OIG FINAL AUDIT REPORT

November 13, 2003

Performing Arts Center Construction Manager's Quality Control Program

OIG EXHIBITS

- Performing Arts Center of Greater Miami, CM Quality Control Program "Genesis," dated November 7, 2002. [Referenced on page 4 of the OIG Final Report].
- Sample PACB letters to subcontractors re: Subcontractor's QC Representatives, QC Organization and QC Testing, dated October 21 and December 27, 2001. [Referenced on page 9 of the OIG Final Report].
- Sample QC Final Inspection Form and letter re: "Contractor is not ready for the scheduled inspections." [Referenced on page 21 of the OIG Final Report].
- Sample QC Inspection Form wherein work nonconformance is noted but not reported in the corresponding Summary. [Referenced on page 23 of the OIG Final Report].
- Letter from PACB to subcontractor reference the subcontractor's quality control program and concern over failed QC and threshold inspections. [Referenced on page 37 of the OIG Final Report].

PERFORMING ARTS CENTER OF GREATER MIAMI

CM QUALITY CONTROL PROGRAM GENESIS

NOVEMBER 7, 2002 R 1

- TAH WAS CONTRACTED BY PACB MANAGEMENT TO DESIGN A QUALITY CONTROL PROGRAM FOR THE CONSTRUCTION MANAGER AND TO WRITE A QC MANUAL WITH APPROPRIATE FORMS AND CHECK LISTS IN STRICT CONFORMANCE WITH THE REQUIREMENTS FOR QUALITY CONTROL AS SPECIFIED IN THE CONTRACT BETWEEN THE CM AND THE OWNER
- THE QC REQUIREMENTS FOR THE CM AND FOR THE SUBS ARE SPECIFIED IN VARIOUS SECTIONS OF THE PROJECT MANUAL AND IN THE TECHNICAL SPECIFICATIONS
- PACB MANAGEMENT PASSED DOWN TO THE SUBS THE QC REQUIREMENTS SPECIFIED IN THE TECHNICAL SPECIFICATIONS WITHIN THEIR SCOPE OF WORK VIA THEIR AGREEMENTS
- 4. THE PACB / SUBS AGREEMENTS CONTAINS SPECIFIC REQUIREMENTS FOR THE SUBS' QC PROGRAM AND THE SUB'S QC MANUAL. ACCEPTANCE BY THE A/E OF THE SUB'S QC MANUAL IS A CONTRACT CONDITION FOR THE SUBS TO DO WORK
- 5. PACB MANAGEMENT GAVE TAH GUIDELINES FOR THE PREPARATION OF THE QC MANUAL, ASKED TAH TO PREPARE TECH SPEC INDICES FOR SPECIFIED INSPECTIONS, TESTS, CERTIFICATES, AND LICENSES FOR QUICK PREPARATION OF INSPECTIONS AND AUDITS CHECK LISTS THAT TIED THEM TO THE APPLICABLE CONTRACT REQUIREMENTS. AND TO DESIGN INSPECTION FORMS THAT WOULD ASSURE THAT INSPECTIONS AND AUDITS BE BASED ON CLEARLY IDENTIFIED SPECIFIED CONTRACT REQUIREMENTS
- TAH INITIATED THE QC MANUAL WORK BY PREPARING A BAR CHART FOR EACH ELEMENT OF THE MANUAL. THE BAR CHART WAS REVIEWED AND ACCEPTED BY PACB MANAGEMENT.
- 7. TAH MADE A THOROUGH REVIEW OF THE ENTIRE PROJECT MANUAL [THE CONTRACT] INCLUDING THE FRONT END DOCUMENTS AND THE TECH SPECS AND IDENTIFIED EACH AND EVERY QC RELATED REQUIREMENT SPECIFIED
- 8. WITH THE REQUIREMENTS STIPULATED BY PACB MANAGEMENT AND THE INFORMATION OBTAINED FROM THE CONTRACT DOCUMENTS REVIEWS ON HAND, TAH THEN PREPARED A DETAILED OUTLINE OF THE QC MANUAL, WHICH AFTER SEVERAL ROUNDS OF REVISIONS WAS ACCEPTED BY PACB MANAGEMENT
- AT THIS TIME TAH PROCEEDED TO WRITE THE MANUAL TEXT, CREATE THE TECH SPECS INDEXES, DESIGN THE FORMS [INSPECTION/AUDIT REPORT, NOTICES, AND LOGS], AND STARTED THE PREPARATION OF CHECK LISTS BEGINNING WITH RECEIPT INSPECTIONS, EQUIPMENT INSPECTIONS, FIELD DOCUMENTS REQUIREMENTS, AUGER CAST PILE INSPECTION REQUIREMENTS, AND STRUCTURAL STEEL QC PROGRAM CHECK LIST

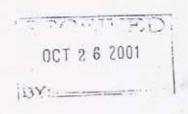


PERFORMING ARTS CENTER OF GREATER MIAMI

CM QUALITY CONTROL PROGRAM GENESIS

- 10. AT THE END OF EACH WORK DAY, OR AT THE FOLLOWING MORNING, TAH SUBMITTED TO PACB MANAGEMENT FOR THEIR REVIEW AND APPROVAL THE WORK PERFORMED DURING THE DAY (AND NIGHTS). IN THIS FASHION, THE MANUAL, INDEXES, FORMS, AND CHECK LISTS WERE UNDER A DAILY MONITORING AND ACCEPTANCE BY PACB MANAGEMENT, INCLUDING DIRECT COMMUNICATION VIA EMAIL AND REGULAR MAIL WITH THE TORONTO OFFICE.
- 11. TAH PREPARED SEVERAL DRAFTS OF THE MANUAL AND FORMS THAT WERE THOROUGLY REVIEWED AND ANNOTATED BY THE ENTIRE PACB MANAGEMENT ORGANIZATION [CHIEFS AND INDIANS, OUTGOING AND INCOMING] TAH INCORPORATED ALL COMMENTS AND PRESENTED A FINAL DRAFT TO PACB MANAGEMENT.
- 12. WHEN PACB MANAGEMENT WAS FULLY SATISFIED WITH THE MANUAL ORGANIZATION, CONTENTS, FORMS, AND INITIAL CHECKLISTS, TAH ISSUED IT AS THE CM QC MANUAL AND PROCEEDED TO IMPLEMENT IT STARTING WITH INSPECTIONS MADE OF WORK IN PROGRESS AT THE SEARS TOWER AND AT THE AUGER CAST PILES.
- 13. ADDITIONALLY, TAH SENT TO EACH SUB RECEIPT INSPECTIONS CHECKLISTS FOR THEM TO USE AT THEIR RECEIPT INSPECTIONS, EQUIPMENT INSPECTIONS CHECKLISTS FOR THEIR MANDATAORY INSPECTION OF THEIR EQUIPMENT CONDITION AND DOCUMENTATION, AND DOCUMENTS CHECK LIST FOR THEM TO USE IN AUDITING THEIR FIELD OFFICES TO ENSURE CONFORMANCE WITH THE FIELD OFFICE DOCUMENTS AS REQUIRED IN THE CONTRACT AND IN THE AGREEMENTS
- 14. FURTHER, TAH PREPARED GUIDELINES CONTAINING EACH AND EVERY SPECIFIED QC RELATED REQUIREMENT IN THE CONTRACT, AND IN THE SUB'S AGREEMENTS TO ASSIST THE SUBS IN THE PREPARATION OF THEIR QC MANUAL [THIS EXTENSIVE EFFORT WAS PERFORMED DURING WEEKENDS AT NO COST TO THE PROJECT – IE; WAS DONE PRO-BONO]
- 15. IMMEDIATELY FOLLOWING A CHANGE IN TAH'S QC LEADERSHIP, THE OFFICIAL, APPROVED, QC PROGRAM AND MANUAL WERE DISCARDED AND A DIFFERENT METHOD AND FORMS WAS IMPLEMENTED.
- 16. THE NEW FORMS DO NOT RECORD THE CONTRACT DOCUMENTS USED BY THE TAH QC TECHNICIANS AS THE BASIS FOR THEIR SURVELLANCE WORK. AS SUCH, THERE IS NOT DOCUMENTED EVIDENCE THAT THE WORK SURVEYED CONFORMS TO THE CONTRACT.
- 17. FURTHER, THE EXTENSIVE OFFICE EFFORT THAT THE TAH QC TECHNICIANS MAKE IN REVIEWING CONTRACT DOCUMENTS IN PREPARATION FOR THEIR SURVELLANCE WORK IS NOT NOTED EITHER. AND HENCE, NOT CREDITED.
- 18. THE OFFICIAL CM QC MANUAL PREPARED BY TAH, ACCEPTED BY PACB MANAGEMENT, AND PRESENTED TO THE OWNER IS THE RESULT OF THE COLLABORATIVE EFFORT OF HIGHLY QUALIFIED AND DEDICATED PROFESIONALS FROM THE VARIOUS ORGANIZATIONS THAT MAKE UP THE JOINT VENTURE THAT IS PACB. AS SUCH, IT LIKELY IS THE BEST IN TOWN!





Performing Arts Center Builders

Tuesday, October 23, 2001

Mr. Edwin Hickey H.J. Foundation, Inc. 8510 NW 68th Street Miami, FL 33166

Re: Performing Arts Center of Greater Miami Subcontract Agreement No. 4

Our Reference: LETT147-223

Subject: Subcontractor's Quality Control [QC] Representative, QC Organization and QC Testing Plan

Dear Mr. Hickey

In conformance with the requirement in item 5 of Attachment "B" to this Agreement, please provide at your earliest convenience the name and qualifications of your "Quality Control Representative on the job".

As required in the Prime Contract, article 1.03 "Quality Control Organization" of section 01440 "Construction Manager Quality Control Program", please, provide an organizational chart of your Quality Control organization. The organizational chart shall identify all quality control staff by name and function, experience, qualifications, certifications, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. The organization chart shall indicate which personnel are Sub-Contractor employees and which are provided by outside organization, and shall also identify the test laboratory and inspection agencies you have contracted, or plan to contract, to perform the quality control tests and inspections under your responsibility as required in item 5 of Attachment "B" to the Subcontract Agreement.

A Joint Venture of Odebrecht Construction, Inc., The Haskell Company, Ellis-Don Construction Inc. 4770 Biscayne Boulevard, Suite 500, Miami, Florida 33137 Phone: (305) 576-5595 Fax: (305) 576-4886



Your company must also provide a Quality Control Testing Plan that includes all mandatory testing and test frequencies required by the SFBC and other codes and standards referenced inthe Technical Specification Items. Your Quality Control Testing Plan shall also include all tests and test frequencies indicated in the Contract Documents for the Work pursuant to our Subcontract Agreement. We have included for ease of reference a matrix that indicates certain tests required by the Technical Specifications. The tests to be provided by your company are not limited to the tests indicated in the matrix, but we believe the matrix may help you to plan your Quality Control activities.

Once again, congratulations and welcome to the team, lets make this project one that is both enjoyable and profitable for all parties.

Acknowledgement

H.J. Foundation, Inc.

Your signature in the space provided will indicate your acknowledgement of the attached.

Sincerely,

Performing Arts Center Builders

Jesus Vazquez

cc:

Project Executive

Mr. George Koos, PACB

Mr. Lucas Prado, PACB

File: H.J. Foundation, Inc.

Attachment: Matrix showing, for ease of reference, some of the tests specified in the individual

technical specification sections that form part of the reference subcontract

agreement.



Performing Arts Center Builders

Thursday, December 27, 2001

Richard Smith Alan W.Smith 9140 NW 96th Street Medley, FL 33178

Re: Performing Arts Center of Greater Miami

Subcontract Agreement No. 7

Our Reference: LETT440-719

Subject: Subcontractor's Quality Control [QC] Representative, QC Organization and QC Testing Plan

Dear Mr. Smith

In conformance with the requirement in item 5 of Attachment "B" to this Agreement, please provide at your earliest convenience the name and qualifications of your "Quality Control Representative on the job".

As required in the Prime Contract, article 1.03 "Quality Control Organization" of section 01440 "Construction Manager Quality Control Program", please, provide an organizational chart of your Quality Control organization. The organizational chart shall identify all quality control staff by name and function, experience, qualifications, certifications, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. The organization chart shall indicate which personnel are Sub-Contractor employees and which are provided by outside organization, and shall also identify the test laboratory and inspection agencies you have contracted, or plan to contract, to perform quality control tests and inspections when specified in the technical Specifications under your responsibility as required in item 5 of Attachment "B" to the Subcontract Agreement.

A Joint Venture of Odebrecht Construction, Inc., The Haskell Company, E 4770 Biscayne Boulevard, Suite 500, Miami, Florida 33137 Phone: (305) 57

			-	AT
PR	GL	RC	BB	MJ
JOC	LCC	DMc	HL	MT
MC	VR	CM	all P	M's

Your company must also provide a Quality Control Testing Plan that includes all mandatory testing and test frequencies required by the SFBC and other codes and standards when referenced in the technical Specifications. Your Quality Control Testing Plan shall also include all tests and test frequencies indicated in the Contract Documents for the Work pursuant to our Subcontract Agreement.

Once again, congratulations and welcome to the team, lets make this project one that is both enjoyable and profitable for all parties.

Your signature in the space provided will indicate your acknowledgement of the attached.

Plese, reply before Monday, January 7, 2002

Sincerely, Performing Arts Center Builders Acknowledgement Alan W.Smith

Frank Soto, PE

Quality Control Administrator

By: _____, Officer

cc:

Mr. Luiz Simon, PACB Mr. Assad Mowzoon, PACB Mr. George Koos, PACB Mr. Lucas Prado, PACB File: Alan W.Smith

TRUCTURAL / AND WITT	Subcontrate MCU Grid Lines	9-9,01 ;00 ding:
	Mau Grid Lines	11:00
	Grid Lines	Iding:
ANO WITT	W/26	The state of the s
	(N) (N) (N)	30H
	el:	vation / Level:
		ONEIB
	UAC REBAN & FWK	oe of inspection:
	WOWK STUL IN shold Inspection:	tus of Threshold Inspection
	to sign off pour card at:	des notified to sign off pou
		marks:
	y	
	10	
	4	
	4	

YSRAEL A. SEINUK, P.C. Consulting Engineers

228 East 45th Street, New York, New York 10017-3303 φ Tel. 212/687-2233 φ Fax 646/487-5555

MEMORANDUM

AWS mello P&H

April 8, 2003

TO: Glen Chen See, PACB

FROM: Mark Druz, The Threshold Inspector

RE: CONTRACTOR IS NOT READY FOR THE SCHEDULED INSPECTIONS.

As has been happening on many occasions, when a threshold arrives at the location at the time indicated in the PACB notification for an inspection, the construction may not be ready even for a preliminary inspection.

We will appreciate a more considerate handling by you of the notifications given to YAS.

Sincerely,

Mark.

Cc. Chaim Elkoby, YAS Cc. Randy Volenec, CPA

Cc. Robert Hendrickson, CPA

PACB Quality Control Program Implementation

	QC Inspection Form
Date: 11-26-02	Inspected by: DONOVAN HALL
Time: 7:30	Subcontractor: MELLO COMCRETE / PH STRUCTURAL Plan reference: Dated:
Building: BOH	Plan reference: / Dated:
Elevation / Level:	Grid Lines / other reference: FDN WACL & NE/1 THIM NE/11 MNE/A 1 HILLINE/H
	ANCHOR BOLCS @ NE/A on NE/4
Inspection Status:	
Status of Threshold Inspection:	
Trades signed off pour card:	Y N Superintendents signed off work:
Comments: ANCHIN BOLTS T	upe empeo prosection Dia 6 6 3.0 8" \$ 1/2"
	O BE REINSPECTED BECAUSE OF CONFLICT
* NEED SHE CONFINHI	WG MEMO FOR REPAIR & CHIPPING OF PIECE
	OCCURED ANCHOR BOLTS STILL RESTING ON
QC Representative: 7	EXHI



Quality Control Daily Inspection Report Summary

Report #:

404

Date:

Tuesday, 11/26/02

QC Technician:

Donovan Hall, Basil Hylton

QC Administrator:

Frank Soto, PE

Contractors observed today are indicated by the completion of their respective division/spec section:

Div.	Spec. Sec.	Name AWSI	Div.	Spec, Sec.	Name CAPMEN
09	09000	STRUCTURAL PRESERVATION	02	02306	HJ FOUNDATION
02	02660	CENTRAL FLORIDA	16	16000	ENCOMPASS
03	03300	MELLO CONCRETE			PROTECH
03	03300	P&H STRUCTURAL	15	15000	POOL AND KENT
02	02240	COMPLETE DEWATERING	05	05100	ADF
N/A	N/A	SAFEWAY	02	02060	SPEEDY

Observations of activities witnessed today by the QC Technicians:

The state of the s						
Ballet / Opera House:	Test	Work Activities	Mock-Up	Equipment	QC Inspection	

Central Florida continues excavating along south west tunnel, and continues backfilling and compacting zone 2;

P&H continues installing form for elevator # 8, continues stripping foundation wall and continues installing form for FDN wall; P&K continues installing storm/sanitary lines in zone 6; PACB placed concrete for mudd slab at tunnel; Encompass continues installing electrical rough-in along zone 6 towards Sears Towers; ADF erecting steel columns and beams west site of elevator # 4; HJ continues removal of sheet piling along zone 2; Mello Concrete installing steel, and continues installing steel at elevator # 11

Sears Tower: | Test | Work Activities | Mock-Up | Equipment | QC Inspection |

Safeway continues removal and erection of steel stairway along north east corner of Tower; Speedy continues demolition of existing building slab and removal of debris; Structural Preservation continue restoration along exterior walls on fifth, six, and seven floors

Test Work Activities Mock-Up Equipment QC Inspection

Concert Hall:

Central Florida: Two operators front end Loader and bobcat backfilling in zone three. HJ Foundation: No activity seen visually. P&H Structural: building forms in zone three. Mello Concrete: tying steel field order seven in zone three, tying steel at elevator # 3, 22'-6" height. Encompass Electrical: Spicing of conduits with aluminum nipples in zone three at switch gear room. P&K: No activity seen visually. Complete Dewatering: de-watering along perimeter of basement north, east, and south. PACB Laborers: excavating fill for grade beams in zone three.

A Joint Venture of Odebrecht Construction Inc., The Haskell Company, Ellis-Don Construction Inc. 4770 Biscayne Boulevard, Suite 500, Miami, Florida 33137 Phone: (305) 576-5595 Fax: (305) 576-4886

Ballet / Opera House: NONE REPORTED Corrective Action: Sears Tower: NONE REPORTED Corrective Action: Concert Hall: NONE REPORTED Corrective Action: PENDING ITEMS: Ballet / Opera House: NONE REPORTED Non-Conformance: Sears Tower: NONE REPORTED Non-Conformance: Concert Hall: NONE REPORTED Non-Conformance: GENERAL COMMENTS: No significant issues, events or occurrences reported. Quality Control Administrator Signature: cc: Luiz Simon, PACB Assad Mowzoon, PACB Daniel Parmenter, PACB FRANK SOYO Print Name: Lucas Prado, PACB

EXCEPTIONS AND DEFICIENCIES NOTED:

Neil Hall, Architects Hall



Performing Arts Center Builders

240 N.E. 13th Street, Miami, Florida 33132 Telephone: (305) 576-5595

Facsimile: (305) 576-4886

Friday, August 16, 2002

SENT VIA FAX 561-793-4379

Mr. Dennis Mello Mello Concrete Services 11985 Southern Blvd., #314 West Palm Beach, FL 33421-0755

Re: Subcontractor quality control MLTR-075-192

Performing Arts Center of Greater Miami

Dear Mr. Mello,

As I stated in the subcontractor meeting yesterday, there is a serious concern that the quality control of your work is inadequate. This concern is evident in the alarming amount of failed quality control and threshold inspections. The purpose of this letter is to summarize our findings from the reports and to establish a precedent by which you will improve the quality control of your work.

Outlined below are some of the typical deficiencies observed in yours and others work from July 19, 2002 through August 9, 2002 that resulted in failed threshold inspections.

Improper quantity, spacing and layout of reinforcing steel (19 locations); lack of securement of reinforcing steel (29 locations); formwork in progress (11 locations); formwork incomplete (7 locations); missing anchor bolts (8 locations); debris in formwork (4 locations); unacceptable concrete cover of reinforcing bars (36 locations); improper splice locations (22 locations); and improper sheathing and anchor reinforcing (29 locations.)

Many questions come to mind when one reviews the history of the problems in your work noted above. Most importantly, why do typical deficiencies exist in the work with no signs of improvement? Also, why do the inspection reports indicate that the work is incomplete in many cases? In an effort to analyze these questions, I've listed below what are, in my opinion, the underlying sources of the problem.

- 1) Inadequate subcontractor resources to implement their quality control program.
- Inadequate subcontractor supervision coordinate the work in accordance with the project schedule.
- Inadequate subcontractor resources to coordinate the changes to the drawings.
- Simply not being ready for inspection.

To my surprise, I've been receiving feedback from your field personnel that the quality of your work suffers due to excessively stringent threshold inspections. Regrettably, no one is able to produce an adequate explanation of where this occurs. Please understand that this is a serious allegation and I suggest that thorough research is presented and discussed with PACB prior to making such statements. Otherwise, your inability to support these statements only further taints the appearance of the project's quality programs.

15	LP	AGA	TUB	NE	CM
PR	GL	RC	BB	ML	JOC
DMc	MT	DR	LCC	VR	CAM
ALI	PM's	GQ8	LIK	10	DA
M	TRL	CV	MB	JL	YM
MA		-			

every two weeks thereafter for determination of backcharges, if any, to the subcontractors. As always, the responsible parties may be held for liable for all other damages should the failed inspection result in corrective work to other trades or an impact to the overall schedule. Furthermore, if there is no sign of subcontractor cooperation with this initiative over the next week, PACB may determine to further supplement your quality control process at your expense. In this way, PACB will ensure that the accountability for the success of the quality control process is primarily with our subcontractors; this is the intent of the written subcontract agreements.

I trust that you share my determination that the quality and completeness of the workmanship will improve to an

Respectfully,

Adam Tveras Project Manager

Mr. Glen Chen-See

Mr. Leonard Coggins

Mr. Doug Creel

Mr. Manny hijz

Mr. Danny Parmenter

Mr. Luiz Simon

Mr. Luc Theberge

Mr. Jorge Urrutia

A Joint Venture of Odebrecht Construction, Inc., The Haskell Company, Ellis-Don Construction Inc.

Total number of pages (including attachments): 2