

# Frequently Forgotten & Excluded (FF&E)

## Equipping Your Facility

*Athletic Business Conference  
December 4, 2003  
Orlando, FL*



# INTRODUCTION

- Meet the Presenters
  - Brad Noyes - Vice President
    - *Trained Architect*
    - *30+ Sports/Recreation Projects*
    - *Extensive Procurement/Project Management Experience*
  - Ann Drummie - Associate
    - *Trained Engineer*
    - *6+ Sports/Recreation Projects*
    - *Recently Procured over \$2M of FF&E items*



# FF&E

## What is Furniture, Fixtures & Equipment?

- What would fall out if you picked up the building, turned it upside down and shook it
- Loose items totaling up to an additional 5% over the hard costs of construction
- Items that are critical to the facility's functional success, and primarily the Owner's responsibility
- Dizzying variety of items, in an industry with new features and upgrades announced regularly
- Always some item needs research or selection or coordination, from the day the design begins to after the doors have opened





# OBJECTIVES

- Learn How to Develop a Preliminary Equipment Budget During the Feasibility Phase
- Learn How to Reconcile a Detailed Equipment List and Budget during Project Design
- Understand How to Manage the Logistics of Specification and Purchasing during Construction



# TOPIC AREAS

1. Budgeting during Feasibility
2. Coordination Issues during Design
3. Determination of Items in Construction Contract
4. RFP process for Specialty Contracts
5. Bid Process and Specification for Key Items
6. Management of Discretionary Funds
7. Committee Input and Consensus Building



# 1. Budgeting During Feasibility

- List by room with desired types and quantities
- Provide estimated costs for each item including delivery, installation, and training (can start with allowances)
- Tally an initial estimate to put in project's development budget
- Build a tracking model to use throughout the project
  - Review if existing items can be refurbished or traded-in
  - Flag high priority items
  - Flag items to be in the construction contract price
  - Log quotes vs. actual expenses





# 1. Budgeting During Feasibility

Space Location	Budget Category	Item Description	Reuse? CFCI?	Quantity New	Unit Cost	Estimated Cost	Suggested Vendor(s)
<i>Gymnasium</i>							
	F	Team Chairs with cushion		42	\$100	\$4,200	Specialized Seating, Varsity Image, Jay
	F	Press and Score Table (9' no rotate Ad space)		1	\$2,500	\$2,500	Specialized Seating, Varsity Image, Jay
	E	Volleyball Stands		4	\$1,700	\$6,800	Sports Imports, CenterLine, Schelde
	E	Volleyball Official Stands with Pads		2	\$1,000	\$2,000	Sports Imports, CenterLine, Schelde
	E	Portable Backboards, Pairs		0	\$7,500	\$0	BPI, HydraRib or equiv.
	E	Main Scoreboard (Installed)	CFCI (2)	0	\$5,500	\$0	Daktronics or equiv.
	E	Secondary Scoreboards (Installed)	CFCI (2)	0	\$4,500	\$0	Daktronics or equiv.
	E	Shot clock	CFCI (4)	0	\$150	\$0	Daktronics or equiv.
	E	Portable Bleacher		6	\$1,500	\$9,000	
	AV	Sound System		1	\$28,000	\$28,000	AV subcontract
	A	Banners/Flags		16	\$500	\$8,000	
	E	Divider Curtain, Electrically Operated	CFCI (1)	1	\$12,000	\$12,000	AlphaProFab, Steelco, Jaypro, Aalco
	E	Divider Curtain, Installation	CFCI (1)	1	\$3,250	\$3,250	
	E	Wallpads		6	\$1,250	\$7,500	
	E	Movable Floor Covering		2	\$10,000	\$20,000	Covermaster, Putterman, Coversport
		<b>Subtotal</b>				<b>\$111,475</b>	
		<b>percentage of total</b>				<b>9.59%</b>	
<i>Jogging Track</i>							
	F	Tackboard		1	\$150	\$150	
	E	Sweep Clock		1	\$250	\$250	Keifer, Brock, Recreonics
		<b>Subtotal</b>				<b>\$400</b>	
		<b>percentage of total</b>				<b>0.03%</b>	
<i>Weight &amp; Fitness Room</i>							
	E	Selectorized Biangular Chest Press		1	\$3,249	\$3,249	Magnum, Freemotion, LifeFitness, Ica
	E	Selectorized Pec/Fly Rear Delt		1	\$2,899	\$2,899	Magnum, Freemotion, LifeFitness, Ica
	E	Selectorized Biangular Shoulder Press		2	\$3,249	\$6,498	Magnum, Freemotion, LifeFitness, Ica
	E	Selectorized Lat Pulldown		1	\$2,399	\$2,399	Magnum, Freemotion, LifeFitness, Ica
	E	Selectorized Assist Chin/Dip		1	\$2,699	\$2,699	Magnum, Freemotion, LifeFitness, Ica
	E	Selectorized Biangular Lat Row		2	\$3,249	\$6,498	Magnum, Freemotion, LifeFitness, Ica



# 1. Budgeting During Feasibility

ABC UNIVERSITY

## FITNESS & HEALTH CENTER

Development Budget

Development Budget

12/04/03

Full Scenario: with aquatics, health and counselling

<b>Hard Costs</b>	
1	Site Acquisition \$0
2	Construction Contract
	A. Enclosed Building \$13,891,100
	B. Demolition, Excavation & Site Preparation \$587,000
	C. Site Utilities & Infrastructure \$500,000
	D. Parking \$0
	E. Landscape Allowance \$75,000
3	<b>Furniture, Fixtures &amp; Equipment \$630,000</b>
4	Inflation Allowance \$960,000
	<b>Subtotal - Hard Costs \$16,643,100</b>
<b>Soft Costs</b>	
5	Architectural & Engineering Fees \$1,216,000
6	Additional Architectural & Engineering Services \$122,000
7	Testing Fees, Surveys , Etc. \$80,000
8	Local Fees & Permits \$50,000
9	Start-Up Expenses (Pre-Opening salaries & marketing, etc.) \$400,000
10	Direct Project Expenses \$50,000
11	Project Contingency \$928,000
12	Construction Period Interest \$860,000
13	Project Management \$780,000
14	Operating Reserve \$0
15	Debt Issuance Fees \$634,000
16	Credit Insurance \$435,000
	<b>Subtotal - Soft Costs \$5,555,000</b>
	<b>Total Project Costs \$22,198,100</b>





## 2. Coordination Issues Memo

- Create a written record
- Distribute to all key project participants
- Solidify budget by resolving potential scope overlap
- Maximize value/control for each item
- Establish and coordinate responsibilities
  - Owner
  - Architect
  - Engineers
  - Contractor



## 2. Coordination Issues Memo

- Cover all items and discuss by category
- Identify items that can be grouped together for procurement
- Coordinate any needs for connections
  - **electricity, water, gas, ventilation, drainage, clearance, doors**
- Provide guidance on preferences and functional needs
- Consider level of integration required with Contractor



# 2. Coordination Issues Memo

## Training Suite

As the training room is susceptible to spills and possibly flooding and general moisture, it is expected that all receptacles in the space will be ground-faulted.

The **extremity whirlpool** will have the same power options (110V/220V/230V). It is a mobile unit and will be filled from any available water source, and will be drained to any available floor drain or sink.

Another general piece of equipment likely to be used in the training room, is a **muscle stimulator/ultrasound machine**. It simply needs access to standard power, but preferably at counter height as it will likely live on a utility cart. Similarly, an **hydroculator** will be in the room. It will move around on its own wheels, but will normally be plugged in near the treatment tables. General information about these appliances is given in attached cutsheets.

There will be a **flake ice machine** in the training room, and a **cube ice machine** on the lower level (for easier access to the field). Depending on the make and model and tightness of the space, ventilation should be considered to avoid a condensation problem. A possible vendor is Scotsman, requiring 115V for their machines per the attached cutsheets. Each should be proximate to a floor drain. Please consult cutsheets for any detailed information on required water supply.

## Equipment/Laundry/Storage/Store

The Laundry room should be designed to accommodate two (2) 75lb washer/extractors and four (4) 75lb dryers, however only one of each will likely be installed upon initial occupancy. A sample vendor would be Continental, though others would be Speedqueen, or Wascomat. Only the smallest machines (50lb) can fit through a 3' door, so we would request that access to the laundry room have doors that are all larger than 3' to allow the school the flexibility in selecting machines.





# 3. Items in Construction Contract

Best candidates for “In Contract” vs. “N.I.C.”:

- Very standard and therefore straight forward to select
- Bulky and will need coordinated storage/staging prior to fixed installation (**lockers, retractable bleachers**)
- Attach directly to the structure with method and time best fully managed by the Contractor (**divider curtains, fixed backboards, volleyball sleeves**)
- Best installed by related construction subcontractor (**lane lines, backstroke pennants, starting platforms**)
- Schedule considerations dictate the best approach







# 3. Items in Construction Contract

## Issues with “In Contract”:

- Need to be identified as “in” before drawings and specifications are complete and clear in contract
- Selection of vendor, model, color etc. will be handled through the submittal process
- Will have Contractor overhead and tax status added to material and labor costs
- Owner will need to respond to Contractor’s arrangements for any training
- Owner has less control and schedule flexibility





# 3. Items in Construction Contract

What about Owner Furnished but Contractor Installed?

- Avoid Contractor overhead and taxes, but keep labor
- Generate direct contact with local providers initiating long term relationship for regular servicing
- Need to be identified before construction contract is signed
- Owner will need to keep up-to-date on Contractor's schedule to arrange effective delivery dates
  - washer-extractor, dryer-tumbler, swimsuit spinner, ice machine, hydrotherapy whirlpool



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CENTER IS  
BUILDED UPON  
THE LEADERSHIP  
LABOR AND  
LOVE OF THE  
NCS BOARD OF  
GOVERNORS  
1998-2002



RT. REV. RONALD H. HAINES  
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RICHARD W. SNOWDON III

MARLANNE STEINER

PATRICIA TALBERT SMITH '77

ELVIRA McMILLAN TATE '61

PAUL M. THOMAS

D. DODGE THOMPSON

EARL D. TRENT, JR.

SALLY SPENCER WALLACE

JULIA RYAN WILLS '54

PENNY MORIARTY WORK '72





# 3. Items in Construction Contract

So everything else Owner Furnished, Owner Installed?

- Either Owner resources installing, or Owner's arranged installers
- Apply tax exempt status and absorb administration costs of managing the full procurement process
- Consider different categories of OFOI items:
  - **Specialty contracts**
  - **Bid process for long lead items / high priority items**
  - **Discretionary fund items**
- Consensus building





# 4. RFP Process: Specialty Contracts

- Require design, but fall outside standard architectural services
- Issue an RFQ/RFP to identify firm best suited to the unique needs (experience with similar facilities is critical; check references)
- Signed contract for design-installation services, terms for deposit/payments, permit process, and schedule
- Identify selected firm prior to drawings and specifications being complete, for coordination input
- Owner responsible for coordinating schedule compatible with Contractor's critical path
  - audio-visual systems, climbing wall, climbing wall landing surface, security systems, telecommunications







# 5. Bid Process and Specification

- Recognize critical to success and long delivery times once ordered
- Research public institution bidding requirements
- Require some forethought to room layout and aesthetics
- Identify vendors and review quotes early in construction
- Issue purchase orders indicating
  - quantities, models, colors, fabrics, guaranteed delivery date etc.
- Pursue complimentary warehousing for schedule flexibility
- Investigate existing relationships with distributors, but can also get referrals, web research, and trade shows
  - artwork, office/lobby furniture, sports medicine equipment, weight & fitness equipment, wrestling mats







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**BRAILSFORD & DUNLAVEY**  
Facility Planning • Project Management



# 6. Discretionary Budgets

- Build sense of ownership in the facility by setting small discretionary budgets for particular users to manage
- Establish protocol for final selection and issuance of purchase order requirements
- User items
  - appliances, plants, portable bleachers, portable stage, AEDs, resistance balls, volleyball stanchions and nets
- Office items
  - photocopiers, computers, fax machines, telephones, payphones, vending machines
- Maintenance items
  - toilet accessories, man lift, floor scrubber, general trashcans, laundry baskets, shelving









# 7. Consensus Building

- Recognize items create identity and compliment the design
- Consult your Architect for recommendations
- Keep continuity of committee that reviews items
- Manage delivery for the tight window between occupancy and grand opening
- Involve the end users so that items are the best fit
  - room signage, donor recognition, banners, team chairs, tackboards, public area trashcans



# BUDGET TRACKING

Space Location	Item Description	Quantity	Unit Cost	Estimated Cost	PO #	PO Date	PO Amount	Buy-Out Differential	Addnl Budget	Approved Model/Item Number
<i>Training Suite</i>										
	Office furniture		budget subtotal	\$4,400	1170-02	4-Feb-03	\$3,589	-\$811		KI
	Small Freezer	1	\$1,000	\$1,000	STC	21-May-03	\$400	-\$600		
	Small Refrigerator	1	\$1,000	\$1,000	STC	21-May-03	\$300	-\$700		
	90 Gallon Stationary Whirlpool	2	\$2,500	\$5,000	1170-13	18-Mar-03	\$4,518	-\$482		
	Hydrotherapy Tables/Benches	2	\$850	\$1,700	1170-13	18-Mar-03	\$1,739	\$39		
	25 gallon extremity whirlpool	not in original budget			1170-13	18-Mar-03	\$1,949		\$1,949	
	Muscle Stimulator	1	\$3,700	\$3,700	1170-13	18-Mar-03	\$2,974	-\$726		
	Hydroculator (6 pack)	1	\$1,000	\$1,000	1170-13	18-Mar-03	\$809	-\$191		
	Ice Machine - one flakes, one cube	2	\$3,000	\$6,000	1170-13	18-Mar-03	\$5,708	-\$292		
	Treatment Tables	2	\$850	\$1,700	1170-13	18-Mar-03	\$838	-\$862		
	UB Ergometer	1	\$2,200	\$2,200	1170-08	5-Mar-03	\$3,345	\$1,145		SciFit
	<b>Subtotal</b>								<b>\$26,169</b>	
	<b>percentage of total</b>								<b>4.47%</b>	
<i>Competition Gymnasium</i>										
	Volleyball Stands	3	\$1,700	\$5,100	1170-06	21-Feb-03	\$4,132	-\$968		Schelde
	Volleyball Stand Pads	3	\$600	\$1,800	1170-06	21-Feb-03	\$1,332	-\$468		Schelde
	Volleyball Official Stands with Pads	1	\$1,000	\$1,000	1170-06	21-Feb-03	\$919	-\$81		Schelde
	Volleyball Nets	3	\$250	\$750	1170-06	21-Feb-03	\$635	-\$115		Schelde
	Volleyball Antennas	3	\$100	\$300	1170-06	21-Feb-03	\$85	-\$215		Schelde
	Volleyball and Badminton Freight	1	\$0	\$0	1170-06	21-Feb-03	\$359	\$359		Recreation Plus
	Volleyball Stand Cart	not in original budget			1170-06	21-Feb-03	\$834		\$834	Schelde
	Badminton Upright (pair)	not in original budget			1170-06	21-Feb-03	\$507		\$507	Schelde
	Badminton Net	not in original budget			1170-06	21-Feb-03	\$254		\$254	Schelde
	Portable Backboards, Pairs	2	\$7,000	\$14,000	invoice	17-May-02	\$15,123	\$1,123		BPI
	Main Scoreboard (Installed)	1	\$5,500	\$5,500	1170-11	18-Mar-03	\$5,253	-\$247		Daktronics
	Secondary Scoreboards (Installed)	3	\$4,000	\$12,000	1170-11	18-Mar-03	\$12,839	\$839		Daktronics
	Sound System	1	\$11,750	\$11,750	contract	AVW	\$11,936	\$186		AVW
	Banners/Flags	8	\$500	\$4,000	1170-12	18-Mar-03	\$3,660	-\$340		
	Divider Curtain, Electrically Operate	2	\$10,000	\$20,000	1170-01	17-Dec-02	\$14,802	-\$5,198		Draper
	Divider Curtain, Installation	included above			1170-14	15-Apr-03	\$2,600	\$2,600		ReRun
	Movable Floor Covering	1	\$20,000	\$20,000	1170-05	19-Feb-03	\$11,804	-\$8,196		Coversport
	<b>Subtotal</b>								<b>\$87,074</b>	
	<b>percentage of total</b>								<b>14.86%</b>	



# TRICKS OF THE TRADE

- Buy in Bulk
- Prioritize Purchasing
- Start Detailed and Stay Detailed
- Take Advantage of Trade Shows and Colleagues
- Start Early and Be Disciplined





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