



YOUR PARTNER FOR
SOLID WASTE SOLUTIONS

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SEP 16 2011

DIVISION OF AIR
RESOURCE MANAGEMENT

September 14, 2011

Mr. Jeff Koerner, Administrator
Office of Permitting and Compliance
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399-2400

Project NO. 0990234-021-AC-PSD-FL-108J
0990234-022-AV

Re: North County Resource Recovery Facility Refurbishment Air Construction Permit Number
0990234-015AC/PSD-FL-108H - Final Design Specification Revisions

Dear Mr. Koerner:

Florida Department of Environmental Protection ("Department") issued an Air Construction Permit (permit number 0990234-015AC/PSD-FL-108H) to the Solid Waste Authority of Palm Beach County on September 18, 2009. The permit authorized the refurbishment of the municipal solid waste combustor Units 1 and 2 at the North County Resource Recovery Facility ("NCRRF").

As specified in Condition 2, entitled "Final Design Specifications", of Section 3, entitled "Emissions Unit Specific Conditions", the Authority entered into contractual agreements with the control equipment vendors and provided the Department with final design specifications for the control equipment systems in the letter dated May 21, 2010.

As specified in Condition 3, entitled "Updated Control Equipment Designs", of Section 3, the Authority "shall update the Permitting Authority and Compliance Authority with final design specifications and any substantial changes made to the final design specifications during the actual construction phase." This letter and associated attachments serves to update the Department on the substantial changes made during the construction phase and fulfill this requirement.

The following table identifies the drawing numbers, names, revision number and date of the drawings that were originally submitted, as well as the revision number and date of the most recent drawing revisions. Of the drawings originally submitted, only four have been revised. These revised drawings are being submitted to provide the Permitting Authority and Compliance Authority with the most recent design specifications. The revisions made to documents previously submitted to the Department are summarized briefly in the table below.

Drawing Number	Drawing Name	Original Submittal (May 21, 2010)		Revised Submittal (September 14, 2011)		
		Revision Number	Date	Revision Number	Date	Change Made
Section 1 - General						
	Refurbishment scope and description	--	5/21/10	--	--	N/A
100-E4-100	Plan view of Facility areas where Refurbishment is occurring	RA	6/26/09	0	9/29/09	Revised drawing notes and added additional note references; added additional building labels.
711-M0-100	Air Pollution Control General Arrangement Plan	D2	1/29/10	--	--	N/A
Section 2 - Boiler Information - Babcock & Wilcox (B&W)						
	B&W Proposal	--	September 2007	--	--	N/A
B0043891	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Side View S-S	4	8/24/09	--	--	N/A
B0043892	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Side View S1-S1	4	8/24/09	--	--	N/A
B0043893	General Arrangement Refurbishment Project SPB with Detroit Stoker Outside Front View A-A	4	8/24/09	5	4/26/10	Added tag numbers for pressure tap connections.
B0043894	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Front View B-B	4	8/24/09	--	--	N/A

Drawing Number	Drawing Name	Original Submittal (May 21, 2010)		Revised Submittal (September 14, 2011)		
		Revision Number	Date	Revision Number	Date	Change Made
B0043895	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Side View C-C	4	8/24/09	--	--	N/A
B0043922	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Side View S1-S1 and S1A-S1A	2	10/20/09	--	--	N/A
B0043923	General Arrangement Refurbishment Project SPB with Detroit Stoker Section Side View S2-S2 and S2A-S2A	2	10/20/09	--	--	N/A
Section 3 - SDA, FFH, PAC Injection System - Siemens Power Generation, Inc.						
	Excerpts from the Siemens Energy, Inc. Proposal to supply the Spray Dryer Absorber/Fabric Filter and powdered activated carbon (PAC) injection systems	--	5/2/09	--	--	N/A
209D1169	General Arrangement - Elevations Dry Scrubbing System (Spray Dryer Absorber & Fabric Filter)	8	1/26/10	--	--	N/A
209D1171	General Arrangement - Plan Views Dry Scrubbing System (28'-0" Spray Dryer Absorber)	4	11/3/09	--	--	N/A

Drawing Number	Drawing Name	Original Submittal (May 21, 2010)		Revised Submittal (September 14, 2011)		
		Revision Number	Date	Revision Number	Date	Change Made
209D1173	Arrangement of Baghouse - Plan View Dry Scrubbing System (For JP-FF-1000) (Spray Dryer Absorber & Fabric Filter)	5	12/14/09	--	--	N/A
209D1329-02	Activated Carbon Storage and Delivery System Dry Scrubbing System (Spray Dryer Absorber & Fabric Filter)	5	1/5/10	7	3/23/10	Title Block scale corrected; changed silo base elevation; added pressure transmitter.
711-P0-017	Pollution Control Piping & Instrument Diagram Powdered Activated Carbon Injection - Sys. Des.	A1	8/26/09	D7	9/14/11	General instrumentation revisions made; added silo explosion rupture panels; added equipment tags and identification; updated PAC feeder range to reflect as-built conditions.
Section 4 - SNCR - Combustion Components Associates, Inc.						
	Excerpts from the SNCR Systems for RDF Fired Boilers for Solid Waste Authority of Palm Beach County, FL, SNCR Proposal No. 09-194 Rev 2	--	5/20/09	--	--	N/A
SWAPB_0901_011	SNCR System Process Flow Diagram	0	8/31/09	--	--	N/A

Mr. Jeff Koerner
 Florida Department of
 Environmental Protection
 September 14, 2011
 Page 5 of 5

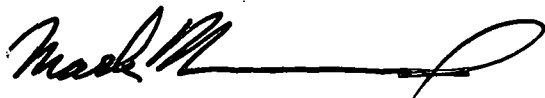
Drawing Number	Drawing Name	Original Submittal (May 21, 2010)		Revised Submittal (September 14, 2011)		
		Revision Number	Date	Revision Number	Date	Change Made
SWAPB_0901_090	Urea Storage Tank	2	11/18/09	--	--	N/A
SWAPB_0901_034	Distribution Module General Arrangement Lower Level Unit No. 1	1	12/9/09	--	--	N/A
SWAPB_0901_030	Urea Metering Module General Arrangement Lower Level Unit No. 1	1	12/5/09	--	--	N/A

Additionally, we will update the Department of any substantial changes to the final design specifications that may occur during the warranty period.

Please do not hesitate to contact us if you need any additional copies or information.

Very truly yours,

SOLID WASTE AUTHORITY OF PALM BEACH COUNTY, FLORIDA



Mark Hammond
 Executive Director

Enclosures

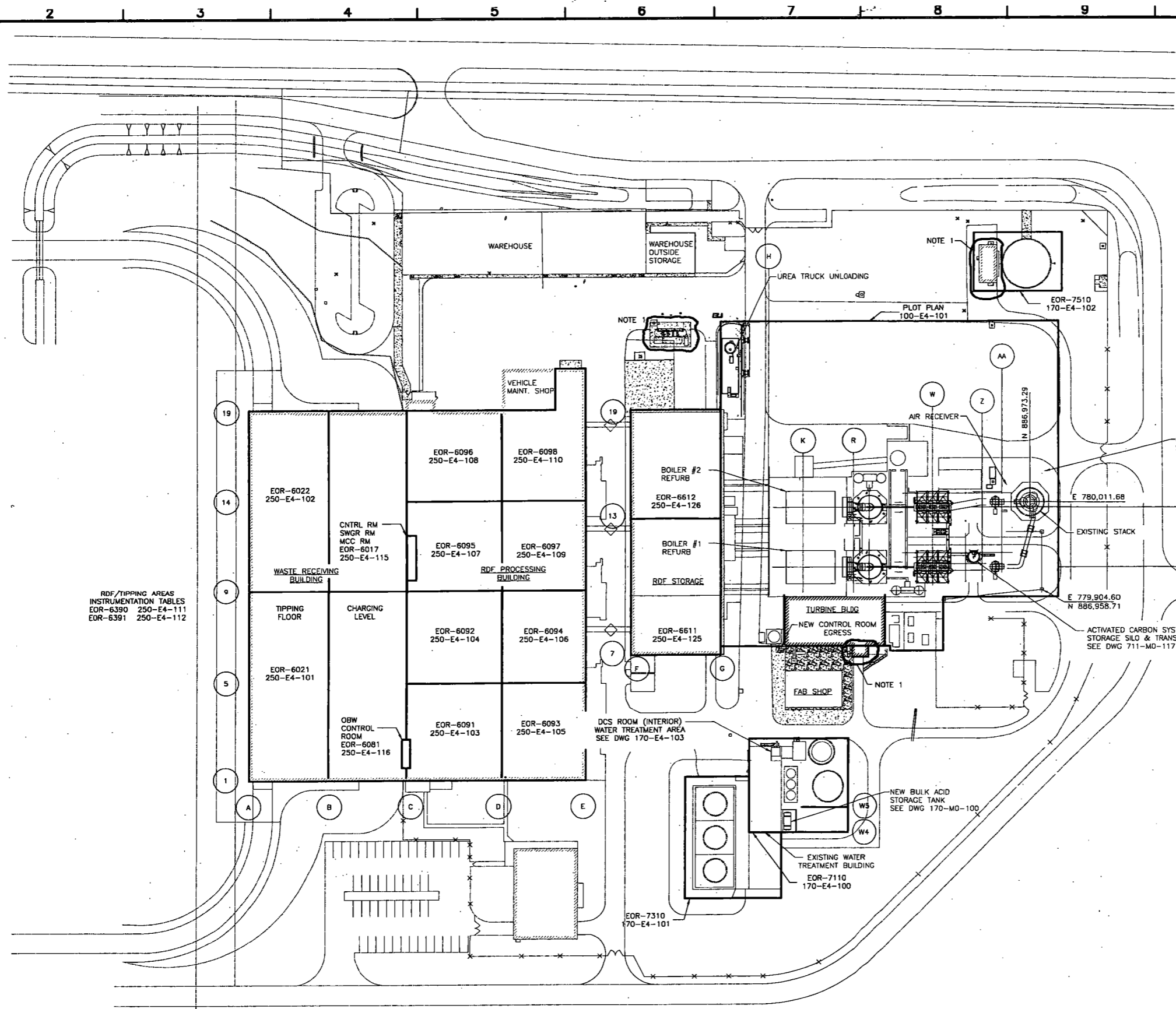
- cc: L. Anderson, FDEP SE District
 R. Schauer, SWA
 B. Worobel, SWA
 M. Morrison, SWA
 W. Arvan, PBRRC
 L. Richter, MPI-FTL
 P. Patton, MPI-WPB Field Office
 K. Liang, MPI-WHI

REV 0
CLIENT DRAWING NO. E001-BLDG-9001



1" = 1/2" 0 1"
GRAPHIC SCALE

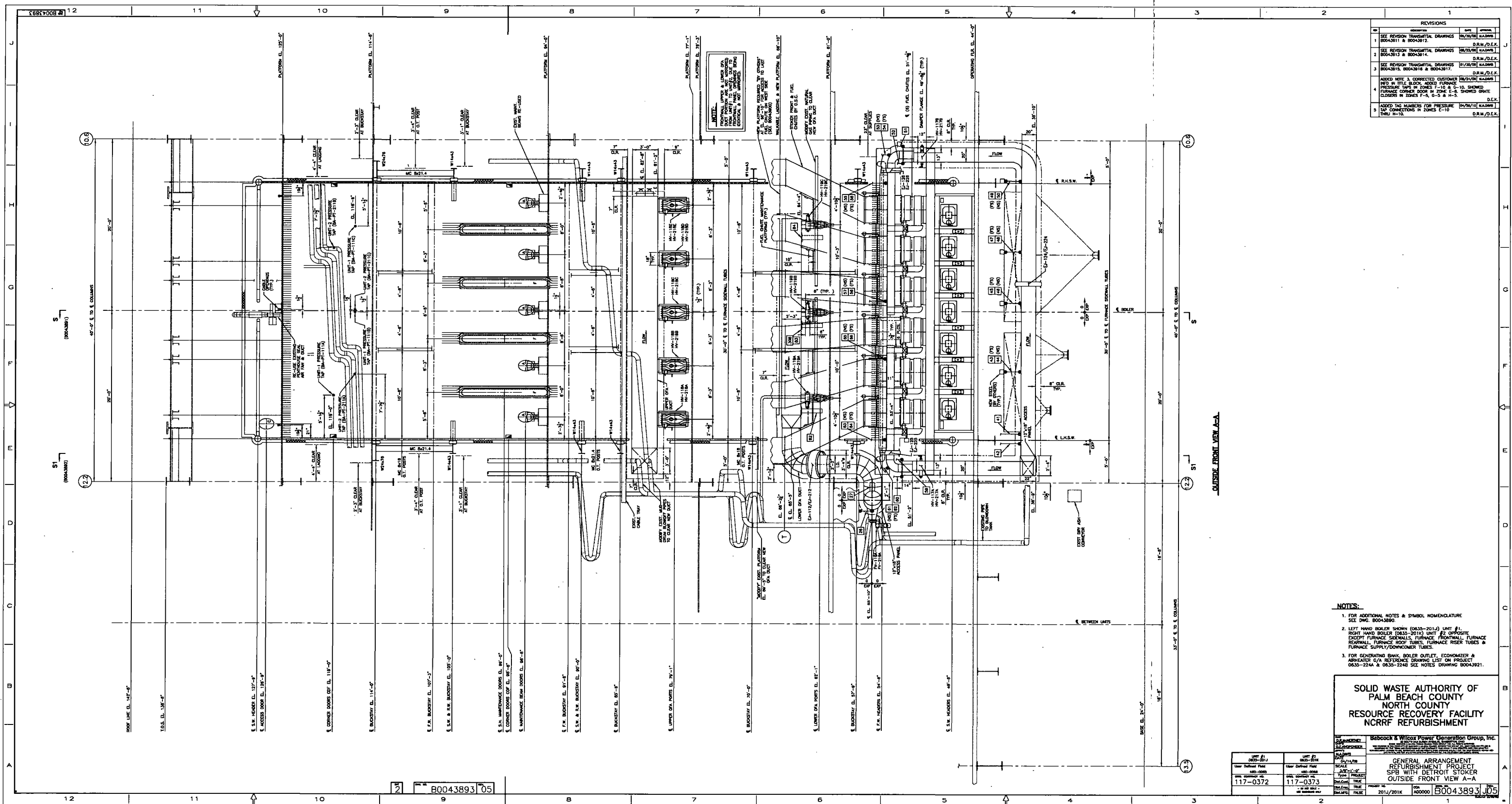
NOTES:
1. THESE ARE AREAS ON THE PROJECT WITH CID1 AND CID2 CLASSIFICATIONS. CONTRACTOR SHALL CHECK WITH THE ENGINEER BEFORE ANY WORK IS PERFORMED IN THESE AREAS.



RDF/TIPPING AREAS
INSTRUMENTATION TABLES
EOR-6390 250-E4-111
EOR-6391 250-E4-112

RELEASED FOR CONSTRUCTION By <u>K. Lyons</u> DATE <u>9/30/09</u>			
NO.	DATE	REVISIONS	BY
0	9/29/09	RELEASED FOR CONSTRUCTION	AJC
A	6/28/09	RELEASED FOR APPROVAL	RTH
DRN	CHKD	DATE	DATE
BY R. NEALAND	6/28/09	CHECKED BY	DATE
DATE R. NEALAND	6/28/09	APPROVED BY	DATE
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY 7501 North Jog Road West Palm Beach, Florida 33412			
NORTH COUNTY RESOURCE RECOVERY FACILITY (NCRRF) REFURBISHMENT			
OUTSIDE AREA LIMITS POWER PLAN PLOT PLAN FACILITY			
SCALE 60'	CONTRACT 5003501	SEAM DRAWING NO. 100 E4 100	REV. 0
FILE		CLIENT DRAWING NO. E001-BLDG-9001	





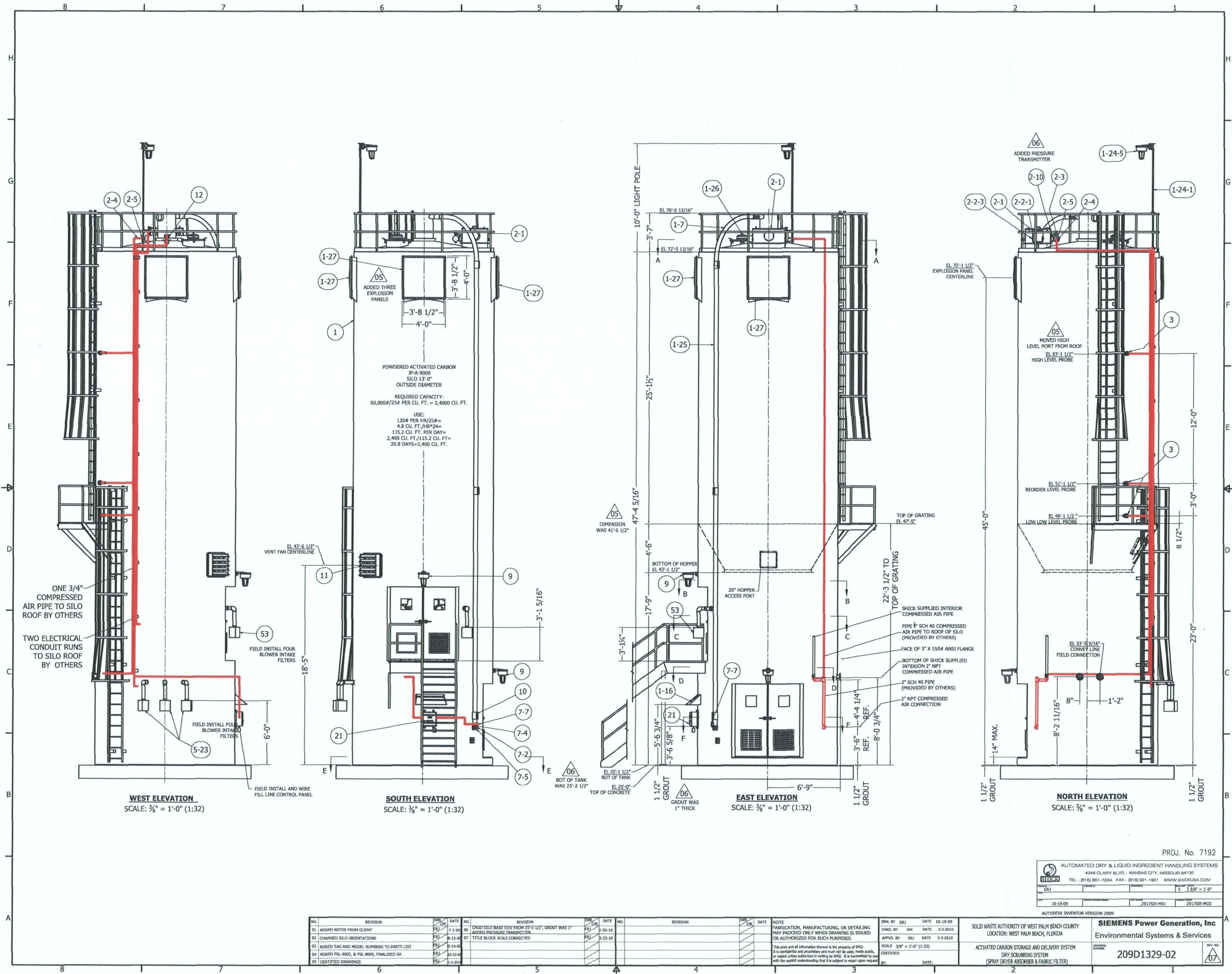
REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	SEE REVISION TRANSMITTAL DRAWINGS 8/2/2010 HASBRO		D.R.M./D.E.K.
2	SEE REVISION TRANSMITTAL DRAWINGS 8/2/2010 HASBRO		D.R.M./D.E.K.
3	SEE REVISION TRANSMITTAL DRAWINGS 8/2/2010 HASBRO		D.R.M./D.E.K.
4	ADDED NOTE 3, CORRECTED CUSTOMER NEED IN TITLE BLOCK, ADDED FURNACE PRESSURE TAPS IN ZONES F-10 & G-10, SHOWN FURNACE CORNER DOOR IN ZONE E-8, SHOWN SHUTE CLOSERS IN ZONES F-5, G-5 & H-5.		D.E.K.
5	ADDED TAG NUMBERS FOR PRESSURE TAP CONNECTIONS IN ZONES E-10 THROUGH H-10.		D.R.M./D.E.K.

- NOTES:**
- FOR ADDITIONAL NOTES & SYMBOL NOMENCLATURE SEE DWG. B0043890.
 - LEFT HAND BOILER SHOWN (2035-2010) UNIT #1, RIGHT HAND BOILER (2035-2010) UNIT #2 OPPOSITE EXCEPT FURNACE SIDEWALLS, FURNACE FRONTWALL, FURNACE REARWALL, FURNACE ROOF TUBES, FURNACE RISER TUBES & FURNACE SUPPLY/DOWNCOMER TUBES.
 - FOR GENERATING BANK BOILER OUTLET, ECONOMIZER & AIRHEATER G/A REFERENCE DRAWING LIST ON PROJECT 0635-2244 & 0635-2248 SEE NOTES DRAWING B0043921.

SOLID WASTE AUTHORITY OF PALM BEACH COUNTY NORTH COUNTY RESOURCE RECOVERY FACILITY NCRRF REFURBISHMENT

USER: 117-0372 PROJECT: 117-0373 DATE: 2011/201K SCALE: AS SHOWN TITLE: GENERAL ARRANGEMENT REFURBISHMENT PROJECT SPB WITH DETROIT STOKER OUTSIDE FRONT VIEW A-A	B0043893 J05
--	--------------

B0043893 05



POWDERED ACTIVATED CARBON
 JP-A-9000
 SILO 13'-0"
 OUTSIDE DIAMETER
 REQUIRED CAPACITY:
 60,000#/25# PER CU. FT. = 2,400 CU. FT.
 USE:
 120# PER HR/25# =
 4.8 CU. FT./HR*24 =
 115.2 CU. FT. PER DAY =
 2,400 CU. FT./115.2 CU. FT. =
 20.8 DAYS = 2,400 CU. FT.

WEST ELEVATION
 SCALE: 3/8" = 1'-0" (1:32)

SOUTH ELEVATION
 SCALE: 3/8" = 1'-0" (1:32)

EAST ELEVATION
 SCALE: 3/8" = 1'-0" (1:32)

NORTH ELEVATION
 SCALE: 3/8" = 1'-0" (1:32)

NO.	REVISION	DATE	NO.	REVISION	DATE	NO.	REVISION	DATE
01	ADDED NOTES FROM CLIENT	7-1-09	06	CHSD SILO BASE ELEV FROM 25'-2 1/2" GROUT WAS 1"	5-26-10			
02	CHANGED SILO ORIENTATIONS	8-13-09	07	ADDED PRESSURE TRANSMITTER	9-23-10			
03	ADDED TAG AND MODEL NUMBERS TO PARTS LIST	9-14-09		TITLE BLOCK SCALE CORRECTED				
04	ADDED PSL-9002, & PSL-9009, FINALIZED GA	10-23-09						
05	CERTIFIED DRAWINGS	5-5-2010						

PROJ. No. 7192

SHICK
 AUTOMATED DRY & LIQUID INGREDIENT HANDLING SYSTEMS
 4346 CLARY BLVD., KANSAS CITY, MISSOURI 64130
 TEL: (816) 861-7224 FAX: (816) 821-1901 WWW.SHICKUSA.COM

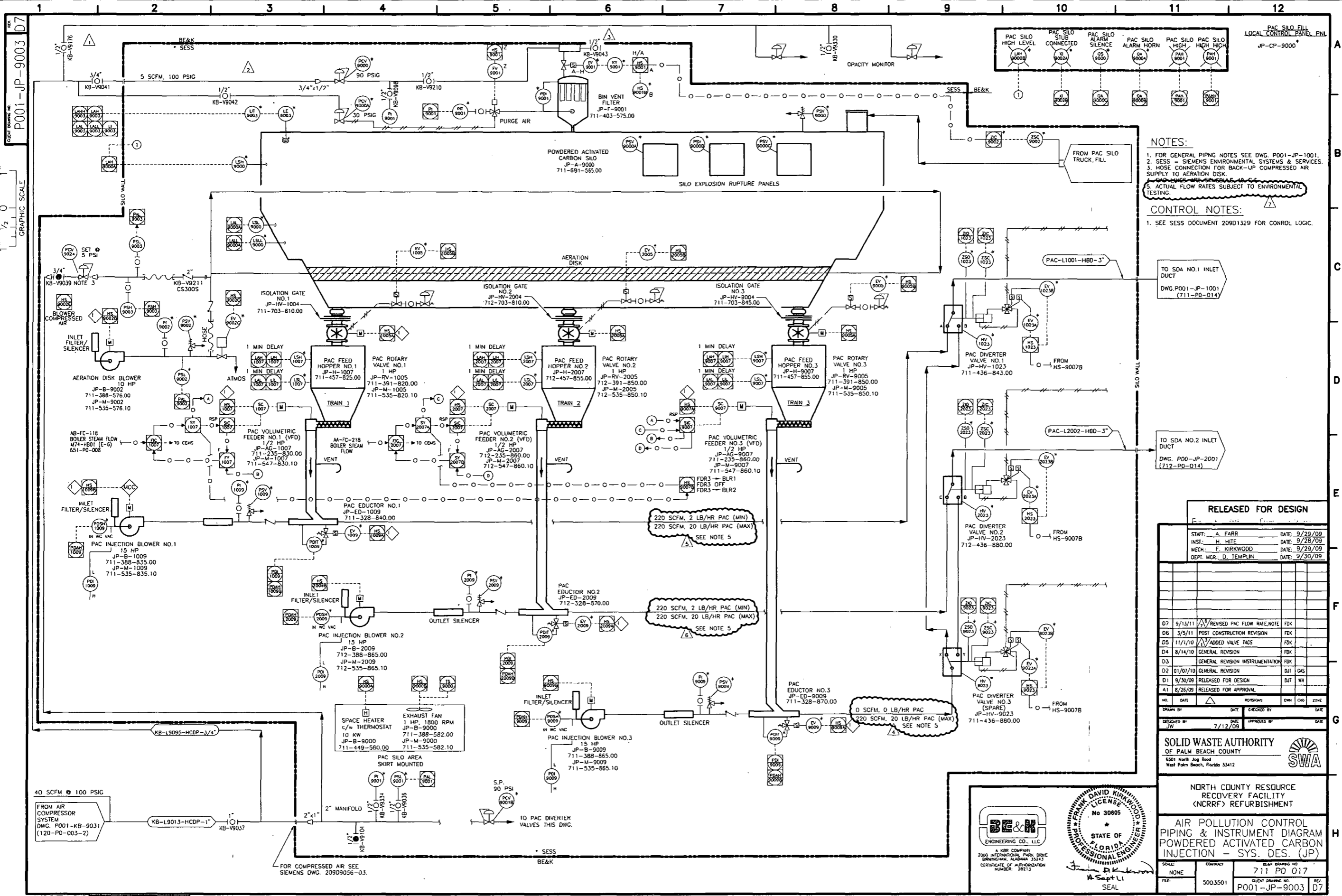
10-15-09 291733E-M01 291733E-M02
 AUTODESK INVENTOR VERSION 2009

SOLID WASTE AUTHORITY OF WEST PALM BEACH COUNTY
 LOCATION: WEST PALM BEACH, FLORIDA

SIEMENS Power Generation, Inc
 Environmental Systems & Services

ACTIVATED CARBON STORAGE AND DELIVERY SYSTEM
 DRY SCRUBBING SYSTEM
 (SPRAY DRYER ABSORBER & FABRIC FILTER)

SCALE: 3/8" = 1'-0" (1:32)
 209D1329-02



NOTES:

- FOR GENERAL PIPING NOTES SEE DWG. P001-JP-1001.
- SESS = SIEMENS ENVIRONMENTAL SYSTEMS & SERVICES.
- HOSE CONNECTION FOR BACK-UP COMPRESSED AIR SUPPLY TO AERATION DISK.
- ACTUAL FLOW RATES SUBJECT TO ENVIRONMENTAL TESTING.

CONTROL NOTES:

- SEE SESS DOCUMENT 20901329 FOR CONTROL LOGIC.

RELEASED FOR DESIGN

STAFF: A. FARR	DATE: 9/29/09
INST.: H. HITE	DATE: 9/28/09
MECH.: F. KIRKWOOD	DATE: 9/29/09
DEPT. MGR.: D. TEMPLIN	DATE: 9/30/09

NO.	DATE	REVISIONS	OWN	CHK	ZONE
D7	9/13/11	REVISED PAC FLOW RATE NOTE	FDK		
D6	3/5/11	POST CONSTRUCTION REVISION	FDK		
D5	11/1/10	ADDED VALVE TAGS	FDK		
D4	8/14/10	GENERAL REVISION	FDK		
D3		GENERAL REVISION INSTRUMENTATION	FDK		
D2	01/07/10	GENERAL REVISION	DJT		
D1	9/30/09	RELEASED FOR DESIGN	DJT	WH	
A1	8/26/09	RELEASED FOR APPROVAL			

SOLID WASTE AUTHORITY
OF PALM BEACH COUNTY

6501 North Jog Road
West Palm Beach, Florida 33412

NORTH COUNTY RESOURCE RECOVERY FACILITY (NCRRF) REFURBISHMENT

AIR POLLUTION CONTROL PIPING & INSTRUMENT DIAGRAM
POWDERED ACTIVATED CARBON INJECTION - SYS. DES. (JP)

SCALE: NONE	CONTRACT: 5003501	711 PO 017
FILE: P001-JP-9003	CLIENT DRAWING NO. P001-JP-9003	REV. 07

BE&N
ENGINEERING CO., LLC

2000 INTERNATIONAL PARK DRIVE
BRUNSWICK, ALABAMA 35243
CERTIFICATE OF AUTHORIZATION NUMBER: 28213

1" = 1/2" 0
GRAPHIC SCALE