 6 of 10

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity	
10 1	GI metal	Sink	White	3rd Fl. Custodian closet	I	>9.9	P	1 sink.	25
2	"	Door				0.6	N		
3	"	" Frame				0.0	N		
4	"	Fume Hood		" Machine Shop		0.0	N		
5	"	Fencing	Gray	" " "		0.0	N		
6	metal	Handrail	Blk	3rd Fl Paints Storage	F	2.1	P.	100 ft	26
7	"	Door	Beige	" " Elevator	I	0	N		
8	"	" Frame	"	" "	I	6.5	P	20 ft x 4	27
9	Conc	Floor stripe	Yellow	" " Entry	F	2.9	P	4x ft +	28
11 0	metal	Wall	Beige	Elevator Car	I	0.0	N		
1	"	Ladder	Blk	" "	F	0.0	N		
2	"	Safety. Gate/Grille	Green	" "	I	0.0	N		
3	"	Elevator Gate	Blk	" " (Interior door)	I	1.0	P	50 ft x 4	29
4	"	Booster pump tank	Green	2nd Fl Booster pump tank	I	0.0	N		
5	"	Sewage Ejector	"	" " Sewage ejector	I	0.0	N		
6	"	Elec Switch	Green	" " Pump Area	I	0.0	N		
7	"	Air tank	Blue	" " "	I	0.0			
8	"	Sump pump Cover	Gray	" Sump pump	I	0			
9	"	Elec Switch Box	"	" Generator Bay	I	0			
12 0	"	" " "		" " "		0			

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date: 10, 11 | 12
XRF Serial Number: 1124_____

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity	Photo
12 1	Metal	Switch Gear	Gray	Generator Bay	I	0	N		
" 2	"	Elec panel	"	" "	I	0			
3	"	CO_2 Bottle frame	Red	" "	I	0			
4	"	Tool rack	"	" " Hitachi tool rack	I	9.8	P	30 ft x 2	30
5	"	Step / riser	Blue	" " Stairs to Turbine pit	I	79.9	P	80 ft x 2	31
6	"	Wall	"	" " — " "	I	79.9	P	300 ft x 2	32
7	"	Servo Linkage	"	" " Turbine Pit (Servo-Linkage)	I	9.9	P	500 ft x 2	33
8	Std	Cal	Yellow	Calibrating		2.1	okay		
9						2.0			
13 0						1.9			
1		Cal				2.0			
2						1.9			
3						1.9			
4	Conc	Parapet Wall	Gray	Upper roof		0	N		
5	metal	Scupper Cover	Red	" " drain		0			
6	metal	Skirt	Gray	Upper roof parapet wall / metal flashing	I	79.9.	N	38 SF	38
7	"	Door	"	1st FL stairwell		0			
8	"	" Frame	"	" " "		0			
9	"	"		" " Elevator		0			
14 0	"	" Frame		" " "		2.7	Grout previously		

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date:
XRF Serial Number: 1124_____

Page 8 of 10

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity	Pic
14 1	metal	Slidis Door	Gray	1st Fl Chemical Storage	I	79.9	100# x2	100# x2	39
2		Tank	Gray	" " " " oil Storage clean		79.9	600# x2		40
3	~~Conc~~	"		" " " " " Dirty		9.2	"		
4	Conc	Floor		" " " "		0			
5	metal	Cabinet	Yellow	" " Chemical Storage - Flouride		0			
6	Conc	stripe	yellow	" " " "		0			
7	metal	~~Comp.~~ Compressor Tank	Blue	" " Compressor rm		0			
8	"	Compressor	Silver	" " " "		0.2			
9	"	" pump housing	Blk	" " " "		0.2			
15 0	"	Sump tank Cover	"	" " " " Sump pipe		.2			
1	"	" " Flange	Red	" " " " " "		0.0			
2	"	" " pipe	white	" " " "		0.1			
3	"	Valve Cover	Blue	" " " "		0.0			
4	"	Sump pipe	Blk	" " " "		0.3			
5	"	pump base	~~Blue~~ Green	" " Piping Sealing	"	0			
6	"	pipe 12" ϕ	Green	" " "	"	0.5			
7	"	" 24" ϕ	Gray	" " "		0			
8	"	Spiral Case Access	Gray			>9.9	P	12,000 ϕ	41
9	"	" "	"			7.1	P	"	
16 0	"	Hand rail	Blk	Stairs to Pen stock Gallery		2.1	P	60 LF	42

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date:
XRF Serial Number: 1124_____

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity	Pho
16 1	Metal	Primer	Green	Penstock Drain / fill #2	I	2.3	P	150 ft²	43
2	"	"	"	" " " #1	I	0.3, 0.4	N		
3	)	Draft Tube	Gray	Draft tube - Penstock Gallery	)	>9.9	P	10,000 ft²	44
4	)	" " Hatch Access	"	" " Access " "	)	3.2	P		"
5	Conc	Wall	Cream	1st Fl Elev. Mech rm	I	0	N		
6	Metal	Mech Equip	Gray	" " " " "	I	P	N		
7	Cal	Cal	Yellow	Standard	)	1.9	OK		
8	)	)	)	)	)	1.7	)		
9	)		)	)	)	1.8	)		
17 0	Metal	Ext. Siding	Green	Warehouse Bldg East	I	0.5	)		
1	"	" "	"	" " " S.	)	0.3	)		
2	"	Door	)	) East	)	0.1	)		
3	)	" Frame	)	) "	)	0.0	)		
4	)	Roll-up door	White	" "	)	0.3	)		
5	)	" " " Frame	Green	" "	)	0.0	N		
6	)	" " " Guide	Gray	" "	)	0.0	)		
7	"	I beam Flange	Green	" Steel Framing - Column	)	0.0	)		
8	"	" " Web	"	" " " "	)	0.3	N		
9		I - Beam Web	"	" " " Foot 24"	)	0.5	)		
18 0		I - " Flange	"	" " " " "	)	0.0	)		

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Lead-Based Paint XRF Testing Data Sheet

Project Number:192271
Project Name: US IBWC Amistad Power Plant
Project Location:670 Texas Spur 349, Del Rio, TX 78840

Inspector's Name: Sam Seneviratne. CA DHS # 9658_
Inspection Date:
XRF Serial Number: 1124_____

Sample Number	Substrate	Component	Color	Description of Sample Location	Condition	XRF Reading (mg/cm²)	Pos = LBP Neg = Not LBP	Approximate Quantity
18 1	Wood	Wall Panel	tan	Warehouse Bldg interior wall	I	0	Neg	
2	metal	Frame	Blue	" Mezzanin Frame	I	0		
3	"	Step	"	" " Stairs		0.		
4	"	Stringer	"	" " "		0		
5	Conc	Floor striping	Yellow	" Floor West	"	0		
6	metal	pressure tank	Gray	" "		0		
7	"	storage tank	"	" "		0		
8	Toilet →	Porcela'n	white	" " Cond rm men's rm		0.1		
9	Sink →	"	"	" " " "		0		
0	Cal	Calibrat	yellow	Calibrat		1.9	okay	
1						1.9		
2						2.0		
3								
4								
5								
6								
7								
8								
9								
0								

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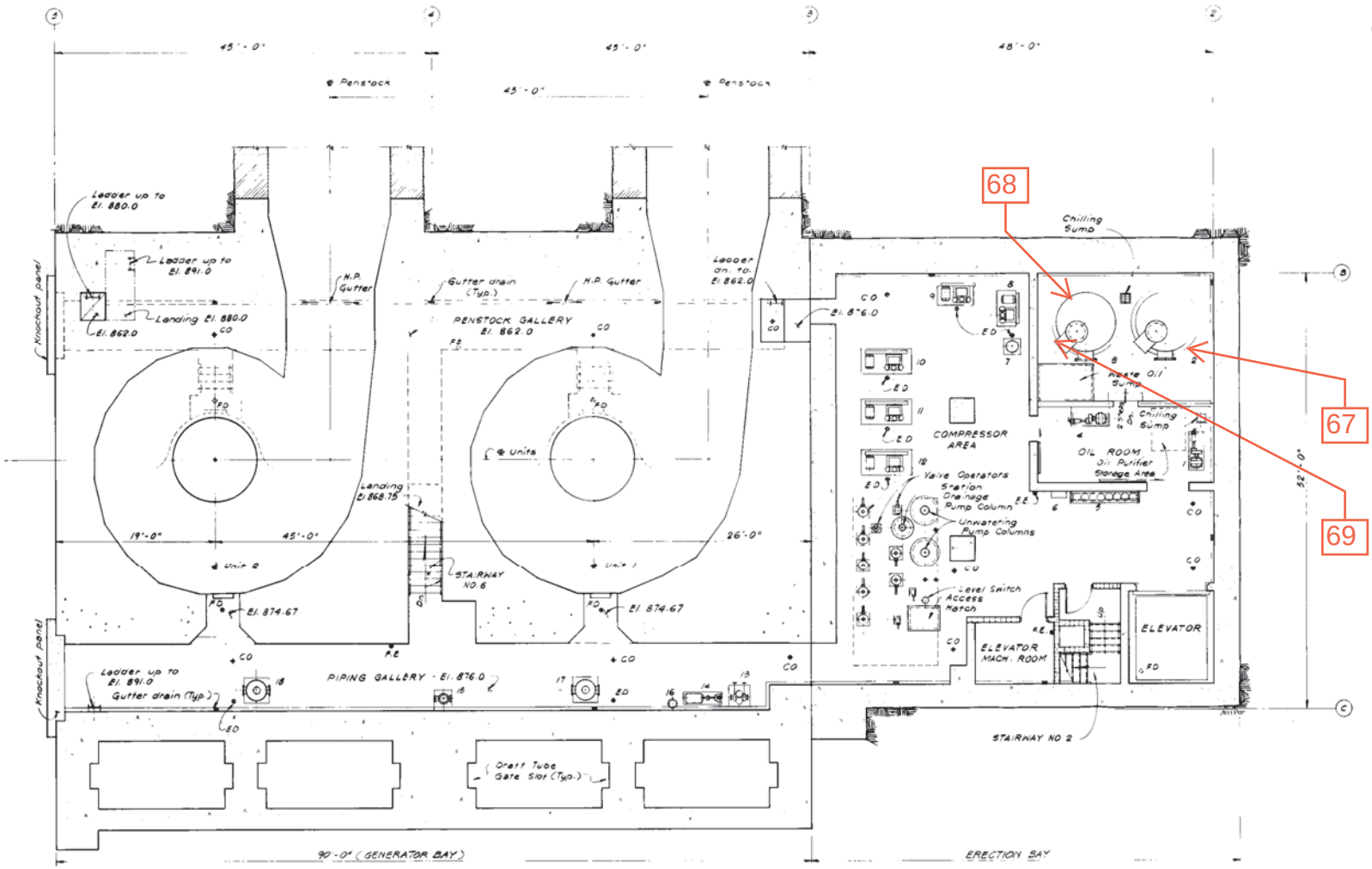
Appendix C

Sample Location Drawings



EQUIPMENT SCHEDULE			
ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	Lub Oil Transfer Pump	13	RW Emergency Strainer
2	Clean Lub Oil Tank	14	RW Emergency Pump
3	Dirty Lub Oil Tank	15	RW Secondary Strainer
4	Waste Oil Pump	16	RW Filter
5	CO_2 Cylinders	17	RW Strainer No. 1
6	CO_2 Control Cab.	18	RW Strainer No. 2
7	Governor Air Receiver		
8	Governor Air Compressor		
9	Service Air Compressor		
10	Service Air Compressor		
11	Draft Tube Depressing Air Compressor		
12	Draft Tube Depressing Air Compressor		

IBWC - Amistad Power Plant
Floor 1
Asbestos Sample Location Diagram

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA
SUBMITTED:
DESIGNED JMN | CHECKED LDW
DRAWN ART | DATE OCT. 80

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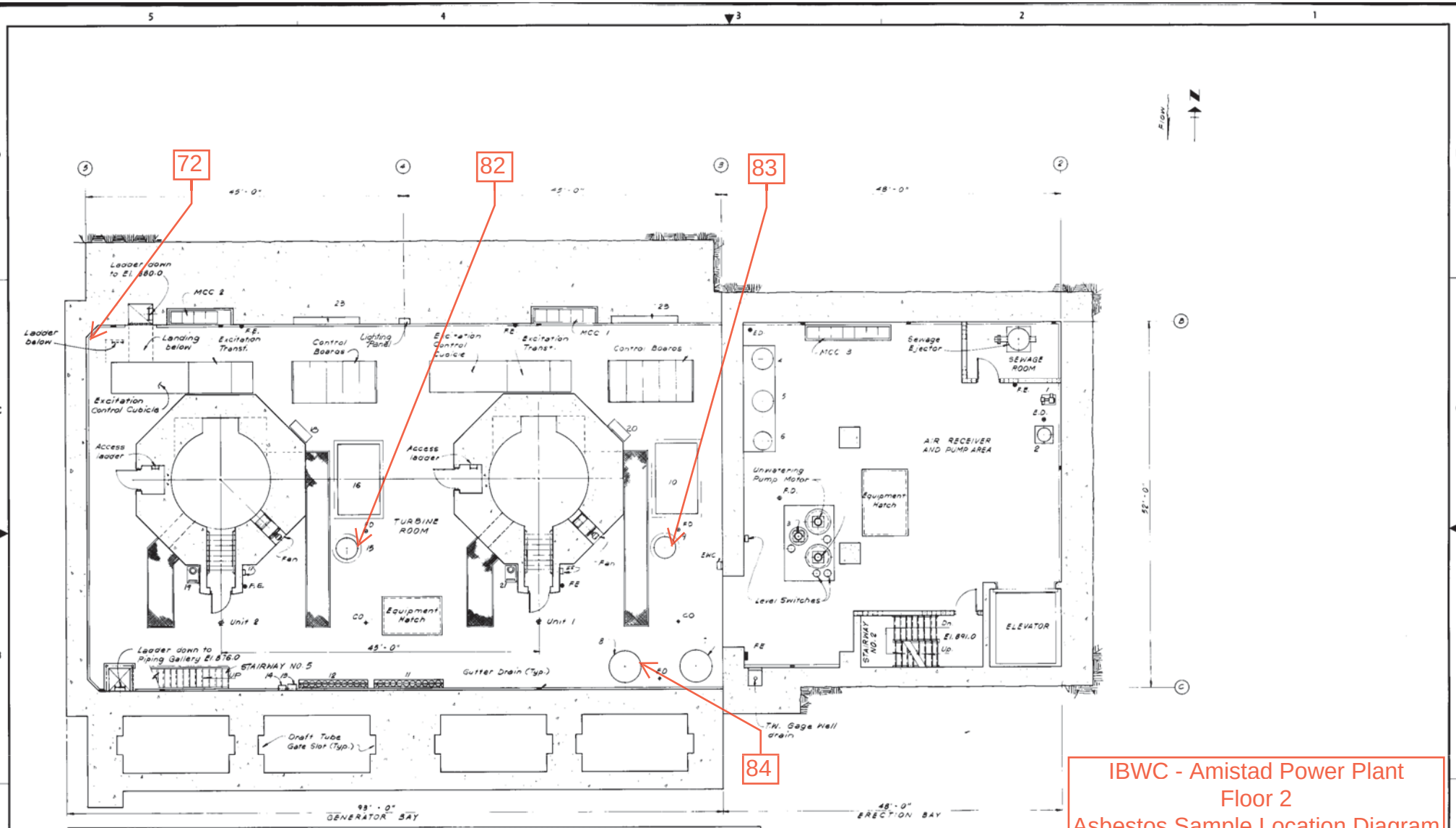
PLAN - EL. 876.0
EL PASO, TEXAS
22,987



IBWC - Amistad Power Plant
Floor 2
Asbestos Sample Location Diagram

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	RW Booster Pump	13	CO_2 Routing Valve Frame		
2	RW Pressure Tank	14	CO_2 Control Cabinet		
3	Sta. Drainage Pump Motor	15	Governor Pressure Tank		
4	Service Air Receiver	16	Governor Actuator Cabinet		
5	Service Air Receiver	17	Flow Meter Cell - Transducer		
6	Brake Air Receiver	18	Gen Jacking Pump		
7	Depressing Air Receiver	19	Automatic Greasing Unit		
8	Depressing Air Receiver	20	Gen Jacking Pump		
9	Governor Pressure Tank	21	Automatic Greasing Unit		
10	Governor Actuator Cabinet	22	Flow Meter Cell - Transducer		
11	Spare CO_2 Cylinders	23	Piezometer - Transducer Connections		
12	CO_2 Cylinders				

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AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT

PLAN - EL. 891.0

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA

DESIGNED JMN | CHECKED LDW
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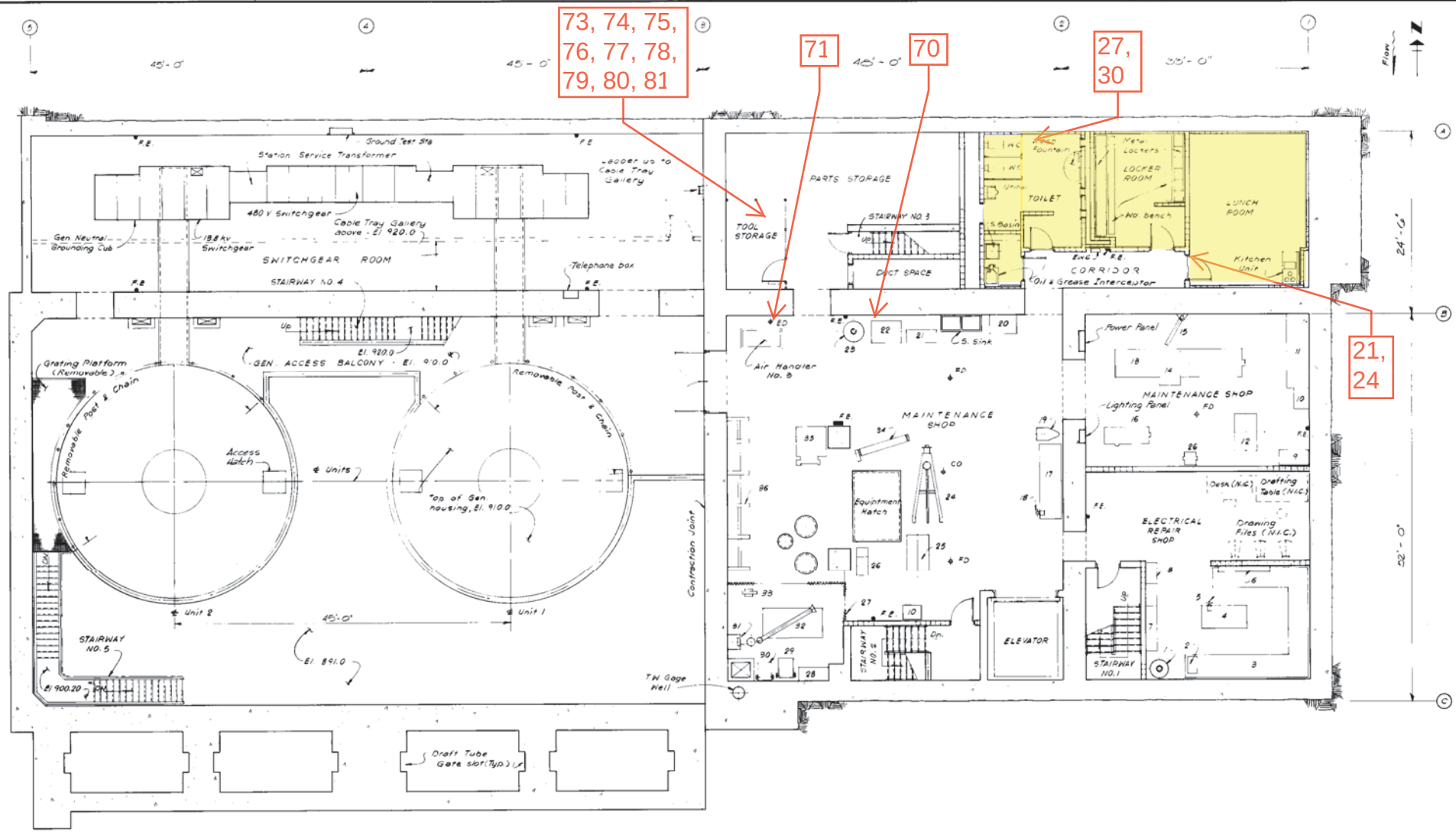
EL PASO, TEXAS | 22,986

SCALE 3/16" = 1'-0"



EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	Revolving Parts Bin	13	Hollow Spindle Lathe	25	Pipe and Bolt Threading Machine
2	Bench Drill Press	14	Lathe Milling Attachment	26	Two (2) Wheel Pedestal Grinder
3	Steel Bench - Wood top	15	Wall Crane 2000 lb. capacity	27	Welding Curtain
4	Steel Bench - Wood top	16	Engine Bench Lathe	28	Steel Tool Cabinet
5	Mechanics Bench Vise	17	Steel Bench - Wood top	29	Combination AC. DC Amperite Welder
6	Electrical Test Panel	18	Mechanics Bench Vise	30	Oxy - Acetylene Weld Set
7	Metal Open Bin Parts Storage	19	Floor Pedestal Drill Press	31	Weld Fume Exhaust Fan
8	Two Door Metal Shelved Cupboard	20	Parts Cleaner with Shelf	32	Steel - Welding Table
9	Steel Tool Cabinet	21	Steel Tool Cabinet	33	Anvil
10	Steel Cabinet	22	50 Ton Hydraulic Press	34	Horz. Cut - off Band - saw (Portable)
11	Steel Bench - Wood top	23	Revolving Parts Bin	35	Vertical Metal Cutting Band - saw
12	Heavy Duty - Sliding Head Drill	24	Portable Floor Crane 4000 lbs. cap.	36	Cantilever - Material Rack

IBWC - Amistad Power Plant
Floor 3
Asbestos Sample Location Diagram

- ACM Vinyl Sheet Flooring

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA
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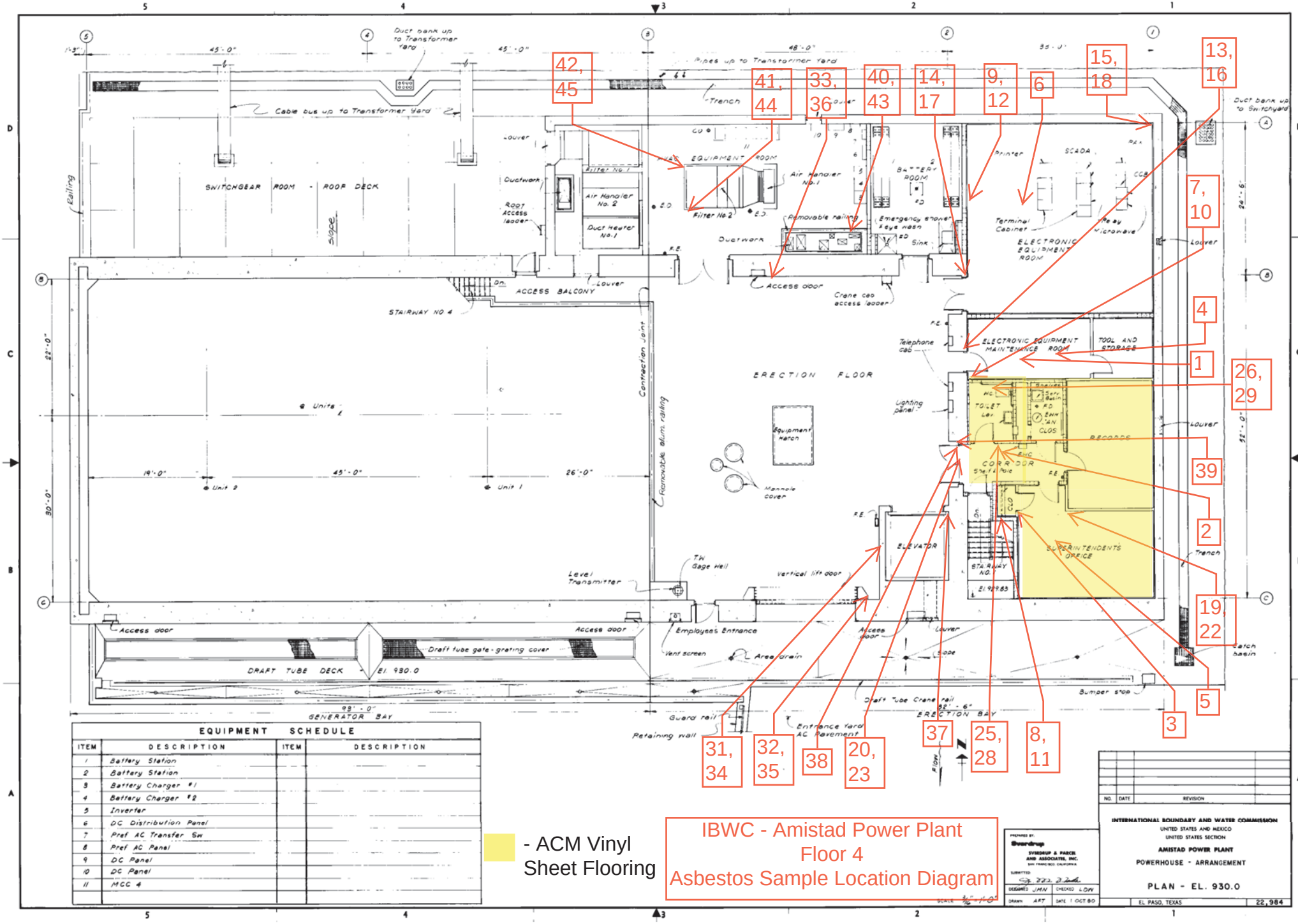

EQUIPMENT SCHEDULE			
ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	Battery Station		
2	Battery Station		
3	Battery Charger #1		
4	Battery Charger #2		
5	Inverter		
6	DC Distribution Panel		
7	Pref AC Transfer Sw		
8	Pref AC Panel		
9	DC Panel		
10	DC Panel		
11	MCC 4		

- ACM Vinyl Sheet Flooring

IBWC - Amistad Power Plant
Floor 4
Asbestos Sample Location Diagram

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA
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DRAWN ART DATE 1 OCT 80

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POWERHOUSE - ARRANGEMENT
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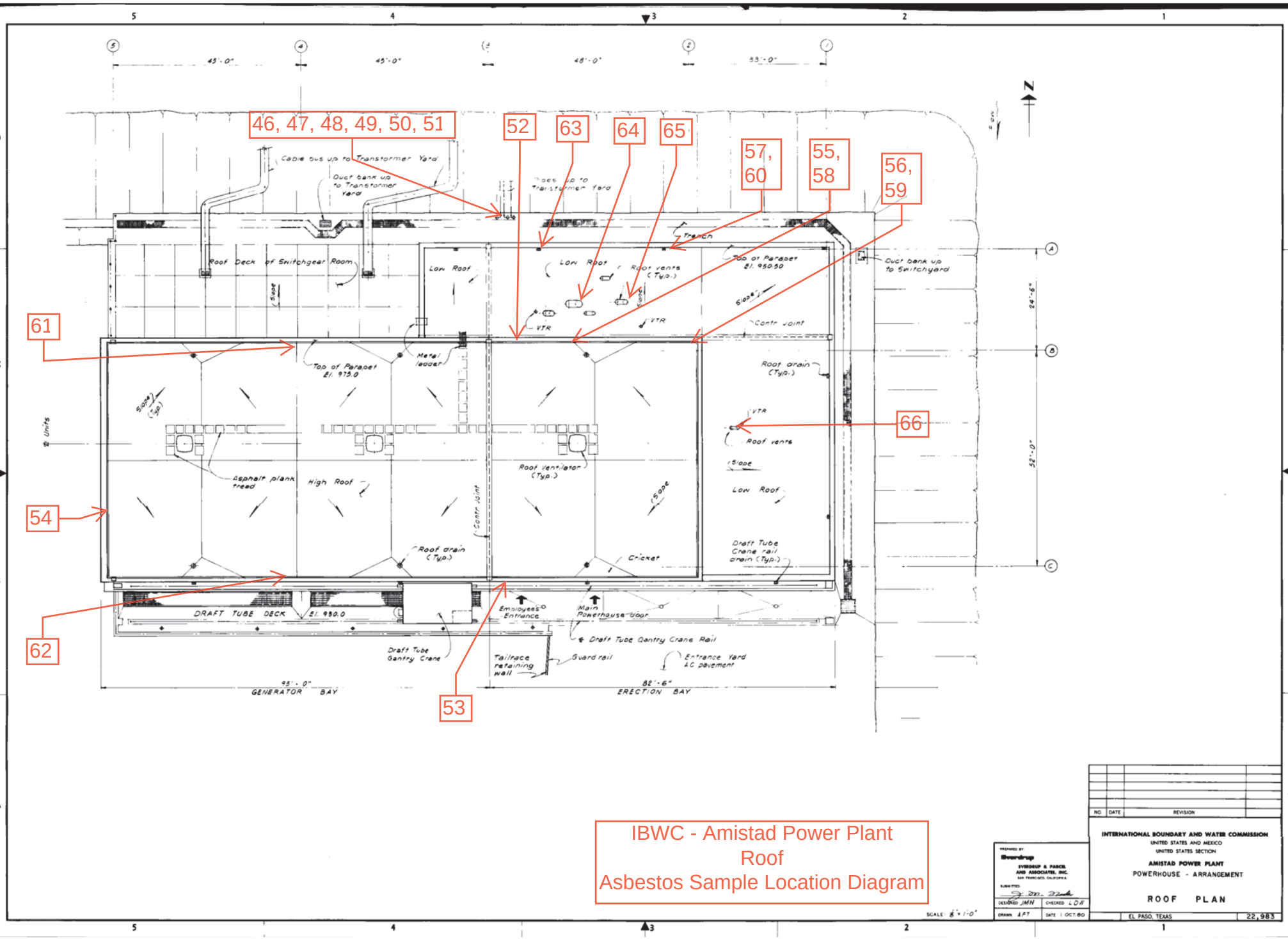
EL PASO, TEXAS
22,984



IBWC - Amistad Power Plant
Roof
Asbestos Sample Location Diagram

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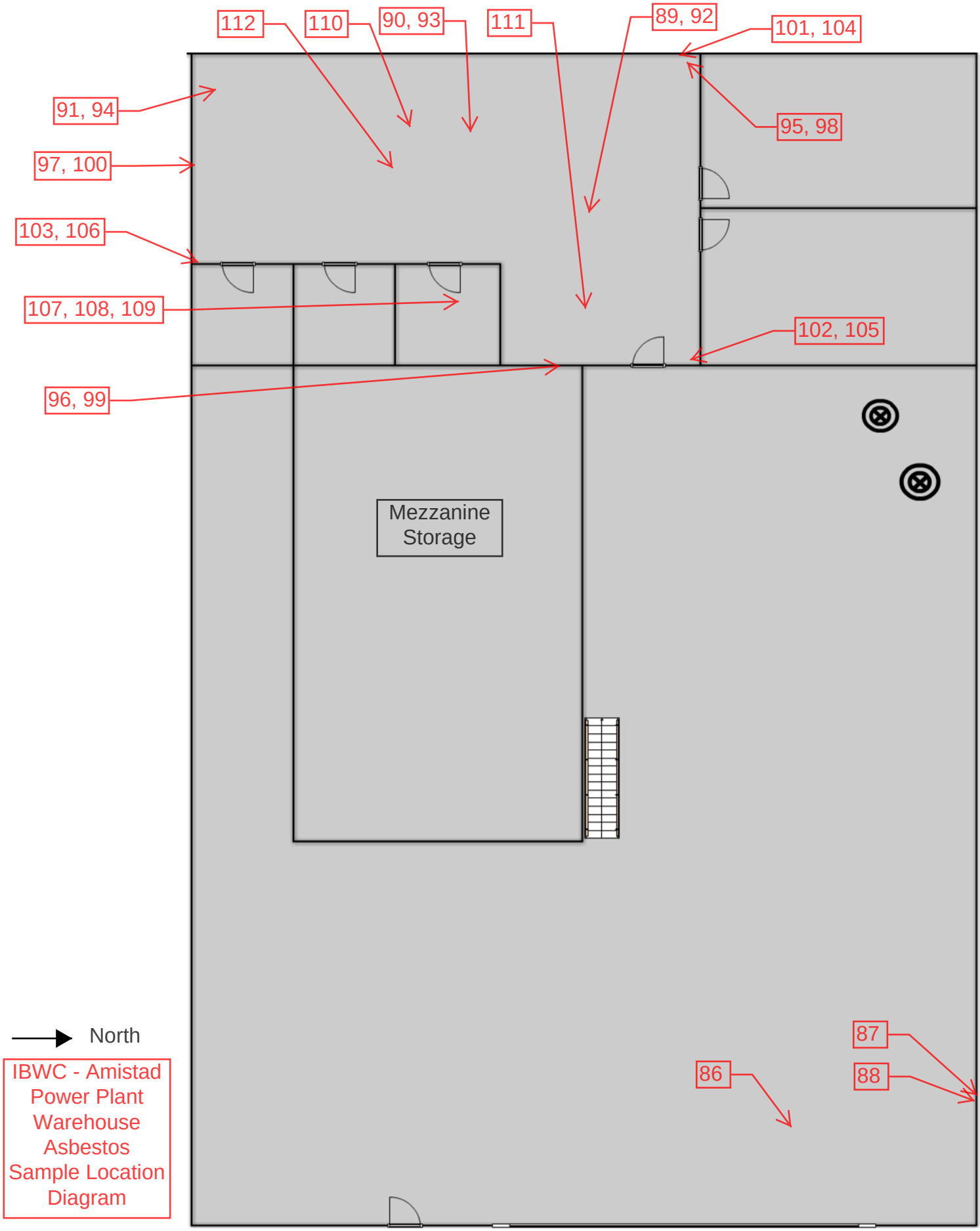
AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT
ROOF PLAN
EL PASO, TEXAS
22,983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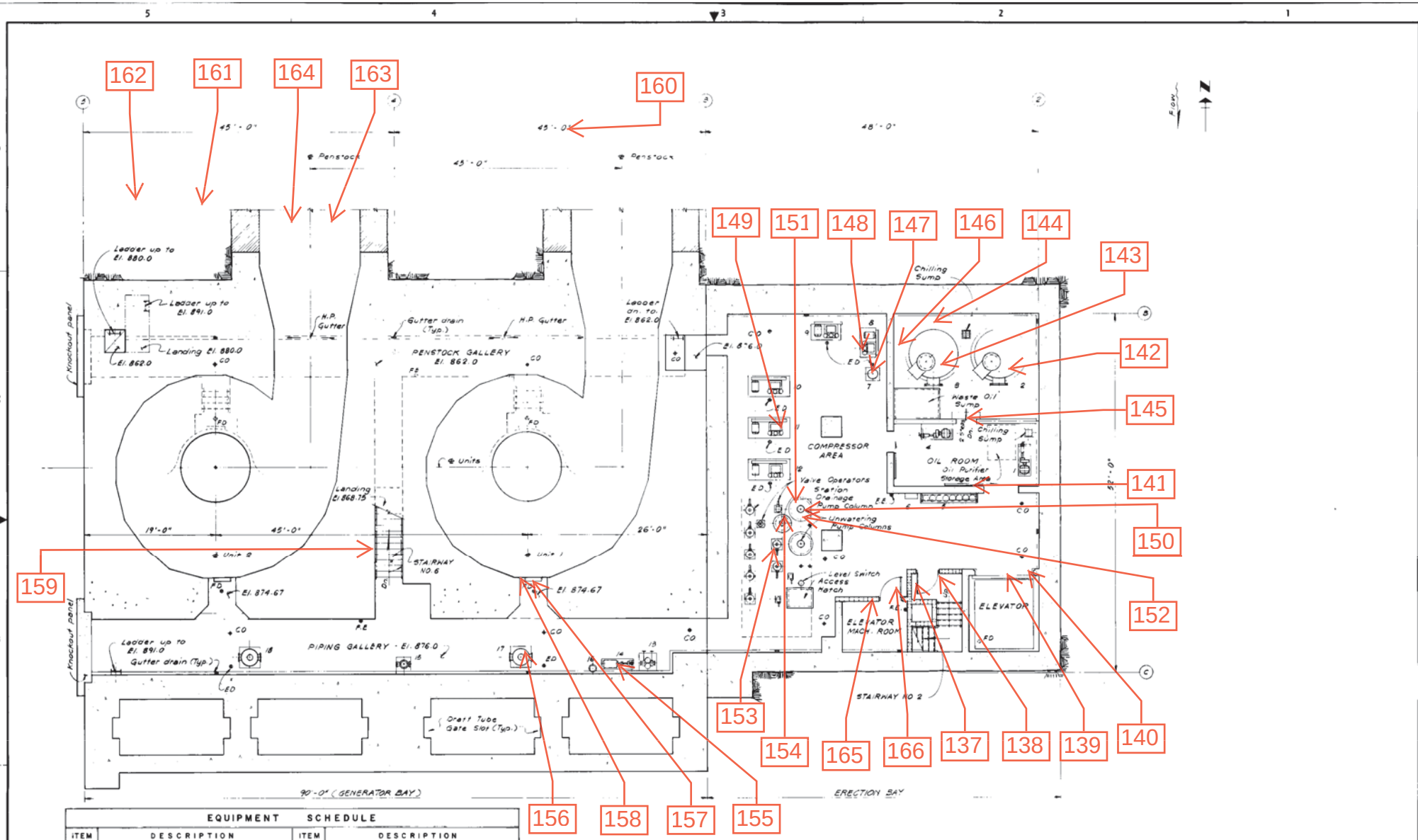
110
90, 93
111
89, 92
101, 104
91, 94
95, 98
97, 100
103, 106
107, 108, 109
102, 105
96, 99
Mezzanine Storage
North
87
86
88
IBWC - Amistad Power Plant Warehouse Asbestos Sample Location Diagram



EQUIPMENT SCHEDULE			
ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	Lub Oil Transfer Pump	13	RW Emergency Strainer
2	Clean Lub Oil Tank	14	RW Emergency Pump
3	Dirty Lub Oil Tank	15	RW Secondary Strainer
4	Waste Oil Pump	16	RW Filter
5	CO_2 Cylinders	17	RW Strainer No. 1
6	CO_2 Control Cab.	18	RW Strainer No. 2
7	Governor Air Receiver		
8	Governor Air Compressor		
9	Service Air Compressor		
10	Service Air Compressor		
11	Draft Tube Depressing Air Compressor		
12	Draft Tube Depressing Air Compressor		

IBWC - Amistad Power Plant
Floor 1
Lead Sample Location Diagram

SCALE 3/16" = 1'-0"

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA
SUBMITTED:
DESIGNED JMN | CHECKED LDW
DRAWN ART | DATE 1 OCT 80

NO.	DATE	REVISION

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UNITED STATES AND MEXICO
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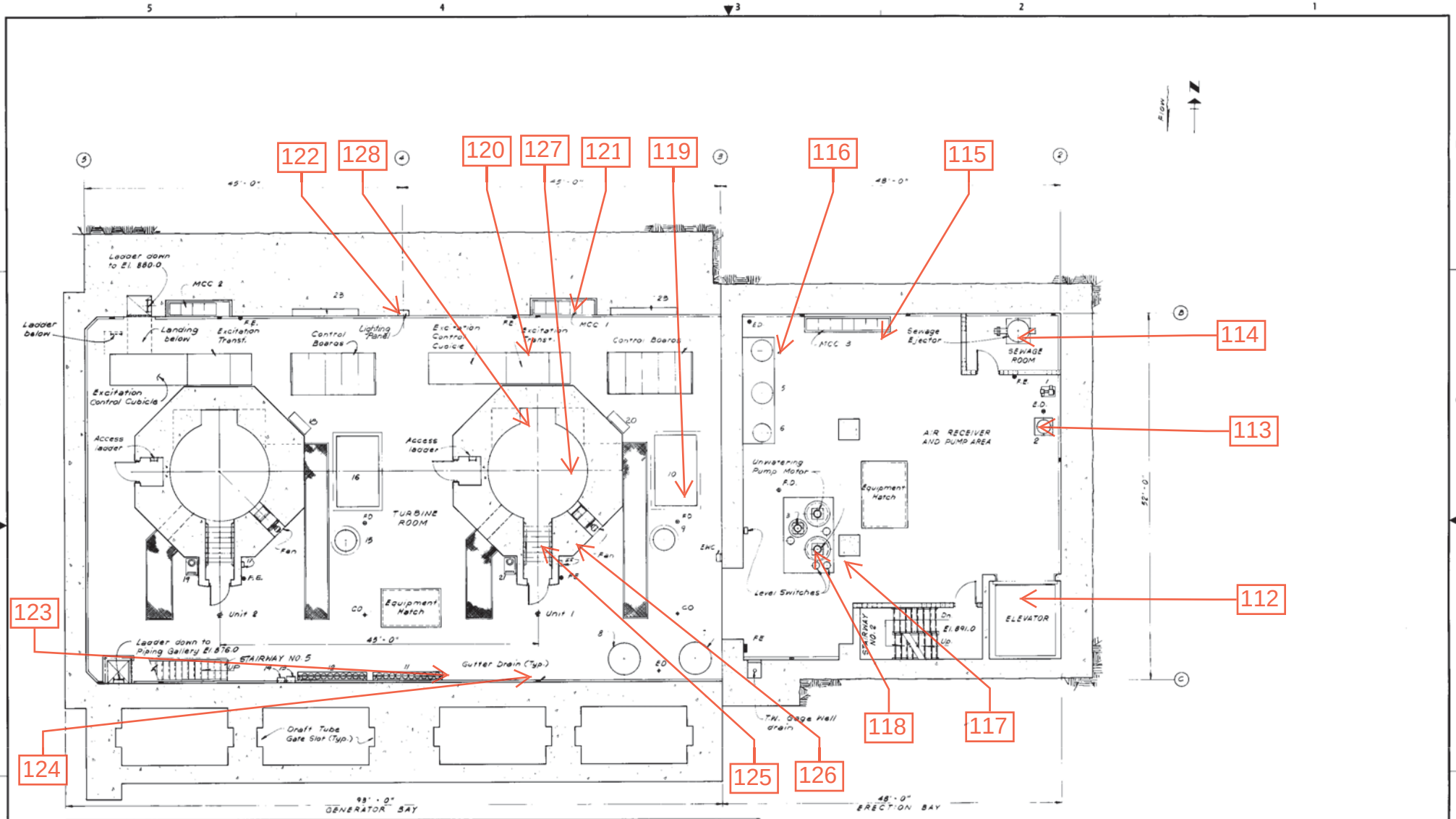
POWERHOUSE - ARRANGEMENT
PLAN - EL. 876.0
EL PASO, TEXAS
22,987



EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	RW Booster Pump	13	CO_2 Routing Valve Frame		
2	RW Pressure Tank	14	CO_2 Control Cabinet		
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5	Service Air Receiver	17	Flow Meter Cell - Transducer		
6	Brake Air Receiver	18	Gen Jacking Pump		
7	Depressing Air Receiver	19	Automatic Greasing Unit		
8	Depressing Air Receiver	20	Gen Jacking Pump		
9	Governor Pressure Tank	21	Automatic Greasing Unit		
10	Governor Actuator Cabinet	22	Flow Meter Cell - Transducer		
11	Spare CO_2 Cylinders	23	Piezometer - Transducer Connections		
12	CO_2 Cylinders				

IBWC - Amistad Power Plant
Floor 2
Lead Sample Location Diagram

SCALE 3/16" = 1'-0"

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA

SUBMITTED: Sep. 222, 2 Inch

DESIGNED JMN | CHECKED LDW
DRAWN APT | DATE 1 OCT 80

NO.	DATE	REVISION

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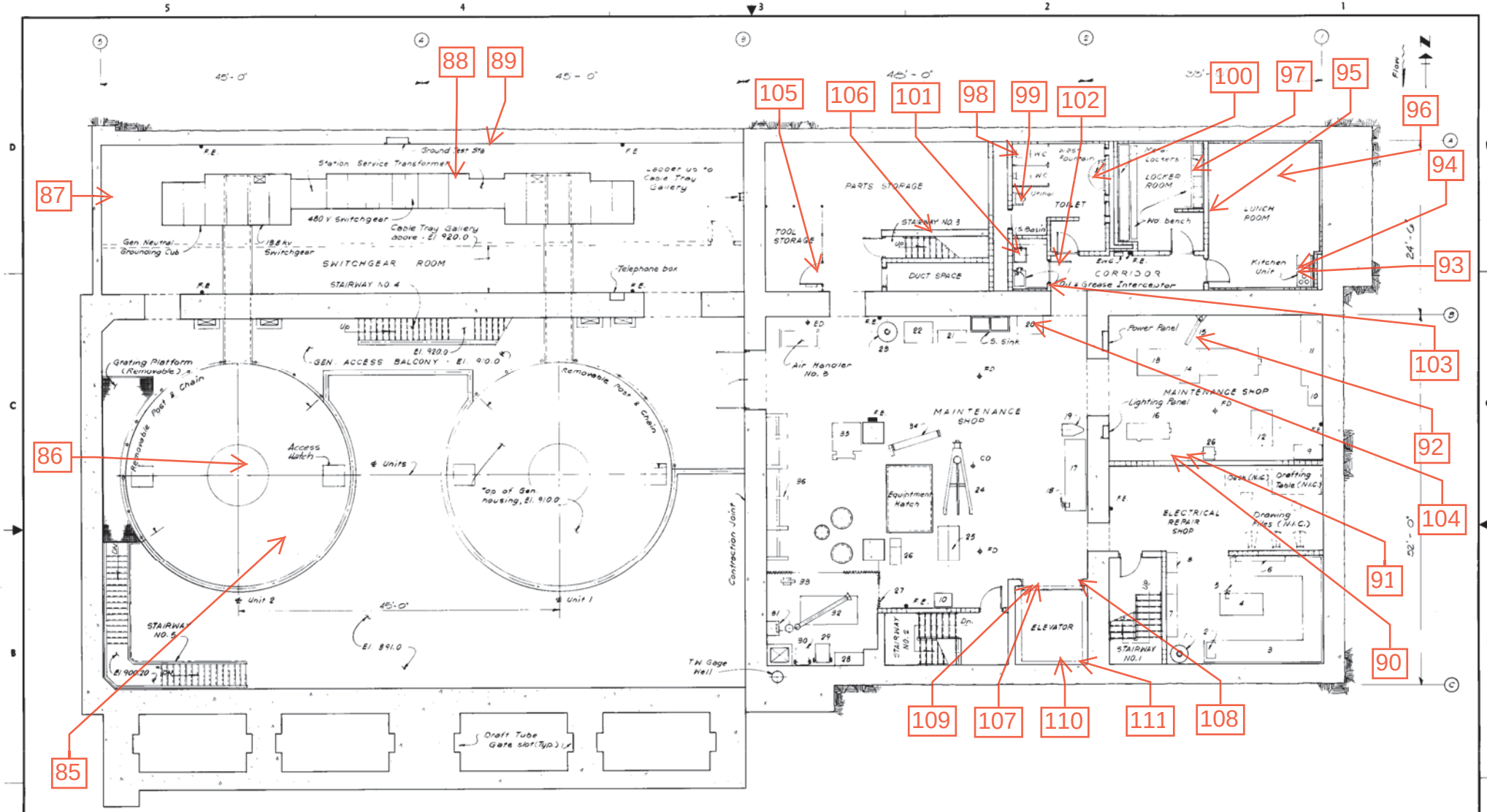
AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT

PLAN - EL. 891.0

EL PASO, TEXAS | 22,986



EQUIPMENT SCHEDULE					
ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
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4	Steel Bench - Wood top	16	Engine Bench Lathe	28	Steel Tool Cabinet
5	Mechanics Bench Vise	17	Steel Bench - Wood top	29	Combination AC. DC Amperie Welder
6	Electrical Test Panel	18	Mechanics Bench Vise	30	Oxy - Acetylene Weld Set
7	Metal Open Bin Parts Storage	19	Floor Pedestal Drill Press	31	Weld Fume Exhaust Fan
8	Two Door Metal Shelved Cupboard	20	Parts Cleaner with Shelf	32	Steel - Welding Table
9	Steel Tool Cabinet	21	Steel Tool Cabinet	33	Anvil
10	Steel Cabinet	22	50 Ton Hydraulic Press	34	Horz. Cut - off Band - saw (Portable)
11	Steel Bench - Wood top	23	Revolving Parts Bin	35	Vertical Metal Cutting Band - saw
12	Heavy Duty - Sliding Head Drill	24	Portable Floor Crane 4000 lbs. cap.	36	Cantilever - Material Rack

IBWC - Amistad Power Plant
Floor 3
Lead Sample Location Diagram

NO.	DATE	REVISION

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
UNITED STATES SECTION

AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT

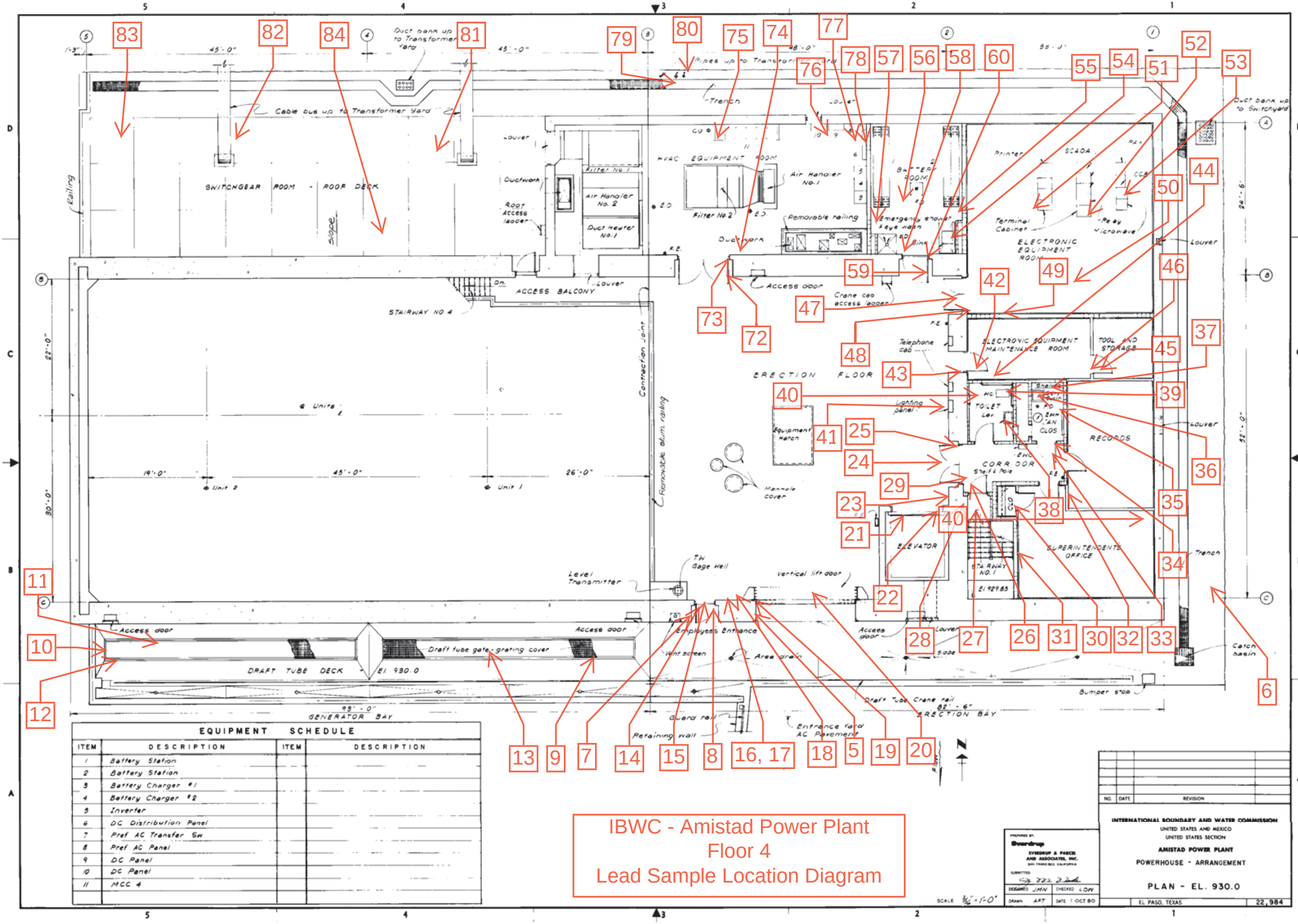
PLAN - EL. 910.0

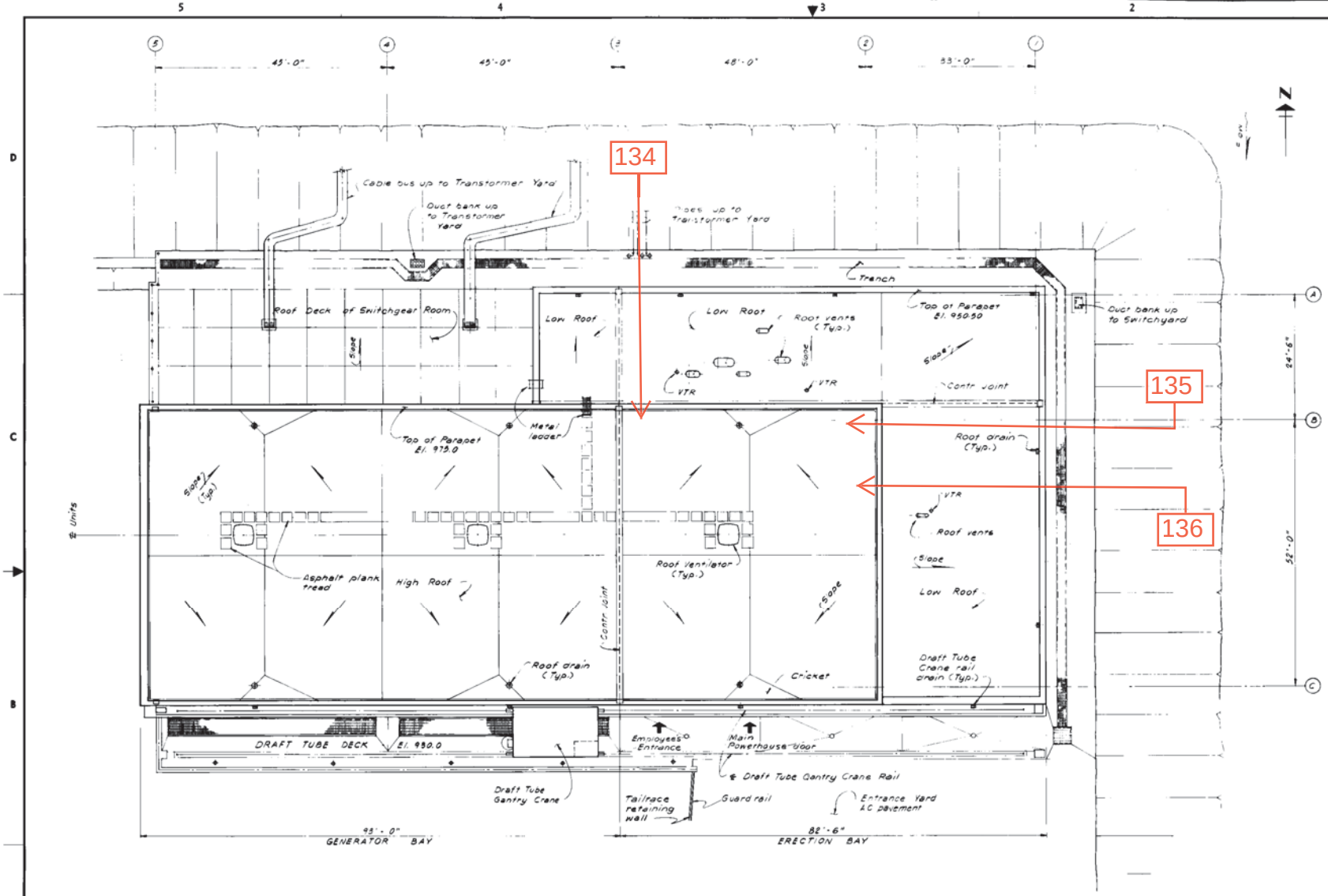
EL PASO, TEXAS | 22,985

PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA

DESIGNED JMN | CHECKED LDW
DRAWN | DATE 1 OCT. 80

SCALE 7/16" = 1'-0"


SWITCHGEAR ROOM - ROOF DECK
Cable bus up to Transformer Yard
Duct bank up to Transformer Yard
Pipes up to Transformer Yard
Trench
HVAC EQUIPMENT ROOM
Air Handler No. 1
Air Handler No. 2
Duct Heater No. 1
Filter No. 1
Filter No. 2
Ductwork
Root Access ladder
Louver
Railing
Slope
ACCESS BALCONY
STAIRWAY NO. 4
Access door
Crane cab access ladder
Removable railing
Emergency shower
Eye wash
Sink
BATTERY ROOM
Printer
SCADA
Terminal Cabinet
Relay Microwave
ELECTRONIC EQUIPMENT ROOM
ELECTRONIC EQUIPMENT MAINTENANCE ROOM
TOOL AND STORAGE
Telephone cab
ERECTION FLOOR
Lighting panel
Equipment hatch
Manhole cover
Contraction Joint
Removable alum. railing
Units
Unit 2
Unit 1
TOILET
CLOS
RECORDS
CORRIDOR
Shelf pole
ELEVATOR
STAIRWAY NO. 1
SUPERINTENDENTS OFFICE
Trench
Catch basin
Level Transmitter
TW Gage Well
Vertical lift door
Employees Entrance
Wint screen
Area drain
Slope
Draft tube gate - grating cover
DRAFT TUBE DECK
El. 930.0
GENERATOR BAY
Guard rail
Retaining wall
Entrance Yard AC Pavement
Draft Tube Crane rail
ERECTION BAY
Bumper stop
EQUIPMENT SCHEDULE
ITEM | DESCRIPTION | ITEM | DESCRIPTION
1 Battery Station
2 Battery Station
3 Battery Charger #1
4 Battery Charger #2
5 Inverter
6 DC Distribution Panel
7 Pref AC Transfer Sw
8 Pref AC Panel
9 DC Panel
10 DC Panel
11 MCC 4
IBWC - Amistad Power Plant
Floor 4
Lead Sample Location Diagram
INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
UNITED STATES SECTION
AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT
PLAN - EL. 930.0
EL PASO, TEXAS
22,984
SYVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA
DESIGNED JMN
CHECKED LDW
DRAWN ART
DATE 1 OCT 80
SCALE 3/16" = 1'-0"
NO. DATE REVISION



IBWC - Amistad Power Plant
Roof
Lead Sample Location Diagram

NO.	DATE	REVISION

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
UNITED STATES SECTION

AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT

ROOF PLAN

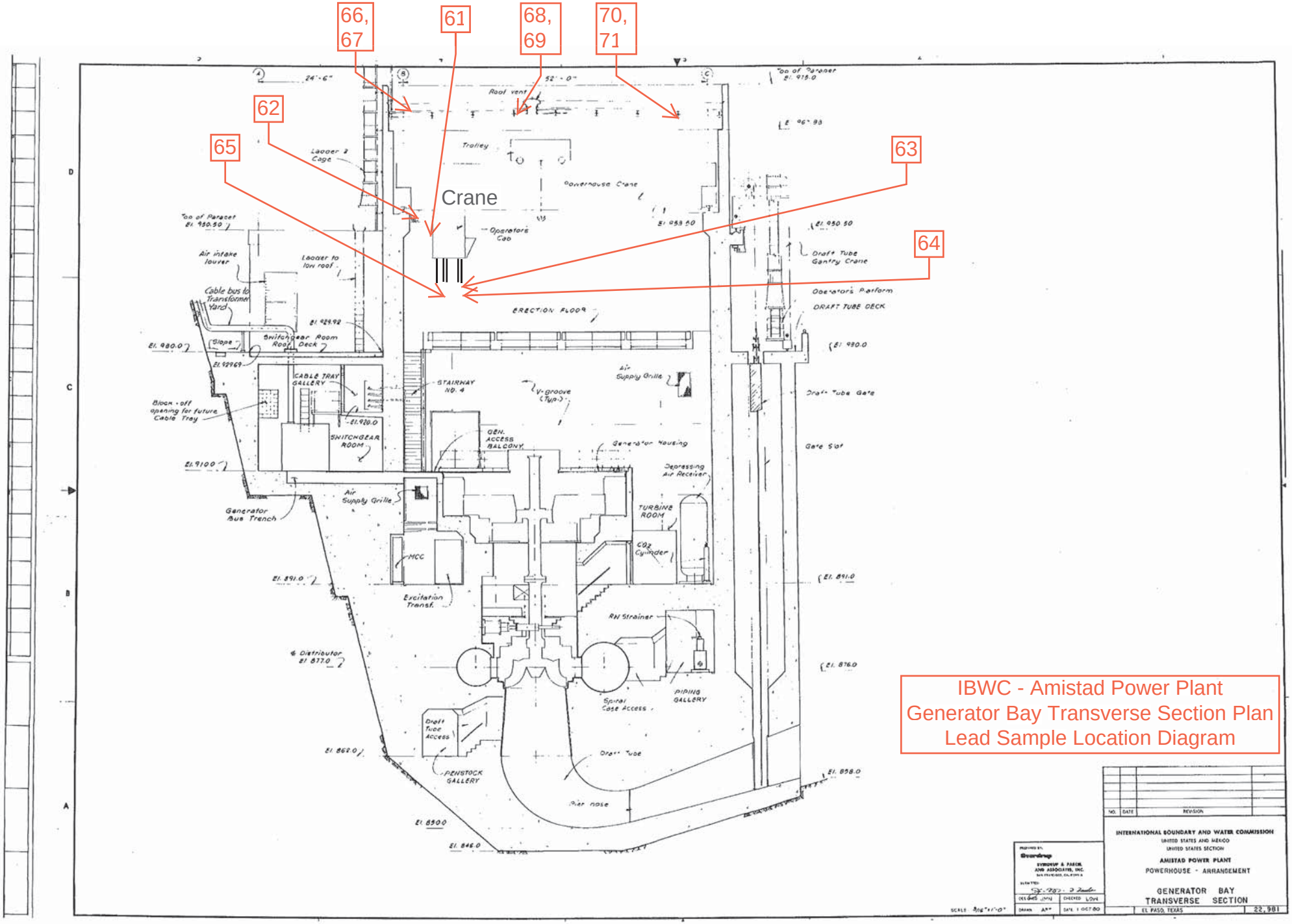
PREPARED BY: Sverdrup
SVERDRUP & PARCEL AND ASSOCIATES, INC.
SAN FRANCISCO, CALIFORNIA

SUBMITTED:

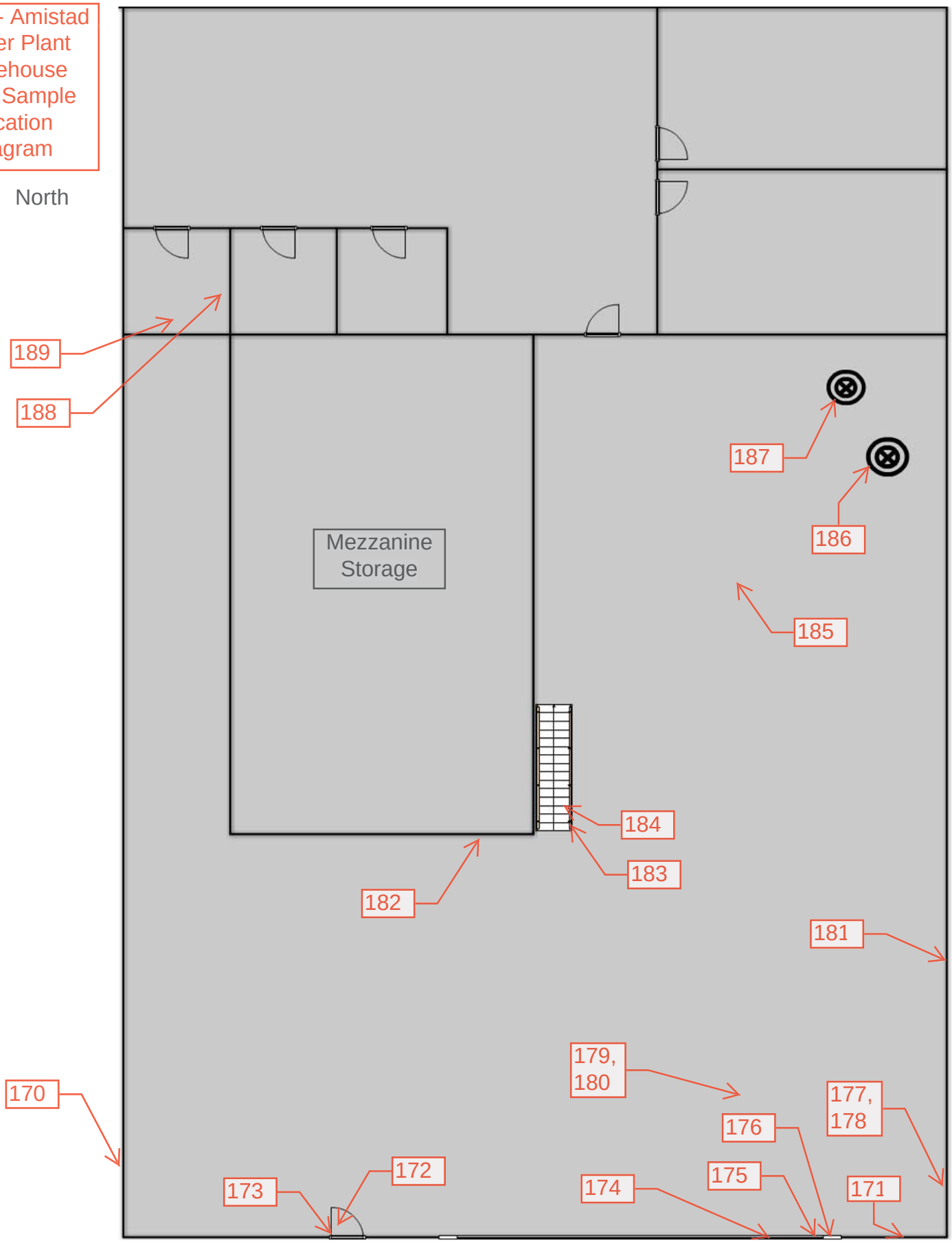
DESIGNED JMN | CHECKED LDN
DRAWN LFT | DATE OCT. 80

SCALE: 1/8" = 1'-0"

EL PASO, TEXAS | 22,983


66, 67
61
68, 69
70, 71
62
65
63
64
Crane
Roof vent
Trolley
Powerhouse Crane
Operator's Cab
Ladder & Cage
Air intake louver
Ladder to lon roof
Cable bus to Transformer Yard
Slope
Switchgear Room Roof Deck
CABLE TRAY GALLERY
Bloom-off opening for future Cable Tray
SWITCHGEAR ROOM
STAIRWAY NO. 4
V-groove (Typ.)
Air Supply Grille
GEN. ACCESS BALCONY
Generator Housing
Depressing Air Receiver
TURBINE ROOM
CO2 Cylinder
Generator Bus Trench
MCC
Excitation Transf.
RH Strainer
PIPING GALLERY
Spiral Case Access
Draft Tube Access
PENSTOCK GALLERY
Draft Tube
Pier nose
ERECTION FLOOR
Draft Tube Gantry Crane
Operator's Platform
DRAFT TUBE DECK
Draft Tube Gate
Gate Slot
IBWC - Amistad Power Plant
Generator Bay Transverse Section Plan
Lead Sample Location Diagram
INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
UNITED STATES SECTION
AMISTAD POWER PLANT
POWERHOUSE - ARRANGEMENT
GENERATOR BAY
TRANSVERSE SECTION
EL PASO, TEXAS
22,981

IBWC - Amistad Power Plant Warehouse Lead Sample Location Diagram

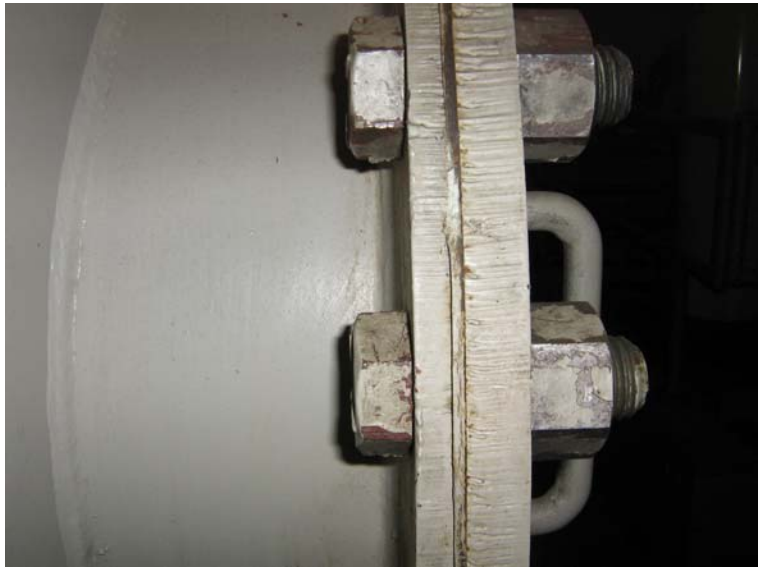


Appendix D

Photographs of Positive Materials

1. ACM-Vinyl Sheet Flooring Blue, Green and White Square Pattern

2. ACM-Roof Parapet Wall Metal Flashing Caulking



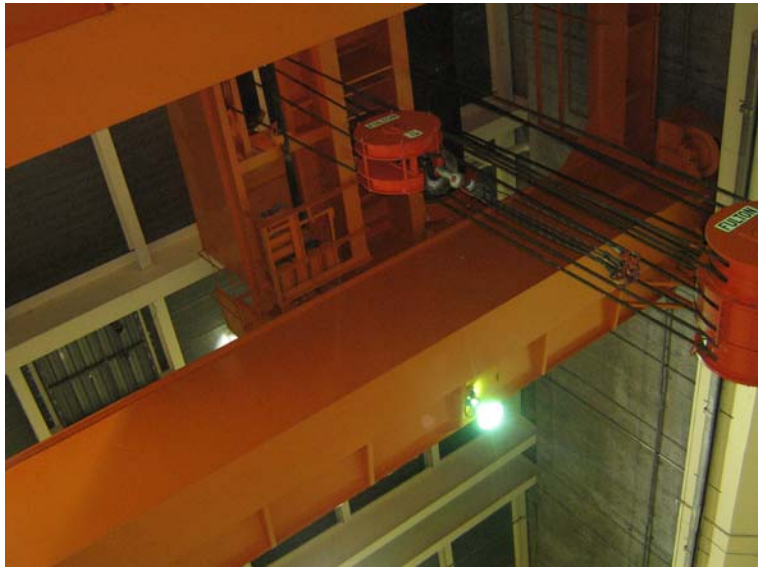
3. ACM-Flange Gasket-1st Floor Chemical Storage Tank Side Flange

4. ACM-Gasket Materials-3rd Floor Mezzanine Parts Storage Area

5. Assumed ACM-Sink Countertop-4th, Floor Battery Room

6. LBP- Gantry Crane Frame and Platform-Exterior Southwest

7. LBP Elevator Door frame



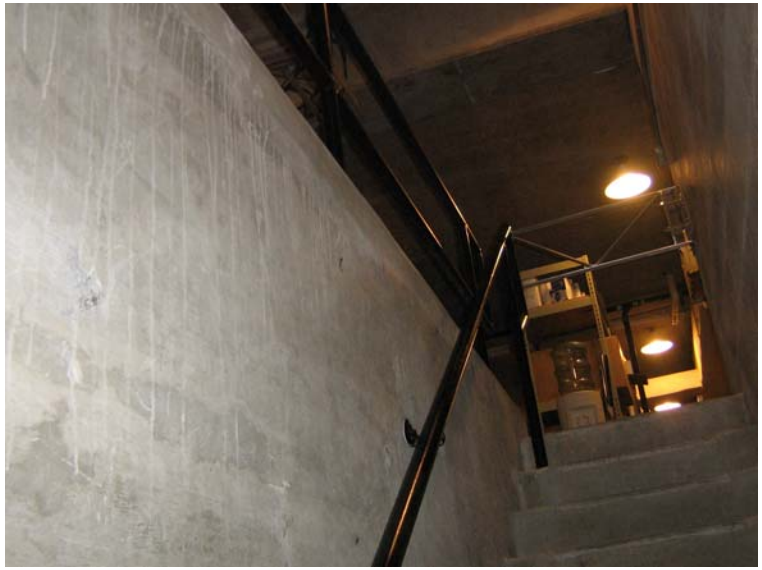
8. LBP-Powerhouse Crane Frame, 20 and 125 Ton Hooks

9. LBP-Cable Tray and Support

10. LBP-Flammable Storage Cabinet

11. LBP-2 ton Crane Boom-

12. LBP-Glazed Metal Custodian Sink



13. LBP-Handrail-3rd, Floor Parts Storage

14. LBP-Concrete Floor stripping

15. LBP-Elevator Gate 1st, thru 4th, floors

16. LBP-Hitachi Tool Rack-Generator Bay

17. LBP-Step and Riser-Stairs to Turbine Pit

18. LBP-Wall-Inside Turbine Pit

19. LBP-Servo Linkage- Inside Turbine Pit

20. LBP-Metal Shim-Upper Roof Parapet wall flashing fastener

21. Assumed ACM & LBP-Slider Door-1st Floor Chemical Storage area

22. LBP-Clean and Dirty Oil Storage Tanks Chemical Storage area

23. LBP-Spiral Case Access 1st Floor Piping Gallery

24. LBP-Stair Handrail to Penstock Gallery

25. LBP-Piping-Penstock Drain/Fill #2

26. LBP-Draft Tube And Access Hatch-Penstock Gallery

Appendix E

Inspector Certifications

TRC

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Samita D Seneviratne
Name

Certification No. **93-0886**

Expires on **02/18/13**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California
California Environmental Protection Agency
Department of Toxic Substances Control

REGISTERED ENVIRONMENTAL ASSESSOR I

Issued to: Samita Seneviratne - REA I - 05765

Annual Expires on: 6/30/2012

Signature:

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	01/04/2013
Project Monitor	01/04/2013

21431

Samita D. Seneviratne **ID #: 9658**

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Sampling Technician	07/31/2012

22394

Hector E. Gonzalez

ID #: 22952

State of California
Division of Occupational Safety and Health

Certified Site Surveillance Technician

Name: Hector E Gonzalez

Certification No. 06-4072

Expires on 09/20/12

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.