



# PHENIX MuTr SOUTH SCAFFOLD INSTALLATION PROCEDURE

procedure name

PHENIX Procedure No. PP-2.5.5.4-13

Revision: A

Date: 4-28-00

### Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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### Approvals

*[Signature]* 5/10/00  
PHENIX S E & I Date

*[Signature]* 8/27/00  
Cognizant Scientist/Engineer Date  
/Activity Manager

*[Signature]* 5/8/00  
PHENIX Safety Date

\_\_\_\_\_  
CA-D ES&H /SAFETY Date

IN HOUSE PROCEDURE

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REVISION CONTROL SHEET

LETTER	DESCRIPTION	DATE	WRITTEN BY	APPROVED BY	CURRENT OVERSIGHT
A	First Issue	4/28/2000	n/a	P. Kroon, (1 unintelligible), W. Lenz	n/a
RETIRED	Installation Completed	3/20/2007	n/a	D. Lynch, P. Giannotti, R. Pisani for PHENIX	D. Lynch

# South Scaffold Installation Procedure, PP-2.5.5.4-13

## 1.0 Purpose and Scope

- 1.1 The purpose of this procedure is to provide direction for the installation of the south scaffolding. The bulk of the scaffolding is commercial items from BIL-JAX, Inc. It consists of three sections; two towers exterior to the magnet and scaffolding placed inside the magnet between stations 2 and 3.

## 2.0 Responsibilities

- 2.1 All operations shall be performed under the direction of the PHENIX experimental hall "person-in-charge", or their designee.
- 2.2 This procedure and all relevant BNL safety guidelines must be strictly adhered to. In accordance with BNL policy, any individual may cease operations if they in any way feel unsafe or if they believe unsafe procedures are being followed, such a complaint shall be reviewed by the cognizant engineer, and if necessary, BNL ES&H service.
- 2.3 A representative from the muon-tracking mechanics team should be present at all times where critical lifts and questions arise.

## 3.0 Prerequisites

- 3.1 Training: All personnel involved in this procedure shall have reviewed this procedure, and be fully knowledgeable about the way in which the scaffolding is mounted in the South magnet. A meeting will take place with all participants involved with this installation to review all aspects and answer any questions that any of the personnel may have.
- 3.2 All personnel involved with in this procedure shall have a safety awareness certificate.
- 3.3 All personnel involved in this procedure shall wear hardhats and safety shoes.

## 4.0 Precautions

- 4.1 The area where rigging operations will be performed shall be cordoned-off to all personnel except the "person in charge" and the technicians assigned to perform this procedure.
- 4.2 Some operations will require personnel to work in close proximity to suspended loads. Do not permit anyone to be positioned under the load.
- 4.3 The maximum static load is 1400 lbs. This provides a safety factor of 4.

## 5.0 Equipment List

- 5.1 Torque wrench

## 6.0 Preparation

- 6.1 Magnet hoses tested and leak tight.
- 6.2 A complete set of scaffolding assembly drawings is available, along with a set of photographs taken at New Mexico State University, where a complete pre-assembly has taken place

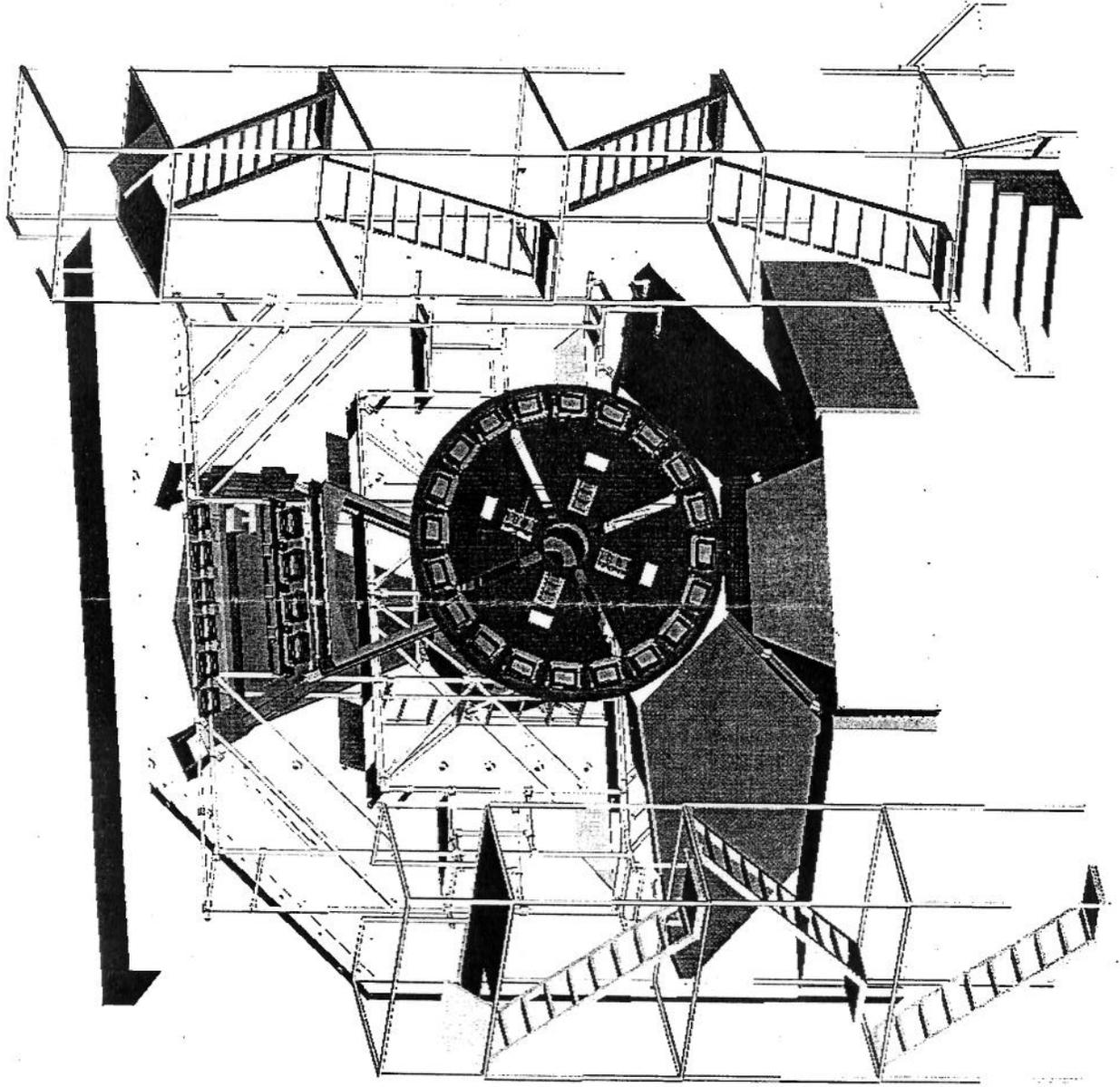
## 7.0 Procedure

### 7.1 Side Towers

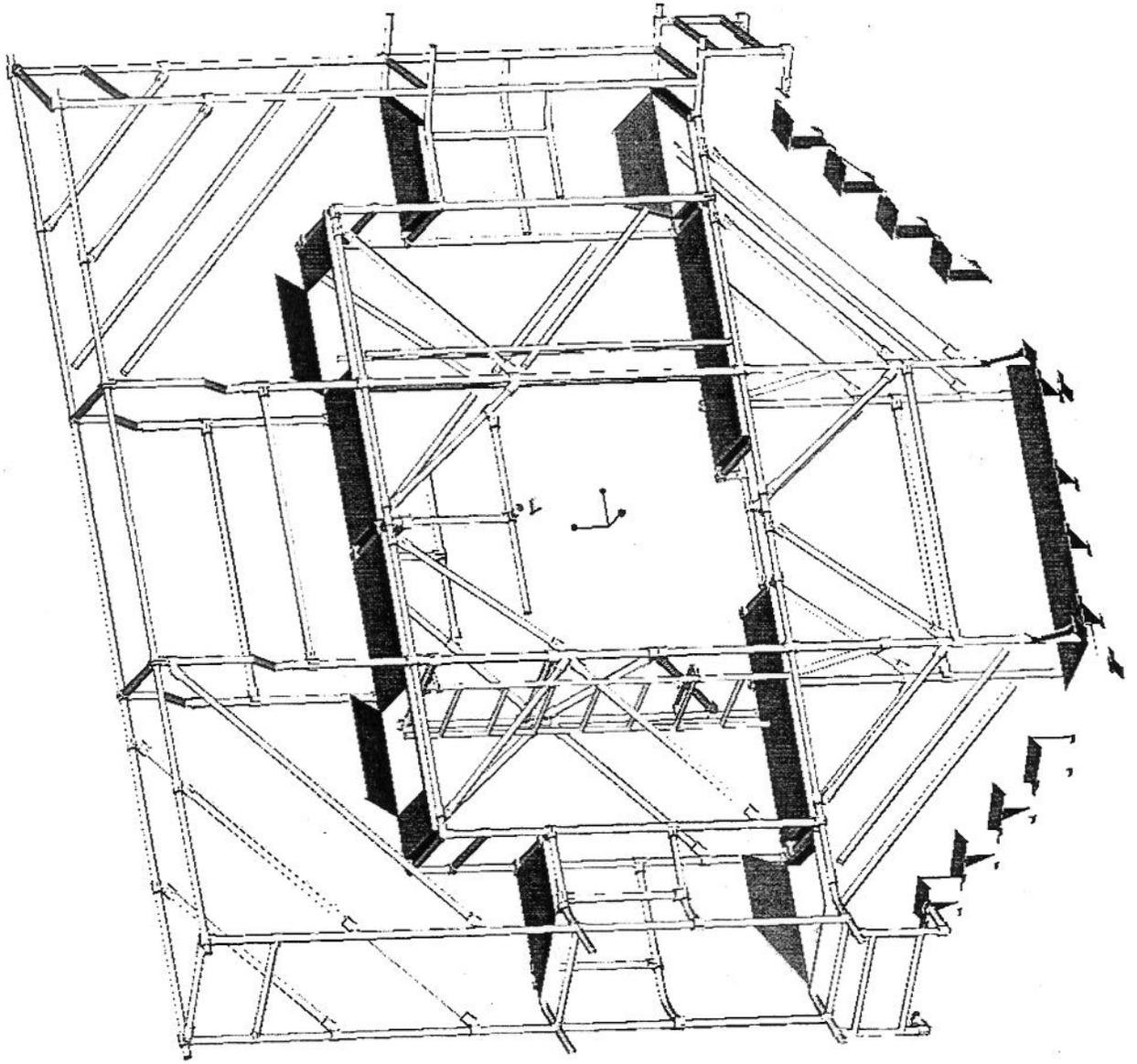
- 7.1.1 The two side towers are identical and this installation procedure covers both. All parts are numbered in accordance to the drawing 002-0212-702 B1. Installation must follow the drawing beginning at the bottom and proceeding to the top.
- 7.1.2 Position the structure according to drawing 002-0212-702 B2.
- 7.1.3 The side towers remain in place for the entire detector and FEE installation.

### 7.2 Internal scaffolding.

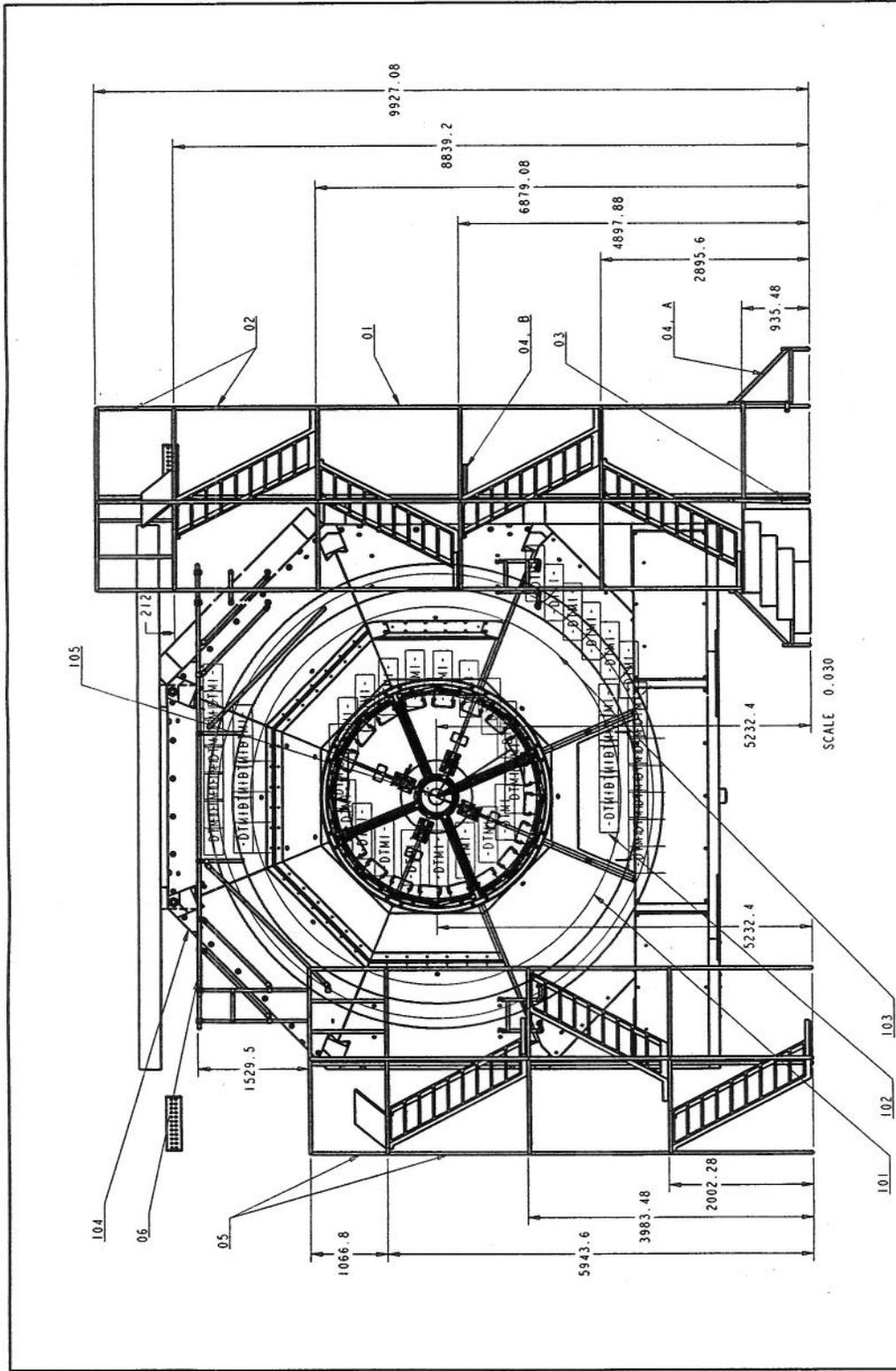
- 7.2.1 The internal scaffolding is assembled from the bottom to the top as the detectors and FEE is installed.
- 7.2.2 Attach to the bottom of the magnet the stairs on either side, drawing 002-0212-704 B3
- 7.2.3 Attach to the bottom of the magnet the bottom plate, drawing 002-0212-707
- 7.2.4 Attach to the bottom of the magnet the bottom foot drawing 002-0212-705 B1,B2
- 7.2.5 Attach to the bottom of the magnet the center support drawing 002-0212-708
- 7.2.6 Attach remaining scaffolding as needed.
- 7.2.7 All setscrews, used with the internal scaffolding couplings, should be set to a maximum torque of 12-ft. lbs.



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NOTES:  
 1) DRAWING FILE NAME: S-MAGNET-FRONTVIEW.DRW  
 ASSEMBLY FILE NAME: S-MAGNET.ASM  
 2) ITEM NUMBERS REFER TO DRAWINGS AND SPECIFICATIONS ON THE BILL OF MATERIALS  
 3) ITEM 01, 02, AND 03 ARE ONLY SKETCHES  
 DETAILS OF COMMERCIAL STAIR TOWER NOT SHOWN.

SURFACE TEXTURE	TOLERANCE:	DATE	QUANTITY	MATERIAL	UNIT	MM	00
X.X	X.XX	10/19/99		AMC.NMSU			
X.XXX	X.XXX	10/26/99		PHENIX DWG#			
		11/16/99		002.0212.702. B1			

SOUTH MAGNET AND SCAFFOLD AND STAIR TOWER  
 DRWF: SMST\_01\_01  
 ENGINEER: YU-P LING  
 AMC APPR: [Signature]  
 PHENIX APPR: [Signature]