EXHIBIT NO. _____

DOCKET NO.: 001797-TP

WITNESS:

PARTY: Covad

DESCRIPTION:

1. BellSouth's (Confidential) Responses to Covad's Request for Production of Documents Number 33.

PROFFERING PARTY: Staff

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 001797-TP EXHIBIT NO. 6
COMPANY/ WITNESS: FPSC Staff
DATE: 6-27-28-29

I.D.# Stip-6

12.20.02

DECLASSIFIED

CONFIDENTIAL

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 001797-TP

COVAD'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 33

PROPRIETARY

Requests for Production Item No. 33
Attachment No. 1
Collocation – Supporting Documents

Karen C. Hill 615-646-7449
575 8878

The information provided below, including the price, is generic in nature. It does not provide any information specific to a particular site. We have made several assumptions. Since the terms of adjacent collocation are still being negotiated and we have not provisioned any adjacent collocation arrangements it is hard to tell what will be encountered in real life. The assumptions that have been made are as follows:

Pricing for typical project:

1) The hut/CEV will be located no further than 50 feet away from the building.
2) The distance traversed within the building to connect to BellSouth's power will be no further away than 100 feet.
3) The service provided would handle an additional load of a dehumidifier, electrical receptacles, lighting, sump pump, mechanical cooling etc.
4) A standard collocator equipment layout for 200 square feet was used to calculate the amount of power.
5) Standard conditions were considered. No work within battery rooms, no work around sensitive equipment, no usage of special breakers, etc. were considered.
6) All work would be between the hours of 7:00AM and 5:00PM during weekdays.
7) Any work associated with the CEV/Hut such as building setup, foundations, landscaping, etc. were not considered as they will be provided by the CLEC.
8) The collocators will be provided the same AC power that is available in the central office facility. If the collocator wishes to convert this power to another phase, they will purchase and install the transformer.

The scope of work categories covered by this price would include:

1) Supervision
2) Demolition (Tearing up the Parking Lot, coring the exterior wall, etc.)
3) Mobilization
4) Earth Work and Excavation (Digging the trench)
5) Compaction (Compacting the dirt placed back in the trench)
6) Asphalt (New parking lot paving)
7) Electrical
8) Painting Allowance (Re-stripping the parking lot)

— Plot 2x
— Permits —
— what's contingency fee
— what power is being provided.

Basically, the pricing would break down as follows:

Electrical Work:	17,250.00 (Item Number 7 above)
Other Work:	9,750.00 (All items except Number 7)
Permitting:	1,000.00
Architectural/engineering/project management:	9,000.00
TOTAL:	37,000.00
Contingency:	2,500.00
GRAND TOTAL:	39,500.00

Conversion to cost per linear foot $39,500/150 l.f.= $263 per linear foot

This price can be used for the electrical installation cost for all adjacent collocation arrangements excluding extra-ordinary conditions. This rate is in addition to the recurring cost per amp for power usage.

Extra-ordinary conditions would only include having to add additional electrical capacity. This will be a rare occurrence and these costs need to be recovered on an ICB basis since there is no way to predict the cost or occurrence.

Matl	Source	Cost	
Physical Collocation - 2 Fiber (Singlemode) Cross Connects			
LGX Bay			
Bay Frwk	Network Planning & Support	703.94	
Retainers JR4C9	Network Planning & Support	265.96	
Lightguide Kit (2)	Network Planning & Support	61	
Total Material Price	Network Planning & Support	$1,030.90	
Circuit Capacity	Network Planning & Support	324	
Projected Actual Utilization	Network Planning & Support		
LGX Shelf			
Shelf	Network Planning & Support	248.27	
Coupler Panel (12)	Network Planning & Support	155.76	
SC Coupling (72)	Network Planning & Support	432	
Total Material Price	Network Planning & Support	836.03	
Circuit Capacity	Network Planning & Support	36	
Projected Actual Utilization	Network Planning & Support		
Fiber Cable			
Material Price per foot ($1,114.02	Network Planning & Support	$11.14	
Number Feet	Network Planning & Support	330	Note 3
2 Fiber Circuit capacity per Cable	Network Planning & Support	36	
Projected Actual Utilization	Network Planning & Support	100.00%	
Connector Price per circuit	Network Planning & Support	$26.84	
Cable Rack 5" ED4C685 -72			Note 1
Material Price per foot	Network Planning & Support	$21.24	
Number Feet	Network Planning & Support	330	Note 3
Circuit Capacity	Network Planning & Support	1200	Note 2
Projected Actual Utilization	Network Planning & Support		
Physical Collocation - Fiber POT Bay			
POT Bay			
Material Price	Network Planning & Support	$1,178.38	
Circuit Capacity	Network Planning & Support	156	
Projected Actual Utilization			
POT Bay Shelf e/w locks			
Shelf	Network Planning & Support	273.28	
Coupler Panel (4)	Network Planning & Support	51.92	
SC Coupling (24)	Network Planning & Support	144	
Total Material Price	Network Planning & Support	469.2	
Circuit Capacity	Network Planning & Support	12	
Projected Actual Utilization			

Note 1: 5 " Cable rack material cost
ED4C685-72 G-1 $99.60 (rack)
G-10 $80.60 (horns)
G-66 $8.88 (support detail)
G-106 $17.19 (threaded rod)
$206.27/9.71' = $21.24/ft

Note 2: Assume 24 fiber LGBC OD=.49"
Assume cable pileup to max of 5"
Max cables = 5/.49 X 5/.49 = 100
Circuit Cap = 100 X 12 = 1200

Note 3: Fiber Duct Components/60ft run

10 - 4x4 Straight Duct 6'	$32.97ea
2 - 4x4 Elbow	$49.31ea
10 - 4x4 Splice	$1.86ea
5 - Support Details	$3.23ea
5 - threaded rod	$17.19ea

Total per 60ft = $549.02
Matl Cost per Foot = $9.15
Fiber Patchcord Capacity from ADC catalog
Assumes 3mm patchcords, 2/ckt

Note 3: Cable length changed from 300 to 330
to match average physical collocation
DS1 cross connect length
(revised 11/6/97)

4

REPLY Dated: 6/10/99 at 15:14
Subject: COST Request on DSX/D4 Contents: 2
Creator: Rhonda E. Vitale /m2,mail2a 404-6506

Item 1

CC: Bill Darwin /m3,mail3a; PHONE=404-529-6588

Item 2

Here is the information that you requested concerning material pricing:

DSX-1 Panels

Lucent		ADC	
80 circuits	$17.96 per circuit	N/A	
90 circuits	$18.26 per circuit	N/A	
84 circuits	$11.90 per circuit	$12.50 per circuit	= 12.20 ~ 1024.8 ÷ .85 = 14.3 (oblig)
56 circuits	$16.35 per circuit	$13.28 per circuit	= 14.815 ~ 727.64

DSX-3 Panels

24 circuit	$170.83 per circuit	$170.83 per circuit	÷ .85 = 200.79 (tilted)

LGX Fiber Termination

Siecor		Lucent	ADC	
72 fibers	$12.50 per fiber	$8.31 per fiber	$9.65 per fiber	= 10.45
72 pre-term	34.68 per fiber	$37.84 per fiber	$36.98 per fiber	→ 36.50
144 pre-term	26.44 per fiber	$37.91 per fiber	N/A	→ 32.14
216 preterm	N/A	N/A	$49.58	→ 47.58

D4 Channel Bank

Lucent		Pulsecom	
7'/3 Banks	$7596.00	7'/4 Banks	$9950.00
9'/5 Banks	$12000.00	9'/5 Banks	$11950.00
11'6"/6 Banks	$15500.00	11'6"/6 Banks	$14950.00
7'/4 Banks	$9900.00	7'/5 Banks	$9950.00
		9'/5 Banks	$11950.00

Coax jumper $0.96 per foot/including connectors
Fiber jumper $0.60 per foot/including connectors 130 ft 78

Please let me know if you need any additional information.

AS PER MIKE HULSEY 10/21/99

RJ48S SMART JACK ADA- RM2011 = 173.00 65% USAGE = 112.45
TELTRAN- 5712 = 164.00 35% USAGE 57.40
$169.85

	A	B	C	E	F	G	H	I	J	K	L	M
1		Adjacent Collocation - Input for DS0, DS1 and DS3 copper cross-connection recurring charge 11/30/99 TEW @ 205-977-0445										
2												
3												
4	Cost	COLLOCATION										
5	#		Inputs	Attachment Ref. #	Supporting Info							
6												
7	H.1.7	Physical Collocation - Cable Support Structure, Per Entrance Cable										
8		Investment per Foot	$33.960	1	5" Rack = $233.49/9.7 ft.= $19.96/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
9		Cable Capacity	30		Note 7							
10		Projected Actual Utilization	50.00%									
11		Average Cable Length	400									
12												
13	H.1.8	Physical Collocation - Power, Per Ampere	$165.800									
14		Monthly Power Usage										
15		Average Monthly Cost per KWH	$0.070		= $.07/month x 48 watts x 24hrs/day x 30days/mo x 1/.85 rect eff x .6666 adj.factr							
16		Watts	48		= $1.8972/Mo							
17		Rectifier Efficiency	85%		The above formula has been modified to include a factor of .66666							
18					This factor is required to calculate commercial power consumption based upon the rating of the DC protection device							
19												
20												
21												
22	H.1.9	Physical Collocation - 2-Wire Cross Connects										
23		Trunk Distributing Frame										
24		Material Price	$4,110.48	2	$3736.80 + 10% ($373.68) for cable rings, designation boards, and other misc. hardware.							
25		Circuit Capacity	12000									
26		Projected Actual Utilization	85.00%									
27		Number Required	2									
28		Connecting Block										
29		Material Price	$29.440	3								
30		Circuit Capacity	100									
31		Projected Actual Utilization	85.00%									
32		Number Required	2									
33		Cable										
34		Material Price per foot	$0.863	4								
35		Number Feet	400									
36		Circuit Capacity	100									
37		Projected Actual Utilization	85.00%									
38		Cable Rack										
39		Material Price per foot	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
40		Number Feet	75									
41		Circuit Capacity	97200		Note;1							
42		Projected Actual Utilization	56.95%									
43												
44	H.1.10	Physical Collocation - 4-Wire Cross Connects										
45		Trunk Distributing Frame										
46		Material Price	$4,110.48	2	$3736.80 + 10% ($373.68) for cable rings, designation boards, and other misc. hardware.							
47		Circuit Capacity	6000									
48		Projected Actual Utilization	85.00%									
49		Number Required	2									
50		Connecting Block										
51		Material Price	$29.440	3								
52		Circuit Capacity	50									
53		Projected Actual Utilization	85.00%									
54		Number Required	2									
55		Cable										
56		Material Price per foot	$0.863	4								

	A	B	C	E	F	G	H	I	J	K	L	M
57		Number Feet	400									
58		Circuit Capacity	50									
59		Projected Actual Utilization	85.00%									
60		Cable Rack										
61		Material Price per foot	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
62		Number Feet	75									
63		Circuit Capacity	48600		Note 1							
64		Projected Actual Utilization	56.95%									
65			PHYSICAL									
66	H.1.11	Physical Collocation - DS1 Cross Connects										
67		DSX-1 Panel Provided by another group			Required for adjacent collocation							
68		Cable										
69		Material Price per foot	$0.634	6								
70		Number Feet	300									
71		Additional Feet if Repeater	600									
72		Circuit Capacity	14									
73		Projected Actual Utilization	90.00%									
74		Percent Repeater Required	5.00%									
75		Cable Rack										
76		Material Price per foot	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
77		Number Feet	100									
78		Additional Feet if Repeater	600									
79		Circuit Capacity	10528		Note 2							
80		Projected Actual Utilization	60.30%									
81		Percent Repeater Required	5.00%									
82		Repeater Bay										
83		Material Price	$455.400									
84		Circuit Capacity	224									
85		Projected Actual Utilization	30.00%									
86		Percent Required	5.00%									
87		Repeater Shelf										
88		Material Price	$276.250									
89		Circuit Capacity	28									
90		Projected Actual Utilization	80.00%									
91		Percent Required	5.00%									
92		Repeater										
93		Material Price	$289.000									
94		Circuit Capacity	1									
95		Projected Actual Utilization	100.00%									
96		Percent Required	5.00%									
97												
98	H.1.12	Physical Collocation - DS3 Cross Connects										
99		DSX-3 Panel Provided by another group			Required for adjacent collocation							
100		Cable										
101		Material Price per foot	$0.488	7 and 8	Note 3							
102		Connector Material Price per cable	$7.760	9 and 10								
103		Number Feet	300									
104		Additional Feet if Repeater	400									
105		Number Cables per Circuit	2									
106		Circuit Capacity	1									
107		Projected Actual Utilization	100.00%									
108		Percent Repeater Required	10.00%									
109		Cable Rack										
110		Material Price per foot	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
111		Number Feet	100									
112		Additional Feet if Repeater	400									
113		Circuit Capacity	3732		Note 4							
114		Projected Actual Utilization	67.00%									
115		Percent Repeater Required	10.00%									
116		Repeater Bay										
117		Material Price	$455.400									
118		Circuit Capacity	80									
119		Projected Actual Utilization	35.00%									
120		Percent Required	10.00%									
121												

J

	A	B	C	E	F	G	H	I	J	K	L	M
182												
183		Note 1: Assume 26Ga 100 Pr 806A cable OD=0.56"										
184		2' 6" Cable rack with max. 10"pileup										
185		Capacity = 30/.56 x 10/0.56 = 54 x 18 = 972 cables										
186		2wire Circuits = 972 x 100 = 97,200										
187		4wire circuits = 972 x 100/2 = 48600										
188												
189		Note 2: Assume 22Ga 616C 28 pair Cable OD = 0.64"										
190		2' 6" Cable rack with max. 10"pileup										
191		Capacity = 30/.64 x 10/.64 = 47 x 15 = 752 cables										
192		DS1 Circuits = 752 x 14 = 10,528										
193												
194		Note 3: DS3 cable pricing. BST standards: use 735A up to 250'. Beyond 250' use 734D. Assume an even distribution of cable lengths from 100' to 455'. 10% beyond 455' require repeaters. 90% less than 455'.										
195		Cables between 100 and 250 = 150/355 =42.3%. Cables between 250 and 455' = 205/355 = 57.7%										
196		735A cable utilization = .423 x 90% = 38%										
197		734D cable utilization = 100% - 38% = 62%										
198		734D = $.550/ft 735A = $.388/ft										
199		$/ft=(.550)x(.62)+(.388)(.38)= $.488/ft										
200												
201		Note 4: from note 3, 38% of DS3 cable is 735A, 62% is 734D										
202		735A OD = .122" , 734D OD = 0.236"										
203		735A cross section = .122 x .122 = .0149 sq. in.										
204		734D cross section = .236 x .236 = .0557 sq. in.										
205		Cabl rack cross section = 30" x 10" = 300 sq in										
206		Let X = total cables; 300 = (.62)(X)(.0557) + (.38)(X)(.0149)										
207		.034534X + .005662X = 300										
208		.040196X = 300										
209		X = 7463										
210		Capacity = 7463/2 = 3732										
211		735A cables = .38 (7463) = 2836										
212		734D cables = .62(7463) = 4627										
213		Assume this same mix for adjacent collocation										
214												
215												
216		~~Note 5: DSO POT Consists of following:~~										
217		~~Qty - 1 universal 7' rack @ $239.46~~										
218		~~Qty – 14 angle mtg bars @ $20.02 ea. = $280.28~~										
219		~~Total POT Bay = $519.74~~										
220												
221		~~Conn. Blk Mall per 25 2-wire ckts.~~										
222		~~Qty - 1 89B mtg blkts @ $.85 ea.~~										
223		~~Qty: 1 66M1 Conn blk @ $5.54 ea.~~										
224		~~Qty 50 C bridging clips @ $.02 ea = $1.00~~										
225		~~Total DSO Conn Blk cost = $6.41~~										
226		~~Note 5 prices quoted from Alltel Supply 11/5/98~~										
227												
228		~~Note 6: DS1 and DS3 POT Bay consists of:~~										
229		~~Qty: 1ED-8C501-50-G1 7ft. Netwk Bay Frame @ $457.80~~										
230		~~Qty: 1 ED-6C157-31-G6 Interconnect Hardware @ $742.38~~										
231		~~Total Bay cost = $1,200.18~~										
232												
233		Note 7: 5" cable rack - length 9' 8.5"										
234		Qty of 1 ED4C685-72 G1 @ $107.20 ea.										
235		Qty of 1 ED4C685-72 G10 @ $86.40 ea.										
236		Total = $19.96/ft.+										
237												

Price Details

Lucent Product ID: ED6C736-30 G-6
Contract No:
Item 1 of 1
Description: DOUBLE SIDED CONV DISTRIBUTING FRA*
Price Effective Date: 02/14/2000

Price Type	Unit Price	Price Multiple / Unit of Measure	Qty Break
Net Price (D)	3857.00	EA	N/A

Delivery Interval: N/A	**Stocked:** No	**Min Order Quantity:** N/A
Order Multiple Qty: N/A	**Source:** Omaha, NE	**Qty/Unit of Measure:** N/A
Merchandise Class: 32221	**Prod Weight:** N/A	**Ship Code:** Shop Mounted

Notes:

Add to my saved product list: Please Select

View product list: Please Select

Create new product list:

Help on this activity Return to price query

~~BOTTOM NAVBAR~~

ADD 10% to BASIC FRAME COST TO COVER MISC. ASSOCIATED HARDWARE SUCH AS WIRE RINGS, DESIGNATION BOARDS, ETC.

$ 3857.00 + 385.70 = $ 4242.70

COLLOCATION KEY & CARD COSTS

Dept = PSM -H7 FT.T

Item		
I. Material costs - Key:		
Material Cost	$3.12	
tage Cost	$3.35	
best (contractor) mark-up ordering charge - future projected cost, based on contract terms*	$2.73	
Total	**$9.20**	
II. Material costs - Card:		
Material Cost per New Security Access Card	$3.10	
Postage Cost per New Security Access Card	$2.97	
Total	**$6.07**	
III. Access Device - Card and key issued per person		
Key Material Cost	$3.12	
Key Postage Cost	$3.35	
Key - Best (contractor) mark-up ordering charge - future projected cost, based on contract terms*	$2.73	
Material Cost per New Security Access Card	$3.10	
Postage Cost per New Security Access Card	$2.97	
The following costs are common to cards and keys:		
Contractor costs:		
Annual contract Labor cost (3.5 people) (**year 2000**)	167,952.20	
1-Siemens and 2.5 Strategic employees (Includes some overtime)		
Annual contract Labor cost (5.0 people) **(year 2001)**	$222,319.52	
1-Siemens and 4 Strategic employees		
Annual Productive Contract Labor Hours per Person = 1960		
BST Headcount:		**Headcount**
JG58 (CURRENT)		**0.5**
JG56 (PROPOSED)		**1.0**

***When keys ordered exceed 22,860 annually, this mark-up applies.**

$ 222 319.52 / 5 =
$ 44,463.90

	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	Q
134	FL	H.1.13	Physical Collocation - 2-Wire POT Bay													
135			POT Bay													
136			Material Price			$850.000	$519.74		Note 5							
137			Circuit Capacity			1296	1400									
138			Projected Actual Utilization			40.00%										
139			Termination Block w/Bridging Clips													
140			Material Price			$7.620	$6.41		Note 5							
141			Circuit Capacity			24	25									
142			Projected Actual Utilization			85.00%										
143																
144	FL	H.1.14	Physical Collocation - 4-Wire POT Bay													
145			POT Bay													
146			Material Price			$850.000	$519.74		Note 5							
147			Circuit Capacity			648	700									
148			Projected Actual Utilization			40.00%										
149			Termination Block wBridging Clips													
150			Material Price			$7.620	$6.41		Note 5							
151			Circuit Capacity			12	12.5									
152			Projected Actual Utilization			85.00%										
153																
154	FL	H.1.15	Physical Collocation - DS1 POT Bay						Note 6							
155			POT Bay													
156			Material Price			$1,000.000	$1,200.18	11 and 12								
157			Circuit Capacity			1008										
158			Projected Actual Utilization			28.40%										
159			POT Bay Shelf													
160			Material Price			$265.340		13								
161			Circuit Capacity			84										
162			Projected Actual Utilization			80.00%										
163			POT Bay Module													
164			Material Price			$35.190		14								
165			Circuit Capacity			4										
166			Projected Actual Utilization			86.70%										
167																
168	FL	H.1.16	Physical Collocation - DS3 POT Bay						Note 6							
169			POT Bay													
170			Material Price			$1,000.000	$1,200.18	11 and 12								
171			Circuit Capacity			384										
172			Projected Actual Utilization			5.94%										
173			POT Bay Shelf													
174			Material Price			$81.400	$198.55	15								
175			Circuit Capacity			32										
176			Projected Actual Utilization			18.00%										
177			POT Bay Module													
178			Material Price			$90.000	$67.75	18								
179			Circuit Capacity			1										
180			Projected Actual Utilization			100.00%										
181																
182																

Matl	Source	Cost	
Physical Collocation - 2 Fiber (Singlemode) Cross Connects			
LGX Bay			
Bay Frwk	Network Planning & Support	703.94	
Retainers JR4C9	Network Planning & Support	265.96	
Lightguide Kit (2)	Network Planning & Support	61	
Total Material Price	Network Planning & Support	$1,030.90	
Circuit Capacity	Network Planning & Support	324	
Projected Actual Utilization	Network Planning & Support	85.00%	
LGX Shelf			LGX shelves will be fully eqp'd for 72 fiber terminations when initially installed
Shelf	Network Planning & Support	248.27	
Coupler Panel (12)	Network Planning & Support	155.76	
SC Coupling (72)	Network Planning & Support	432	
Total Material Price	Network Planning & Support	836.03	
Circuit Capacity	Network Planning & Support	36	
Projected Actual Utilization	Network Planning & Support		
Fiber Cable (2 fiber bldg cable)			
Material Price per foot ($33 38/100)	Network Planning & Support	$0.3338	
Number Feet	Network Planning & Support	315.00	Note 4 Note - add total 15ft for drop ends - 345ft
		105.15	
Projected Actual Utilization	Network Planning & Support		
SC Plug Price (11.80 ea.) 4 per 2-fiber cable	Network Planning & Support	47.20	Note 5
Sub total cable & SC plugs		152.35	
Factory assembly charge (estimated)		20.00	
Total plug eqp'd 2 fiber cable		$172.35	
Cable Rack 5" ED4C685 -72			Note 1
Material Price per foot	Network Planning & Support	$21.24	
Number Feet	Network Planning & Support	300	Note 4
2 fiber Circuit Capacity	Network Planning & Support	771	Note 2
Projected Actual Utilization	Network Planning & Support		
Fiber Cable (4 fiber bldg cable)			
Material Price per foot ($55 96/100)	Network Planning & Support	$0.5596	
Number Feet	Network Planning & Support	315.00	Note 4 Note - add total 15ft for drop ends - 345ft
		176.27	
Projected Actual Utilization	Network Planning & Support		
SC Plug Price (11.80 ea.) 8 per 4-fiber cable	Network Planning & Support	94.40	Note 5
Sub total cable & SC plugs		270.67	
Factory assembly charge (estimated)		40.00	
Total plug eqp'd 4 fiber cable		$310.67	
Cable Rack 5" ED4C685 -72			Note 1
Material Price per foot	Network Planning & Support	$21.24	
Number Feet	Network Planning & Support	300	Note 4
4 fiber Circuit Capacity	Network Planning & Support	730	Note 2
Projected Actual Utilization	Network Planning & Support		
Physical Collocation - Fiber POT Bay			
POT Bay			
Material Price	Network Planning & Support	$1,178.38	
Circuit Capacity	Network Planning & Support	156	
Projected Actual Utilization			
POT Bay Shelf e/w locks			
Shelf (12 ckt, 24 fiber cpacity)	Network Planning & Support	273.28	POT bay shelves will be eqp'd with coupler panels and couplers as req'd based upon service rec
Coupler Panel (1 per 6 fibers, 4 max)	Network Planning & Support	12.98	One coupler panel is required to terminate a 6 fiber cable
SC Coupling (1 per fiber, 24 max)	Network Planning & Support	6.00	Six couplers are required per 6 fiber cable
Projected Actual Utilization			
Excess fiber cable storage shelf	Network Planning & Support	206.18	assume 1 per 24 2-fiber ckts, occupies one of max. 12 POT shelf positions in POT bay
Direct Interconnection Cable Support			
(data provided for computation of cable support cost/linear foot; billing should be based upon installed cable circuit capacity not circuits placed in service)			
DS0			
Cable Rack			
Material Price per foot	Network Planning & Support	$40.46	
Circuit Capacity	Network Planning & Support	97200	
Projected Actual Utilization		use DS0 xconn	
DS1			
Cable Rack			
Material Price per foot	Network Planning & Support	$40.46	

Circuit Capacity	Network Planning & Support	10528	
Projected Actual Utilization		use DS1 xconn	
DS3			
Cable Rack			
Material Price per foot	Network Planning & Support	$40.46	
Circuit Capacity	Network Planning & Support	3732	
Projected Actual Utilization		use DS3 xconn	
FIBER Cable Rack (5 inch)			
Material Price per foot	Network Planning & Support	$21.24	
Circuit Capacity	Network Planning & Support	771	Updated to reflect 2 fiber bldg cable capacity
Projected Actual Utilization		67%	
FIBER Duct			Note 3
Material Price per foot	Network Planning & Support	$9.15	
Circuit Capacity	Network Planning & Support	400	
Projected Actual Utilization		67%	

Note 1: 5 " Cable rack material cost
ED4C685-72 G-1 $99.60 (rack)
G-10 $80.60 (horns)
G-66 $8.88 (support detail)
G-106 $17.19 (threaded rod)
$206.27/9.71' = $21.24/ft

Note 2:
For 2 fiber LGBC OD =.18"
Assume cable pileup to max of 5"
Max cables = 5/.18 X 5/.18 = 771
2 Fiber circuit cap = 771 X 1 = 771

For 4 fiber LGBC OD =.185"
Assume cable pileup to max of 5"
Max cables = 5/.185 X 5/.185 = 730
4 Fiber circuit cap = 730 X 1 = 730

Note 3: Fiber Duct Components/60ft run
10 - 4x4 Straight Duct 6' $32.97ea
2 - 4x4 Elbow $49.31ea
10 - 4x4 Splice $1.86ea
5 - Support Details $3.23ea
5 - threaded rod $17.19ea
Total per 60ft = $549.02
Matl Cost per Foot = $9.15
Fiber Patchcord Capacity from ADC catalog
Assumes 3mm patchcords, 2/ckt

Note 4: Cable length changed to 300 ft.
plus 15ft for avg (7 5 ft drop on both ends)

Note 5: Each fiber within a cable must be eqp'd with an SC plug on each end of the fiber. Assume a 24 fiber cable will be eqp'd with 48 connectors, a 6 fiber cable will be eqp'd with 12 connectors, etc..

6' x 24' CONTROLLED ENVIRONMENT VAULT

ITEM	DESCRIPTION	QTY	UNIT PRICE	EQPT TOTAL	TOTAL INST. MATERIAL	TOTAL INST. LABOR
	DISCHS HDT EQUIPMENT					
1A	HDT IFITL Bay c/w 7 OCS RDSC Code RM6506007	7	$5,246.00	$36,722.00	$3,724.00	$3,430.00
	-48VS Fuse & Alarm Panel (J-C2001L12)	2	$934.00	$1,868.00	$300.00	$280.00
	Alcoa Fujikura Octal Jumpers					
	Bays 1-4, 31 Feet, SC/SC	4	$2,618.00	$10,472.00	N/A	$560.00
	Bays 5-7, 22 Feet, SC/SC	3	$2,569.00	$7,707.00	N/A	$420.00
	Data Cable Set (1 per IFITL Bay)	7	$575.00	$4,025.00	N/A	$490.00
	7 DISCHS HDT BAYS TOTAL			**$60,794.00**	**$4,024.00**	**$5,180.00**
1B	HDT IFITL Bay c/w 7 OCS RDSC Code RM6506007	8	$5,246.00	$41,968.00	$4,256.00	$3,920.00
	-48VS Fuse & Alarm Panel (J-C2001L12)	3	$934.00	$2,802.00	$450.00	$420.00
	Alcoa Fujikura Octal Jumpers					
	Bays 1-4, 31 Feet, SC/SC	4	$2,618.00	$10,472.00	N/A	$560.00
	Bays 5-8, 22 Feet, SC/SC	4	$2,569.00	$10,276.00	N/A	$560.00
	Data Cable Set (1 per IFITL Bay)	8	$575.00	$4,600.00	N/A	$560.00
	8 DISCHS HDT BAYS TOTAL			**$70,118.00**	**$4,706.00**	**$6,020.00**
1C	HDT IFITL Bay c/w 7 OCS RDSC Code RM6506007	9	$5,246.00	$47,214.00	$4,788.00	$4,410.00
	-48VS Fuse & Alarm Panel (J-C2001L12)	3	$934.00	$2,802.00	$450.00	$420.00
	Alcoa Fujikura Octal Jumpers					
	Bays 1-4, 31 Feet, SC/SC	4	$2,618.00	$10,472.00	N/A	$560.00
	Bays 5-9, 22 Feet, SC/SC	5	$2,569.00	$12,845.00	N/A	$700.00
	Data Cable Set (1 per IFITL Bay)	9	$575.00	$5,175.00	N/A	$630.00
	9 DISCHS HDT BAYS TOTAL			**$78,508.00**	**$5,238.00**	**$6,720.00**

6' x 24' CONTROLLED ENVIRONMENT VAULT

ITEM	DESCRIPTION	QTY	UNIT PRICE	EQPT TOTAL	TOTAL INST. MATERIAL	TOTAL INST. LABOR
	POWER TRANSFER SWITCH					
2	200 Amp JuiceBox RJBD200MXRBS	1	$2,046.00	$2,046.00	N/A	Included in Turnkey
	JuiceBox Template (F003488)	1	$121.00	$121.00		
	BASIC STRUCTURE					
3A	Oldcastle 6' X 24' CEV	1	$46,506.00	$46,506.00	N/A	N/A
3B	Capital Concrete 6' x 24' CEV	1	$42,635.00	$42,635.00	N/A	N/A
	DISTRIBUTING FRAME					
4	800 Frame	5	$500.00	$2,500.00	N/A	$175.00
	100 Pr. Cross Connect Block	27	$98.00	$2,646.00	Included w/ frame	Included w/ frame
	DS-1 CROSS CONNECT					
5	DIXI-84 DS-1 DSX Panels	2	$1,127.00	$2,254.00	N/A	$70.00
6	800 Frame	2	$500.00	$1,000.00	N/A	$70.00
	56 Pr. Cross Connect Block	8	$98.00	$784.00	Included w/ frame	Included w/ Frame
	MULTIPLEXER					
7A	FLM-150 Multiplexer System	2	$2,459.00	$4,918.00	N/A	$840.00
7B	DDM-2000 Multiplexer System	2	$2,118.00	$4,236.00	N/A	$840.00
	LGX / FIBER MGMT.					
8	Feeder 24F LGX (108319849)	1	$1,230.00	$1,230.00	$296.00	$140.00
9	Dist. 144F LGX (108349390)	5	$4,290.00	$21,450.00	$1,480.00	$700.00
10	CEV Fiber Management System	1	$2,175.00	$2,175.00	N/A	N/A

6' x 24' CONTROLLED ENVIRONMENT VAULT

ITEM	DESCRIPTION	QTY	UNIT PRICE	EQPT TOTAL	TOTAL INST. MATERIAL	TOTAL INST. LABOR
	REPEATER					
11	Wescom STS 3192 System	1	$488.00	$488.00	$40.00	$210.00
	POWER EQUIPMENT					
12	Power Plant	1	$19,720.00	$19,720.00	$300.00	$420.00
13	Battery Stands (PM0125-4CB)	2	$3,793.00	$7,586.00	$600.00	$1,400.00
	Batteries FIAMM (FL0125BE 125 AH)	16	$1,749.00	$27,984.00	Installed in field	Installed in field
	MISC. EQUIPMENT					
14	Iron Work & Cable Rack	1	$2,400.00	$2,400.00	N/A	$3,500.00
	Ground System	1	$1,200.00	$1,200.00	N/A	$700.00
	Fiber Ducting System	1	$4,100.00	$4,100.00	N/A	$1,400.00
	Pwr. Harness for PC Data & Video	1	$100.00	$100.00	N/A	$70.00
	MISC. FUSE PANEL					
15	Misc. Fuse Panel	2	$768.00	$1,536.00	$120.00	$210.00
	MISC. EQUIPMENT RACK					
16	Misc. Equipment Rack	5	$168.00	$840.00	N/A	$700.00
	ALARM CROSS CONNECT SYSTEM					
17	Alarm Cross Connect Panel	2	$120.00	$240.00	N/A	$420.00
	PROTECTION					
18	Protection Frame Assembly	1	$2,226.00	$2,226.00	N/A	$210.00
	307C2-100 Protection Block	14	$715.00	$10,010	$1,176.00	$1,715.00

Scope of Turnkey Installation

- Project management.
- Test bores and soil investigation report.
- Excavation of site.
- Compacted stone base.
- Provide, install and connect ground ring consisting of #2 bare copper conductor cad-welded to 8' copper ground rods spaced approximately 8' - 10' apart.
- Crane Services and placement of CEV.
- Concrete slurry (CDF) backfill.
- Dry well.
- Basic site restoration.
- Connect commercial AC from meter to CEV.
- Connect environmental alarms.
- Installation of batteries, DC power turn-up and adjustment, and brief orientation session on DC power system.

Proposal Assumptions

- All easements, leases, zoning variances and special permits beyond normal excavation permits shall be secured by customer.
- Site is clear and free of obstructions.
- Pricing does not include charges associated with the relocation of overhead and/or underground utilities.
- Assumes that traffic control is not required.
- Assumes sufficient lead times for construction start.
- Site is accessible by cranes, boom trucks and concrete trucks under their own power.
- MARCONI Communications shall not be liable for testing, handling or disposal of contaminated or hazardous materials.
- Free and unobstructed access to site during normal business hours.
- Pricing does not include driveway construction, landscaping or custom site preparation such as walls, fences and landscape timbers.
- Assumes a non-union work environment.
- Commercial AC is available at site within 25' of AC service entrance.
- Soil investigation report does not indicate special foundation or installation requirements.
- MARCONI, Network Solutions Group shall be responsible for arranging for commercial AC and coordinating with local Power Company for final inspection and connection.
- Any deviation from the previously mentioned Scope of Work shall result in a pricing increase.
- Any downtime beyond the control of MARCONI, Network Solutions group shall result in a charge that shall be billed hourly in accordance with the work being performed.
- All work to be performed shall be completed in such a sequence as to ensure that a continuous work environment shall be utilized until final acceptance of the project. Failure to comply could result in a pricing increase.
- Pricing does not include any blasting of hard soil and assumes that ground condition shall be deemed as normal and will not require any additional pricing.
- Pricing does not include any pricing for the excavation in or through any environmentally protected areas.
- Pricing assumes that well pointing shall not be utilized.
- Additional Mobilization fee will apply if less than 2 sites are awarded in any of the aforementioned BellSouth regions
- Hoisting pricing will be set at up to 4 hours. Additional charges may be incurred for more time due to varying site conditions.

- Pricing for AC connection shall be for one 200A power transfer switch.
- Pricing for AC connection does not provide for any type of special licensing fees.
- Engineering shall consist of "As Built" of the site installed.

1A

Ordering Guide
June, 1999

MESA 6 Models

CUSTOMER: BELLSOUTH TELECOMMUNICATIONS, INC.

BASE MODEL CODE: XRM6200

CONFIGURATION: MESA 6 Remote Terminal Cabinet Equipped with Three (3) DISC★S Common Shelves, One (1) DDM 2000 Mux Shelf, Zero (0) STS 3192 Repeater Shelves, (1) DIXI Panel, and wired for (21) Copper Channel Shelves.

ITEM	BASE MODEL HARDWARE	PRODUCT CODE	QTY
1.0	**MESA Cabinet Assy consist of:**	**JC0402L1**	**1**
1.1	MESA Cabinet	F003196	1
1.2	Fuse & Alarm Panel	4100892L3	3
1.3	Common Shelf	4100891L2	3
1.4	Modular Power Shelf	72-07-954	1
1.5	DC Distribution Panel	73-16-598	1
1.6	Marconi 325 Protector Block (2300pr)		1
1.7	Alarm Cross Connect Panel	45-508-49	1
1.8	Battery Termination Panel	73-16-599	1
2.0	**DDM-2000 Wired for 84 DS1s**	**JC0402L19**	**1**
2.1	DDM-2000 MUX Shelf Kit: CABDDMKIT PID: 665950820		1
2.2	DDM-2000 2C Fan Unit		1
3.0	**DIXI Panel KIT: CABDIXIPANEL**	**JC0402L12C**	**1**
3.1	DIXI Panel PID: 410970149		1
4.0	**900 Type DSX**	**JC0402L61** , L60	**1**
	KIT: CAB900DSXM6KIT PID: 409970142		1
4.1	900 Type DSX		1
5.0	**Thermal Runaway Unit**	**JC0402L35**	**1**
5.1	Thermal Runaway Unit		1
6.0	**Ringing Generator Shelf**	**JC0402L18**	**1**
6.1	SFT7 Ring Generator Shelf		
7.0	**MESA 6 Documentation consists of:**		
7.1	MESA 6 Description & Install. Practice	640-250-612C	1
8.0	**6V-160AH Batteries**	**JC0402L32**	**2/3**

ITEM	BASE MODEL PLUG-INS	PRODUCT CODE	QTY
9.0	**Power and Ringing Plug-Ins**		
9.1	Modular Rectifiers	41-308-39	2
9.2	Ringing Generator Modules	487110900	2
10.0	**LIU Test Connector**	**41-008-39**	**2**
11.0	**Adapter Null Modem**	**41-008-46**	**1**

Marconi Communications

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 6

To Wally Elston	From [illegible]
Co.	
Dept.	
Fax # 404-529-5469	

Contains

19

RDSC Code		MESA 6 REMOTE TERMINAL CABINET EQUIPPED WITH THREE (3) DISC*S COMMON SHELVES; ONE (1) DDM 2000 MUX SHELF; (0) STS 3192 REPEATER SHELVES, (1) DIXI PANEL, AND WIRED FOR (21) COPPER CHANNEL SHELVES.						
Base Model	Sub-Model						Marconi Total Price	BellSouth Total Price
XPID Number		Qty.	Product Description	Product Code	Item Designator	PID NO.	Sub -Price	
XRM6200D	0000	1	Base Model Hardware	*				
X0005378		0	RDT (Copper) RT Channel Shelf	JCO402L15				
		0	HDT (FITL) RT Channel Shelf	JCO402L14				
		2	(8) 6V-160AH Batteries	JCO402L32	RM62000000H	759970510	$37,458	
		1	Base Model Plug-Ins	*				
		2	Modular Rectifier	41-308-39				
		0	Ringing Generator Module SFT 7	487110900				
		1	Adapter Null Modem	41-008-46				
		2	LIU Test Connector	41-008-39	RM62000000P	739970507	$4,810	$42,268
		1	Other Vendors Equipment	*	CAB900DSXM6KIT	409970142		
		1		*	CABDIXIPANEL	410970149		
		1		*	CABDDMKIT	665950820		
		*	**BellSouth Total**	*				$42,268
XRM6200D	0300	1	Base Model Hardware	*				
X0005177		3	RDT (Copper) RT Channel Shelf	JCO402L15				
		0	HDT (FITL) RT Channel Shelf	JCO402L14				
		2	(8) 6V-160AH Batteries	JCO402L32	RM62000300H	369943618	$37,292	
		1	Base Model Plug-Ins	*				
		2	Modular Rectifier	41-308-39				
		2	Ringing Generator Module SFT 7	487110900				
		1	Adapter Null Modem	41-008-46				
		2	LIU Test Connector	41-008-39	RM62000300P	411943624	$6,160	$43,452
		1	Other Vendors Equipment	*	CAB900DSXM6KIT	409970142		
		1			CABDIXIPANEL	410970149		
		1			CABDDMKIT	665950820		
		*	**BellSouth Total**	*				$43,452

H.1.6

Yr	ST	GLC	Location	Sq. Ft.	Cost	City Cost Index	National Cost	Comments
			ALABAMA					
99	AL	11616	Cahaba Heights - CO Additon	10300	$1,780,000	0.871	$2,043,628	
00	AL	11734	Hanceville - CO Addition	2000	$370,000	0.871	$424,799	
99	AL	11831	Huntsville Madison - CO Addition	3800	$730,000	0.827	$882,709	
00	AL	11813	Huntsville University CO Addition	6000	$1,300,000	0.827	$1,571,947	
99	AL	12340	Mobile Bay Front - CO Addition	1136	$445,000	0.834	$533,573	
			TOTAL:	23236	$4,625,000		$5,456,656	
			National Avg Cost/sq.ft.:	$234.84				
			Alabama Avg. Cost Index:	0.8252				
			Investment/sq.ft.:	$193.79				
			AVG. COST /SQ. FT.:	$199.04				
			Florida					
99	FL	31538	Chipley - CO Addition	2800	$561,000	0.796	$704,774	
00	FL	32273	Gainesville NW - CO 2nd Floor Add.	4000	$1,600,000	0.841	$1,902,497	
00	FL	M6506	Golden Glades CO Addition	10500	$5,100,000	0.866	$5,889,145	
00	FL	31241	Jacksonville Beachwood - CO Addn.	1792	$1,400,000	0.841	$1,664,685	
00	FL	39280	Lake Mary CO Addition	3100	$1,725,000	0.861	$2,003,484	
00	FL	31040	Mandarin - CO Addition	6148	$1,450,000	0.841	$1,724,138	
00	FL	31848	Oveido - CO Addition	2560	$1,255,000	0.861	$1,457,607	
00	FL	E8660	Port St. Lucie CO Addition	3200	$2,175,000	0.883	$2,463,194	
99	FL	E8838	Royal Palms - CO Addition	5308	$136,000	0.869	$156,502	
99	FL	E8636	Vero Beach - CO Addition	3158	$1,350,000	0.883	$1,528,879	
00	FL	E8519	WPBH Gardens - CO 2nd Floor Add.	20754	$8,601,000	0.869	$9,897,583	
			TOTAL:	63320	$25,353,000		$29,392,489	
			National Avg Cost/sq.ft.:	$464.19				
			Florida Avg. Cost Index:	0.8413				
			Investment/sq.ft.:	$390.52				
			AVG. COST /SQ. FT.:	$400.39				
			Georgia					
00	GA	F5602	Buford, 2000	5966	$1,728,000	0.884	$1,954,751	Bids in, ready to start const.
00	GA	R3930	Villa Rica,2000	4075	$2,125,000	0.884	$2,403,846	Under construction
00	GA	F1440	Fayetteville - CO Addition, 2000	9600	$3,781,000	0.884	$4,277,149	Under construction
00	GA	F1437	Peachtree City CO Addition, 2000	9600	$2,024,000	0.884	$2,289,593	Bids in, ready to start const.
00	GA	F1356	Powder Springs - CO Addition, 2000	4275	$1,310,000	0.884	$1,481,900	Bids in, ready to start const.
99	GA	F5352	Powers Ferry, 1999&2000	26970	$5,350,000	0.884	$6,052,036	Under construction
99	GA	R3907	Tallapoosa - CO Addition, 1999	987	$288,000	0.884	$325,792	Completed, Actual Costs
99	GA	R2164	Gay - CO Addition, 1999	567	$195,000	0.884	$220,588	Completed, Actual Costs
98	GA		Norcross CO, 1998	17880	$1,955,485	0.884	$2,212,087	Completed, Actual Costs
98	GA		Woodstock CO, 1998	6400	$1,897,000	0.884	$2,145,928	Completed, Actual Costs
98	GA		Dunwoody CO, 1998	16390	$3,003,520	0.884	$3,397,647	Completed, Actual Costs
			TOTAL	102710	$23,657,005		$26,761,318	
			National Avg Cost/sq.ft.:	$260.55		Including Planning data		
			Georgia Avg. Cost Index:	0.813		Including Planning data		
			Investment/sq.ft.:	$211.83				
			AVG. COST /SQ. FT.:	$230.33				
			Kentucky					
99	KY	52470	Garden Village - CO Addition	448	$166,000	0.854	$194,379	
99	KY	52724	S. Williamson - CO Addition	384	$181,000	0.854	$211,944	
				832	$347,000		$406,323	
			National Avg Cost/sq.ft.:	$488.37				
			Kentucky Avg. Cost Index:	0.8895				
			Investment/sq.ft.:	$434.40				
			AVG. COST /SQ. FT.:	$417.07				
			Louisianna					
		K3266	Denham Springs CO - Addition & HVAC	1600	$340,000	0.828	$410,628	
		K4567	Shreveport College - Addition & HVAC	3200	$990,000	0.805	$1,229,814	
				4800	$1,330,000		$1,640,442	
			National Avg Cost/sq.ft.:	$341.76				
			Louisianna Avg. Cost Index:	0.8176				
			Investment/sq.ft.:	$279.42				
			AVG. COST /SQ. FT.:	$277.08				
			Mississippi					
00	MS	72126	Brandon CO Add (Jackson Rankin)	2500	$680,000	0.79	$860,759	
00	MS	75171	Iuka C.O. - Building Addition	1600	$560,000	0.768	$729,167	
				4100	$1,240,000		$1,589,926	
			National Avg Cost/sq.ft.:	$387.79				
			Mississippi Avg. Cost Index:	0.79				
			Investment/sq.ft.:	$306.35				
			AVG. COST /SQ. FT.:	$302.44				

STATE	AVG COST PER SQUARE FOOT	WEIGHTING	ADJUSTED AVG COST
Alabama	$110	0.094	$10.34
Florida	$198	0.306	$60.57
Georgia	$69	0.133	$9.18
Kentucky	$33	0.032	$1.05
Louisiana	$105	0.092	$9.62
Mississippi	$11	0.024	$0.26
North Carolina	$116	0.133	$15.42
South Carolina	$136	0.067	$9.15
Tennessee	$46	0.119	$5.51
	$92		**$121.11**

Note: Weighting based on number of firm orders received between April and November 1999.

UNIT COSTS:

cage cost set fee	$7,071
barrier wall 1hr cost/ft	$100
barrier wall wire cost/ft	$60
card reader	$14,237
card reader - pad only	$2,640

Data Points =	123
FOs 4/1-8/31/99	594
Percentage =	21%

Note: Many data points represent more than one collocator/firm order, thus percentage above is low.

FL Collocation Flat Fee

PROJECT ID	PROJECT ID & WBS #	# OF CAGES	# OF RACKS	LINEAR FT. BARRIER WALL	COLLOCATION SQ FT	COMMON AREA (SQ FT)	CARD READER	TOTAL COST DESIGN	TOTAL COST CONSTR	ASBESTOS COSTS	TOTAL COST	ADJUSTED TOTAL COST (LESS FIXED RATES)	ADJUSTED COST PER SQUARE FOOT
JCBHFLMA.DLT.01	734808-81291	2	1	21.5	308	887	1	$27,294	$74,565	$1,360	$103,219	$73,550	$82.92
JCVLFLCL.ATX.02	734808-80141	1	0	0	400	520	0	$17,751	$34,209	$0	$51,960	$44,889	$86.33
JCVLFLCL.FDW.03	732822-25751	1	0	0	200	260	0	$20,181	$30,105	$0	$50,286	$43,215	$166.21
ORLDFLCL.FDW.03	734808-80811	1	0	98	200	260	1	$33,571	$31,016	$0	$64,587	$37,399	$143.84
ORLDFLCL.ICF.01	732822-22941	1	0	96	300	399	1	$32,759	$51,734	$0	$84,493	$57,425	$143.92
ORLDFLCL.LVC.01	732822-25741	1	0	263	400	2475	1	$44,572	$124,270	$1,183	$170,025	$132,937	$53.71
ORLDFLMA.FDW.05	732822-25921	1	0	0	200	260	0	$27,431	$54,736	$0	$82,167	$75,096	$288.83
PNVDFLMA.DLT.01	734808-81571	0	1	0	8	225	0	$15,949	$36,463	$0	$52,412	$52,412	$232.94
MIAMFLWM.NVE.02	734808-80101	1		0	100	305	0	$20,389	$40,761	$0	$61,150	$54,079	$177.31
MIAMFLBA.NVE.03	734808-82031	4		0	100	310	0	$18,074	$75,432	$0	$93,506	$65,222	$210.39
MIAMFLBA.FIM.01	734808-80931	1		0	100	300	0	$37,393	$68,407	$0	$105,800	$98,729	$329.10

PROJECT ID	PROJECT ID & WBS #	# OF CAGES	# OF RACKS	LINEAR FT. BARRIER WALL	COLLOCATION SQ FT	COMMON AREA (SQ FT)	CARD READER	TOTAL COST DESIGN	TOTAL COST CONSTR	ASBESTOS COSTS	TOTAL COST	ADJUSTED TOTAL COST (LESS FIXED RATES)	ADJUSTED COST PER SQUARE FOOT
MIAMFLSO.NVE.01	734808-82051	1			115	130	0	$11,881	$25,310	$2,047	$39,238	$32,167	$247.44
MIAMFLSO.FIM.01	734808-81041	4		0	100	130	0	$27,504	$53,943	$0	$81,447	$53,163	$408.95
MIAMFLBR.NVE.01	734808-80181	2		0	400	520	0	$18,062	$94,171	$0	$112,233	$98,091	$188.64
PRRNFLMA.AKJ.07	734808-81741	1		0	100	690	0	$14,452	$135,674	$0	$150,126	$143,055	$207.33
MIAMFLFL.AKJ.02	734808-82201	1		0	100	130	0	$13,459	$14,480	$1,738	$29,677	$22,606	$173.89
MIAMFLBA.AKJ.04	734808-86081	1		0	100	130	0	$17,144	$15,585	$0	$32,729	$25,658	$197.37
MIAMFLAP.OVC.03	734808-81501	1			100	130	0	$13,323	$21,409	$2,076	$36,808	$29,737	$228.75
MIAMFLAP.AKJ.02	734808-81581	1			100	130	0	$11,550	$21,230	$0	$32,780	$25,709	$197.76
MIAMFLAP.ATX.01	734808-80281	1			400	1200	0	$31,177	$121,019	$0	$152,196	$145,125	$120.94
MIAMFLWD.AKJ.02	734808-81651	1			100	130	1	$17,015	$29,624	$0	$46,639	$25,331	$194.85
PRRNFLMA.NVE.03	734808-82021	1			100	130	0	$10,668	$25,154	$0	$35,822	$28,751	$221.16

FL Collocation Flat Fee

PROJECT ID	PROJECT ID & WBS #	# OF CAGES	# OF RACKS	LINEAR FT. BARRIER WALL	COLLOCATION SQ FT	COMMON AREA (SQ FT)	CARD READER	TOTAL COST DESIGN	TOTAL COST CONSTR	ASBESTOS COSTS	TOTAL COST	ADJUSTED TOTAL COST (LESS FIXED RATES)	ADJUSTED COST PER SQUARE FOOT
PRRNFLMA.ATX.01	734808-83271	1			400	520	0	$19,470	$86,020	$0	$105,490	$98,419	$189.27
MIAMFLBR.FIM.01	734808-80921	1			100	1680	1	$36,405	$142,162	$1,042	$179,609	$158,301	$94.23
MIAMFLBC.AKJ.02	734808-81731	1			100	1809	0	$22,725	$195,235	$0	$217,960	$210,889	$116.58
MIAMFLSO.AKJ.05	734808-81841	1			100	130	0	$12,906	$22,402	$0	$35,308	$28,237	$217.21
MIAMFLWM.FIM.03	734808-80631	1			100	305	0	$19,092	$20,712	$0	$39,804	$32,733	$107.32
MIAMFLWM.ACI.04	734808-81961	1			100	305	0	$19,344	$21,217	$0	$40,561	$33,490	$109.80
MIAMFLFL.FIM.02	734808-81641	1			100	130	0	$9,318	$14,083	$0	$23,401	$16,330	$125.62
FTLDFLJA.FIM.06	734808-82081	1		5.5	100	1,640		$14,264	$78,951	$0	$93,215	$85,814	$52.33
PMBHFLCS.OVC.03	732822-25111				100	130		$24,558	$38,614	$3,452	$66,624	$66,624	$512.49
PMBHFLFE.AKJ.03	734808-82221	1			100	130		$12,528	$42,730	$1,208	$56,466	$49,395	$379.96
PMBHFLMA.ATX.02	734808 81011	1			400	1,668		$32,359	$140,133	$0	$172,492	$165,421	$99.17

FL Collocation Flat Fee

PROJECT ID	PROJECT ID & WBS #	# OF CAGES	# OF RACKS	LINEAR FT. BARRIER WALL	COLLOCATION SQ FT	COMMON AREA (SQ FT)	CARD READER	TOTAL COST DESIGN	TOTAL COST CONSTR	ASBESTOS COSTS	TOTAL COST	ADJUSTED TOTAL COST (LESS FIXED RATES)	ADJUSTED COST PER SQUARE FOOT
HLWDFLPE.ATX.01	734808 83101	1			400	520		$19,607	$42,248	$0	$61,855	$54,784	$105.35
HLWDFLPE.AKJ.07	734808 86061	1			100	130		$18,685	$33,833	$0	$52,518	$45,447	$349.59
HLWDFLPE.OVC.04	732822-25101				100	130		$19,124	$27,412	$253	$46,789	$46,789	$359.91
											Average		**$198**

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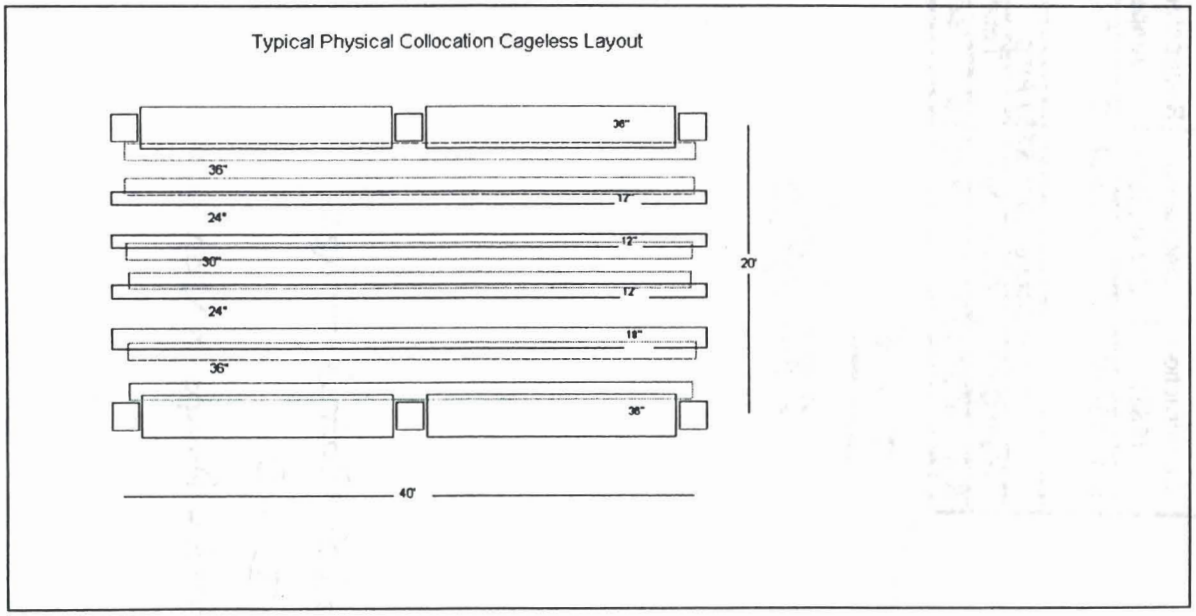
Collocation Space Preparation Standard ICB Rate Worksheet (Network Construction)
Issue 2 - 1/6/00

Driver Description	#	Vendor	First Unit				Subsequent Units				Cageless				Caged or Non-conventional Cageless			
			Engrg Hrs	Labor Hrs	Minor Matl	Avg.	Engrg Hrs	Labor Hrs	Minor Matl	Avg.	Qty FU's	Qty SU's	Total $	$/Sq.Ft.	Qty FU's	Qty SU's	Total $	$/Arrangement
Cable Rack - panned 15" (switchboard)	101																	
		ADC	2	4	365		2	4	365									
		6R	3	3	351.61		0.75	1.75	351.61									
		Lucent	2.05	8	635		0.84	6	635									
			2.35	5.00	450.54	857.69	1.20	3.92	450.54	725.02	12	12	$18,992.52	$23.74	8	0	$6,861.49	$857.69
Cable Rack - nonpanned 15" (power)	102																	
		ADC	2	4	334		2	4	334									
		6R	3	3	338.75		0.75	1.75	338.75									
		Lucent	2.05	8	555		0.84	6	555									
			2.35	5.00	409.25	816.40	1.20	3.92	409.25	683.74	12	12	$18,001.64	$22.50	8	0	$6,531.20	$816.40
Cross-aisle cable rack	104																	
		ADC	2	3	425		2	3	425									
		6R	1.5	1	310.04		0.75	1	310.04									
		Lucent	1.6	4	134		0.84	3	134									
			1.70	2.67	289.68	537.65	1.20	2.33	289.68	486.58	12	9	$10,831.01	$13.54	0	0	$0.00	$0.00
AC - main feed to bay	105																	
		ADC																
		6R	3	4	422.48		0.75	3	422.48									
		Lucent	2	10	483		1	10	483									
			2.50	7.00	452.74	968.24	0.88	6.50	452.74	831.62	5	0	$4,841.20	$6.05	8	0	$7,745.92	$968.24
Auxiliary Supports	107																	
		ADC	1.41	4.4	165		1.41	4.4	165									
		6R	3	1.5	196.34		0.75	1	196.34									
		Lucent	1.5	6	161		0.33	6	161									
			1.97	3.97	174.11	504.41	0.83	3.80	174.11	417.58	4	12	$7,028.64	$8.79			$1,757.16	$219.65
Stanchion	108																	
		ADC	1	2	76		1	2	76									
		6R	3	1.5	94.36		0.75	1	94.36									
		Lucent	0.85	3	164		0.36	3	164									
			1.62	2.17	111.45	329.17	0.70	2.00	111.45	257.98	12	28	$11,173.57	$13.97	2	8	$2,722.21	$340.28
Main Aisle Conduit	109																	
		ADC	1	2.51	450		1	2.51	450									
		6R	3	3	357.42		0.75	2	357.42									
		Lucent	1.65	4	48		0.81	4	48									
			1.88	3.17	285.14	570.42	0.85	2.84	285.14	483.02	2	2	$2,106.87	$2.63	2	2	$2,106.87	$263.36
Main Aisle Ground 2/0	110																	
		ADC	2	4	145		2	4	145									
		6R	3	6	178.66		0.75	3.75	178.66									
		Lucent	1	4	60		0.75	4	60									
			2.00	4.67	124.55	491.22	1.17	3.92	124.55	396.97	1	0	$491.22	$0.61	1	0	$491.22	$61.40
Light Fixture - double tube	114																	
		ADC	1	2	530		1	2	530									
		6R	3	4	714.67		0.75	2	714.67									
		Lucent	1	9	600		0.5	8	600									
			1.67	5.00	614.86	974.86	0.75	3.33	614.86	829.94	6	12	$15,808.42	$19.76	0	0	$0.00	$0.00
Cable hole establishment	115																	
		ADC																
		6R	3	4	1001.5		0.75	4	1001.5									
		Lucent	5	2.51	162		2	2.51	162									
			4.00	3.26	581.75	1017.25	1.38	3.26	581.75	836.12	2	0	$2,034.49	$2.54	2	0	$2,034.49	$254.31
Fiber Duct (Use 50% of driver # 11)	11		0.83	1.71	225	366.06	0.38	1.17	225	307.17	12	30	$13,607.82	$17.01	8	8	$5,385.84	$673.23
Cageless $/Sq. Ft.														$131.15				
Caged or Nonconventional Cageless $/Arrangement																		$4,454.55

Assumptions:
BellSouth expends infrastructure capital immediately to prepare space. BellSouth has no control over utilization of this investment. The investment benefits no other service other than Collocation. Therefore, recovery of infrastructure costs should begin immediately without regard to activation of service.
above. The cost calculations are based upon preliminary "driver" costs provided to Supply Chain Management by three Turf Vendors and a theoretical average arrangement of collocated equipment within this 800 sq. ft.. From these calculations the average EF&I cost/sq.ft. is determined. From the avg. EF&I

To accomplish this for caged or cageless non-conventional collocation the average EF&I space preparation cost to prepare 800 sq. ft. (2 building bays) of collocation space is calculated above. The cost calculations are based upon preliminary EF&I "driver" costs provided to Supply Chain Management by three Turf Vendors and a theoretical average of 8 - 100 sq. ft. arrangements within this 800 sq. ft. area. From these calculations the average EF&I cost/arrangement is determined. From the avg.EF&I cost/arrangement a cost study can determine a recurring rate to apply to every arrangement. All TelCo loadings must be applied to the EF&I cost.

The recurring charge for cross-connects should not be impacted by the standard rate space preparation charge. Cross connects will continue to require utilization of via or main aisle cable support to deliver the service from the collocated equipment to the demarcation point.
It must be emphasised that the above "driver" rates are very preliminary. These drivers are being established to address equipment space preparation. Such drivers do not currently exist, as space preparation for BellSouth equipment space has been recovered by Turf vendors through the MBOS model prices.



Region		
Total Power Plant Construction ($$$)	Total CLEC Dedicated Cable ($$$)	Total CLEC Requested DC Amps
$ 16,154,045	$ 506,867	$ 37,656

Power Construction $$$ / Amp		
Plant Only	Cable Only	Total
$ 429.00	$ 13.46	$ 442.46

÷ 1.5

286 fused

Used ≤ Rated Amps

$P = I \times E$

WATTS = Amps × Volts

Recommended AC power pricing formulas for the recovery of commercial AC power expenses and standby power assets.
These formulas may be used to develop recurring charges when BST supplies AC equipment power to collocated equipment.

The following formulas can be used to compute the monthly cost of providing commercial and standby AC power to a collocated power plant. The costs are based on the electrical service (voltage and phases) and the rating (in Amps) of the electrical protection device used to provide AC power to the collocated power plant.

Commercial AC Formula ($/month/breaker amp)

for 120V, single phase (120/240)

0.07 $/kwh X 8760 h/yr X 0.0833333 yr/mo X 0.001 KW/W X 0.8 W/VA X 120 V/Phase X 1 Phases X 1 Amps X 0.8 (NEC Rule) = 3.92 $/month

for 240V, single phase (120/240)

0.07 $/kwh X 8760 h/yr X 0.0833333 yr/mo X 0.001 KW/W X 0.8 W/VA X 240 V/Phase X 1 Phases X 1 Amps X 0.8 (NEC Rule) = 7.85 $/month

for 120V, three phase (208Y/120)

0.07 $/kwh X 8760 h/yr X 0.0833333 yr/mo X 0.001 KW/W X 0.8 W/VA X 120 V/Phase X 3 Phases X 1 Amps X 0.8 (NEC Rule) = 11.77 $/month

for 277V, three phase (480Y/277 or 480 Delta)

0.07 $/kwh X 8760 h/yr X 0.0833333 yr/mo X 0.001 KW/W X 0.8 W/VA X 277 V/Phase X 3 Phases X 1 Amps X 0.8 (NEC Rule) = 27.18 $/month

Engine Alternator Investment required to provide standy power per AC breaker amp

for 120V, single phase (120/240)

800 $/KW X 0.001 KW/W X 0.8 W/VA X 120 V/Phase X 1 Phases X 0.8 (NEC Rule) = $61.44

for 240V, single phase (120/240)

800 $/KW X 0.001 KW/W X 0.8 W/VA X 240 V/Phase X 1 Phases X 0.8 (NEC Rule) = $122.88

for 120V, three phase (208Y/120)

800 $/KW X 0.001 KW/W X 0.8 W/VA X 120 V/Phase X 3 Phases X 0.8 (NEC Rule) = $184.32

for 277V, three phase (480Y/277 or 480 Delta)

800 $/KW X 0.001 KW/W X 0.8 W/VA X 277 V/Phase X 3 Phases X 0.8 (NEC Rule) = $425.47

The above formulas can be reduced to:

for 120V, single phase - monthly recurring billing =
($3.92 + monthly recurring charge to recover $61.44 standby engine asset) X AC breaker amperage rating

for 240V, single phase - monthly recurring billing =
($7.85 + monthly recurring charge to recover $122.88 standby engine asset) X AC breaker amperage rating

for 120V, three phase - monthly recurring billing =
($11.77 + monthly recurring charge to recover $184.32 standby engine asset) X AC breaker amperage rating

for 277V, three phase - monthly recurring billing =
($27.18 + monthly recurring charge to recover $425.47 standby engine asset) X AC breaker amperage rating

2/9/1999
Spreadsheet developed by Tom Weber, NP&PS, 205-321-8113.
The commercial AC formulas were developed by John Clements, P&SM.
The standby engine investment formlas were developed by Steve Martin, NP&PS.
(Note: the maximum utilization on a standby engine will be approximately 80%.
The regional average utilization of these assets is estimated at approximately 65%)

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H.1.37

Average Card Reader Installation Costs:	
Average card reader installation includes 2 readers.	
ITEM	**COST**
Unit	$7,286
Modem & encryption software	$575
Avg. electrical job	$1,500
POTS line	$300
Total	**$9,661**
Parsons markup @1%	$97
Parsons distributables/loadings @ 13.5%	$1,304
*Host cost	$257
Grand Total	**$11,319**
Notes:	
* Host costs include hardware, software and communications costs.	
Host can support 2,000 - 3000 units.	
Host costs spread over 2000 units	
No taxes included.	

MESSAGE   Dated: 9/30/99 at 10:56
Subject: Cost Accounting Information for Collocation   Contents: 2
Sender: Rusty M. Foster /m3,mail3a

Item 1

TO: Woodson E. Elston /m6,mail6a
CC: Lynetta Baldwin /m6,mail6a; PHONE=205-321-4455
Jerry K. Higgins /m7,mail7a; PHONE=205-321-2673
Karen C. Hill /m2,mail2a; PHONE=615-646-7449
Beth Shiroishi /m4,mail4a; PHONE=404-927-1375

Item 2

Woody,

Listed below is the information you requested:

	Field Reporting Code	RTC	COST
Card Access Hardware	530C(inside data cntr)	533	?
	630C (outside data cntr)	523	$ 69K/ New Syst.
Card Access Software	460C	613	$206K New Syst.
Hardware Mntce	930M	481	$125K/Yr. Extg.

Submitted,

Rusty Foster 205-321-4793

Card Access Software (206K)   Facility

FRC 460C -00

$58,228	Application SW ~~[illegible]~~ / Server
$ 4,178	Multiple Site Facility Code Software
$ 17,085	Work stations (15) (addl application)
$ 9,600	Oracle dB RTU fee
$ 7,594	Server Hot Redundant
$ 94,000	Backward Compatibility
$ 15,190	VCSN connectivity
$205,875	

w/o Collocation 375 existing

$205,875 – (206K)

(1609)

375 of 400 ① # cards ② server size

128,000

Strategies 12-13 ⇒ Cards Keys

(65,000) cards (65K MAX)

(60-70,000)

APOGEE (M[illegible])

PROPRIETARY
Not for Disclosure Outside BellSouth
Except by Written Agreement

Matl	Source	Cost	
Virtual Collocation - 2 Fiber (Singlemode) Cross Connects			
LGX Bay			
Bay Frwk	Network Planning & Support	703.94	
Retainers JR4C9	Network Planning & Support	265.96	
Lightguide Kit (2)	Network Planning & Support	61	
Total Material Price	Network Planning & Support	$1,030.90	
Circuit Capacity	Network Planning & Support	324	
Projected Actual Utilization	Network Planning & Support		
LGX Shelf			
Shelf	Network Planning & Support	248.27	
Coupler Panel (12)	Network Planning & Support	155.76	
SC Coupling (72)	Network Planning & Support	432	
Total Material Price	Network Planning & Support	836.03	
Circuit Capacity	Network Planning & Support	36	
Projected Actual Utilization	Network Planning & Support		
Fiber Duct (fiber jumper support)			Note 1
Material Price per foot	Network Planning & Support	$9.15	
Number Feet	Network Planning & Support	300	
Circuit Capacity	Network Planning & Support	400	
Projected Actual Utilization	Network Planning & Support		

Note 1: Virtual collocation equip. is typically placed in BST lineups and will use BST fiber duct.

Fiber Duct Components/60ft run

10 - 4x4 Straight Duct 6'	$32.97ea
2 - 4x4 Elbow	$49.31ea
10 - 4x4 Splice	$1.86ea
5 - Support Details	$3.23ea
5 - threaded rod	$17.19ea

Total per 60ft = $549.02

Matl Cost per Foot = $9.15

Fiber Patchcord Capacity from ADC catalog = 800

Assumes 3mm patchcords, 2/ckt

What costs are recovered in space construction?

The following unit cost specifications were compiled based on engineering estimates and actual costs. The engineer's estimates were extrapolated from actual projects to come up with a cost per square foot. The actual costs were taken from past projects and project costs to determine a new project baseline cost.

Space construction investment for the first 100 square foot enclosure includes (a) the material and labor cost of constructing a 100 square foot welded wire mesh enclosure, (b) architectural and engineering fees for project management, design and construction oversight, and (c) electrical and grounding work.

The standard is a 100 square foot enclosure and is assumed to be a 10' by 10' space with enclosure required on 3 sides for a total of 30 linear feet. Enclosure sizes are available at 100 s.f. minimum and then 50 s.f. increments.

These prices are based on constructing the entire collocation suite and all enclosures at the same time (at least 80% of the time). This method allows for cost savings due to bulk purchases, reduced contractor setup fee and reduced architectural/engineering fees. The enclosure construction can not be done at this rate if the enclosures are constructed as each firm orders is received.

These costs are considered to be the most likely costs. The actual cost will vary according to existing building conditions, location of building, and local material and labor rates.

The material and labor costs for constructing the 100 square foot enclosure are as follows:

Welded Wire Mesh Enclosure (3 sides considered)	$2246
Swinging Door (3' x 8') and lockset	$ 726
Dust Protection	$ 478
Electrical Work	$ 336
Electrical Grounding	$1558
Signage	$ 132
General Conditions	$ 433
Contractor's Fee	$ 709
Architectural/Engineering fee	$1059
Project Management fee	$ 529
Total	$8206
Incremental cost for additional 50 s.f. (See calculation below)	$ 947

Space construction investment for an additional 50 square feet includes the material and labor cost of increasing the enclosure by additional 50 foot increments when constructed

at the same time as the first 100 square foot enclosure. Costs may include additional wire cage, doors, electrical and grounding work.

The incremental amount per 50 square feet (over the first 100 square feet) is weighted with the following probabilities to determine the cost per additional 50 square feet:

Square feet	Probability	Computation	Cost
150	5%	($9,480-$8,206)/1x0.05 =	$ 64
200	55%	($10,239-$8,206)/2x0.55=	$559
250	0%	($10,810-$8,206)/3x0.00=	$ 0
300	9%	($11,537-$8,206)/4x0.09=	$ 75
350	0%	($12,108-$8,206)/5x0.00=	$ 0
400	31%	($13,019-$8,206)/6x0.31=	$249
Total	100%		$947

These probabilities are based on the actual requests for physical collocation enclosure construction received by BellSouth in 1997 and 1998 excluding the unusual requests for 700 s.f., 4000 s.f. and 5000 s.f..

BELLSOUTH COLLOCATION COST STUDY

PROJECT: TYPICAL COLLOCATOR COSTS - WIRE MESH PARTITION SYSTEM
LOCATION: **Varies** ROOM AREA: **100** SF
CLIENT: BellSouth Telecommunications, Inc PROJECT NO: DATE: 3/22/2000

SUMMARY

DESCRIPTION	PERCENT OF JOB	SUBTOTAL COST	COST PER SQ. FT.
1. GENERAL CONDITIONS	7.33	$433	$4.33
10. SPECIALTIES	60.62	$3,582	$35.82
16. ELECTRICAL	32.05	$1,894	$18.94
SUBTOTAL	100	$5,909	59.09
CONTRACTOR'S MARKUP (12%)		$709	$7.09
TOTAL ESTIMATED CONSTRUCTION COST		$6,618	$66.18
ESTIMATED ARCHITECTURAL/ENGINEERING FEE(16%)		$1,059	$10.59
PROJECT MANAGEMENT FEE (8%)		$529	$5.29
TOTAL DESIGN/CONSTRUCTION COST		**$8,206**	$82.06

BREAKDOWN BY DIVISION

DESCRIPTION	QUAN-TITY	UNIT MEAS.	UNIT COST	SUBTOTAL COST	TOTAL COST
1. GENERAL CONDITIONS					**$433**
Superintendent	1	LS	433	$433	
General clean up	1	LS	0	$0	
Permit (Moved to Space Preparation)	1	LS	0	$0	
Contingency (5%)	1	LS	0	$0	
10. SPECIALTIES					**$3,582**
Wire Mesh partition enclosure					
Swinging door and lockset	1	Ea	726	$726	
Wall panels	1	Ea	2,246	$2,246	
Signage	1	Ea	132	$132	
Miscellaneous Protection	1	Job	478	$478	
Prep)	0	LF	0	$0	
16. ELECTRICAL					**$1,894**
Relocation or addition of light fixture(s)	1	Job	336	$336	
Complete grounding of wire mesh partition system, including all necessary conductors, lugs, taps, etc.	1	Job	1,558	$1,558	

Note: Costs shown above are directly attributable to the cost of preparing the Collocator's enclosure only. The space enclosure charge per the tarrif. Space Preparation costs are not inclu

Assumptions: Entire collocation suite and all enclosures are constructed at the same time (at least 80% of t
All mechanical and electrical modifications will be included in the space preparation fees.

It is not possible to construct the enclosures for this cost if they are constructed at different times a for a central office is received. The cost savings are due to reduced set-up, architectural, engineering management fees, supervision, as well as bulk purchases.

	25			50			100			150			200		
	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total
Wire mesh panels (56.15/Linear Foot)	5	74.87	$ 374	10	74.87	$ 749	30	74.87	$ 2,246	35	74.87	$ 2,620	40	74.87	$ 2,995
Relocate Wire Panels	1	300	$ 300	1	300	$ 300				1	300	$ 300	1	300	$ 300
Swing Door & Lockset	1	726	$ 726	1	726	$ 726	1	726	$ 726	1	726	$ 726	1	726	$ 726
Additional Protection	1	478	$ 478	1	478	$ 478	1	478	$ 478	1	400	$ 400	1	400	$ 400
Electrical	1	336	$ 336	1	336	$ 336	1	336	$ 336	1	336	$ 336	1	336	$ 336
Grounding	1	1558	$ 1,558	1	1558	$ 1,558	1	1558	$ 1,558	1	1600	$ 1,600	1	1700	$ 1,700
Signage	1	132	$ 132	1	132	$ 132	1	132	$ 132	1	132	$ 132	1	132	$ 132
General															
Cleanup	1	0	$ -	1	0	$ -	1	0	$ -	1	100	$ 100	1	125	$ 125
Superintendent (5%)	1	344	$ 344	1	377	$ 377	1	433	$ 433	1	306	$ 306	1	329	$ 329
Contingency(5%)	1	0	$ -	1	0	$ -	1	0	$ -	1	306	$ 306	1	329	$ 329
Contractor Fee (12%)	1	510	$ 510	1	559	$ 559	1	709	$ 709	1	819	$ 819	1	885	$ 885
A/E Fees(16%)	1	761	$ 761	1	834	$ 834	1	1059	$ 1,059	1	1223	$ 1,223	1	1321	$ 1,321
Project Mgmt(5%)	1	381	$ 381	1	417	$ 417	1	529	$ 529	1	612	$ 612	1	661	$ 661
Total			**$ 5,900**			**$ 6,466**			**$ 8,206**			**$ 9,480**			**$ 10,239**
Construction w/o gen.cond.			$ 3,904			$ 4,279			$ 5,476			$ 6,114			$ 6,589
Total Construction w/o fee			$ 4,248			$ 4,656			$ 5,909			$ 6,826			$ 7,372
Total Construction w/fee			$ 4,758			$ 5,215			$ 6,618			$ 7,645			$ 8,257
Incremental cost per 50sf from std. Cost (100sf)						$ (1,740)			$ -			$ 1,274			$ 1,016
Percentage												5%			55%
Cost												64			559

W 5

	250			300			350			400		
	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total
Wire mesh panels (56.15/Linear Foot)	45	74.87	$ 3,369	50	74.87	$ 3,744	55	74.87	$ 4,118	60	74.87	$ 4,492
Relocate Wire Panels	1	300	$ 300	1	300	$ 300	1	300	$ 300	1	300	$ 300
Swing Door & Lockset	1	726	$ 726	1	726	$ 726	1	726	$ 726	1	726	$ 726
Additional Protection	1	400	$ 400	1	400	$ 400	1	400	$ 400	1	400	$ 400
Electrical	1	336	$ 336	1	336	$ 336	1	336	$ 336	1	336	$ 336
Grounding	1	1700	$ 1,700	1	1800	$ 1,800	1	1800	$ 1,800	1	2000	$ 2,000
Signage	1	132	$ 132	1	132	$ 132	1	132	$ 132	1	132	$ 132
General												
Cleanup	1	125	$ 125	1	125	$ 125	1	125	$ 125	1	150	$ 150
Superintendent (5%)	1	348	$ 348	1	372	$ 372	1	391	$ 391	1	419	$ 419
Contingency(5%)	1	348	$ 348	1	372	$ 372	1	391	$ 391	1	419	$ 419
Contractor Fee (12%)	1	934	$ 934	1	997	$ 997	1	1046	$ 1,046	1	1125	$ 1,125
A/E Fees(16%)	1	1395	$ 1,395	1	1489	$ 1,489	1	1562	$ 1,562	1	1680	$ 1,680
Project Mgmt(5%)	1	697	$ 697	1	744	$ 744	1	781	$ 781	1	840	$ 840
Total			**$ 10,810**			**$ 11,537**			**$ 12,108**			**$ 13,019**
Construction w/o gen.cond.			$ 6,963			$ 7,438			$ 7,812			$ 8,386
Total Construction w/o fee			$ 7,784			$ 8,307			$ 8,719			$ 9,374
Total Construction w/fee			$ 8,718			$ 9,304			$ 9,765			$ 10,499
Incremental cost per 50sf from std. Cost (100sf)			$ 868			$ 833			$ 780			$ 802
									Total Avg.Incremental cost			$ 929
Percentage			0%			9%			0%			31%
Cost			-			75			-			249
									Total Weighted Average Incremental cost			$ 947

	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	Q
1			Updated 11/10/98 TEW @ 205-321-8113													
2																
3																
4	State	Cost	COLLOCATION	VIRTUAL		PHYSICAL										
5		#		Inputs	New Inputs	Inputs	New Inputs	Attachment Ref. #	Supporting Info							
6																
7	FL	H.1.7	Physical Collocation - Cable Support Structure, Per Entrance Cable													
8			Investment per Foot	$35.000	$33.960	$35.000	$33.960	1	5" Rack = $233.49/9.7 ft.= $19.96/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
9			Cable Capacity	30		30			Note 7							
10			Projected Actual Utilization	50.00%		50.00%										
11			Average Cable Length	350		400										
12																
13	FL	H.1.8	Physical Collocation - Power, Per Ampere	$165.800		$165.800										
14			Monthly Power Usage													
15			Average Monthly Cost per KWH	$0.070		$0.070			= $.07/month x 48 watts x 24hrs/day x 30days/mo x 1/.85 rect eff x .6666 adj.factr							
16			Watts	48		48			= $1.8972/Mo							
17			Rectifier Efficiency	85%		85%			The above formula has been modified to include a factor of .66666							
18									This factor is required to calculate commercial power consumption based upon the rating of the DC protection device							
19																
20																
21																
22	FL	H.1.9	Physical Collocation - 2-Wire Cross Connects													
23			Trunk Distributing Frame													
24			Material Price	$3,976.000	$4,110.48	$3,976.000	$4,110.48	2	$3736.80 + 10% ($373.68) for cable rings, designation boards, and other misc. hardware.							
25			Circuit Capacity	12000		12000										
26			Projected Actual Utilization	85.00%		85.00%										
27			Number Required	2		2										
28			Connecting Block													
29			Material Price	$29.440		$29.440		3								
30			Circuit Capacity	100		100										
31			Projected Actual Utilization	85.00%		85.00%										
32			Number Required	2		2										
33			Cable													
34			Material Price per foot			$1.000	$0.863	4								
35			Number Feet			400										
36			Circuit Capacity			100										
37			Projected Actual Utilization			85.00%										
38			Cable Rack													
39			Material Price per foot	$38.000	$38.070	$38.000	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
40			Number Feet	300		400										
41			Circuit Capacity	48000	97200	48000	97200		Note;1							
42			Projected Actual Utilization	56.95%		56.95%										
43																
44	FL	H.1.10	Physical Collocation - 4-Wire Cross Connects													
45			Trunk Distributing Frame													
46			Material Price	$3,976.000	$4,110.48	$3,976.000	$4,110.48	2	$3736.80 + 10% ($373.68) for cable rings, designation boards, and other misc. hardware.							
47			Circuit Capacity	6000		6000										
48			Projected Actual Utilization	85.00%		85.00%										
49			Number Required	2		2										
50			Connecting Block													
51			Material Price	$29.440		$29.440		3								
52			Circuit Capacity	50		50										
53			Projected Actual Utilization	85.00%		85.00%										
54			Number Required	2		2										
55			Cable													
56			Material Price per foot			$1.000	$0.863	4								
57			Number Feet			400										
58			Circuit Capacity			50										
59			Projected Actual Utilization			85.00%										
60			Cable Rack													
61			Material Price per foot	$38.000	$38.070	$38.000	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
62			Number Feet	300		400										
63			Circuit Capacity	24000	48600	24000	48600		Note 1							
64			Projected Actual Utilization	56.95%		56.95%										

	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	Q
65				VIRTUAL		PHYSICAL										
66	FL	H.1.11	Physical Collocation - DS1 Cross Connects													
67			DSX-1 Panel Provided by another group													
68			Cable													
69			Material Price per foot			$0.680	$0.634	6								
70			Number Feet			300										
71			Additional Feet if Repeater			600										
72			Circuit Capacity			14										
73			Projected Actual Utilization			90.00%										
74			Percent Repeater Required			5.00%										
75			Cable Rack													
76			Material Price per foot	$38.000	$38.070	$38.000	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
77			Number Feet	300		300										
78			Additional Feet if Repeater			600										
79			Circuit Capacity	6720	10528	6720	10528		Note 2							
80			Projected Actual Utilization	60.30%		60.30%										
81			Percent Repeater Required			5.00%										
82			Repeater Bay													
83			Material Price			$4,579.000	$455.400									
84			Circuit Capacity			224										
85			Projected Actual Utilization			30.00%										
86			Percent Required			5.00%										
87			Repeater Shelf													
88			Material Price			$276.000	$276.250									
89			Circuit Capacity			28										
90			Projected Actual Utilization			80.00%										
91			Percent Required			5.00%										
92			Repeater													
93			Material Price			$280.000	$289.000									
94			Circuit Capacity			1										
95			Projected Actual Utilization			100.00%										
96			Percent Required			5.00%										
97																
98	FL	H.1.12	Physical Collocation - DS3 Cross Connects													
99			DSX-3 Panel Provided by another group													
100			Cable													
101			Material Price per foot			$0.770	$0.488	7 and 8	Note 3							
102			Connector Material Price per cable			$10.000	$7.760	9 and 10								
103			Number Feet			300										
104			Additional Feet if Repeater			400										
105			Number Cables per Circuit			2										
106			Circuit Capacity			1										
107			Projected Actual Utilization			100.00%										
108			Percent Repeater Required			10.00%										
109			Cable Rack													
110			Material Price per foot	$38.000	$38.070	$38.000	$38.070	5	Rack = $233.49/9.7 ft.= $24.07/ft.; Auxiliary framing, support rods, junction details, etc. estimated at $14.00 ft.							
111			Number Feet	300		300										
112			Additional Feet if Repeater			400										
113			Circuit Capacity	480	3732	480	3732		Note 4							
114			Projected Actual Utilization	87.00%		87.00%										
115			Percent Repeater Required			10.00%										
116			Repeater Bay													
117			Material Price			$4,579.000	$455.400									
118			Circuit Capacity			80										
119			Projected Actual Utilization			35.00%										
120			Percent Required			10.00%										
121																
122																
123	FL	H.1.12	Repeater Shelf			PHYSICAL										
124			Material Price			$385.000	$385.200									
125			Circuit Capacity			8										
126			Projected Actual Utilization			85.00%										
127			Percent Required			10.00%										
128			Repeater													
129			Material Price			$1,516.000	$1,516.500									
130			Circuit Capacity			1										
131			Projected Actual Utilization			100.00%										
132			Percent Required			10.00%										
133																

	A	B	C	D	E	F	G	I	J	K	L	M	N
134	FL	H.1.13	Physical Collocation - 2-Wire POT Bay										
135			POT Bay										
136			Material Price			$850.000	$519.74		Note 5				
137			Circuit Capacity			1296	1400						
138			Projected Actual Utilization			40.00%							
139			Termination Block w/Bridging Clips										
140			Material Price			$7.620	$6.41		Note 5				
141			Circuit Capacity			24	25						
142			Projected Actual Utilization			85.00%							
143													
144	FL	H.1.14	Physical Collocation - 4-Wire POT Bay										
145			POT Bay										
146			Material Price			$850.000	$519.74		Note 5				
147			Circuit Capacity			648	700						
148			Projected Actual Utilization			40.00%							
149			Termination Block wBridging Clips										
150			Material Price			$7.620	$6.41		Note 5				
151			Circuit Capacity			12	12.5						
152			Projected Actual Utilization			85.00%							
153													
154	FL	H.1.15	Physical Collocation - DS1 POT Bay						Note 6				
155			POT Bay										
156			Material Price			$1,000.000	$1,200.18	11 and 12					
157			Circuit Capacity			1008							
158			Projected Actual Utilization			26.40%							
159			POT Bay Shelf										
160			Material Price			$265.340		13					
161			Circuit Capacity			84							
162			Projected Actual Utilization			80.00%							
163			POT Bay Module										
164			Material Price			$35.190		14					
165			Circuit Capacity			4							
166			Projected Actual Utilization			98.70%							
167													
168	FL	H.1.16	Physical Collocation - DS3 POT Bay						Note 6				
169			POT Bay										
170			Material Price			$1,000.000	$1,200.18	11 and 12					
171			Circuit Capacity			384							
172			Projected Actual Utilization			5.94%							
173			POT Bay Shelf										
174			Material Price			$81.400	$198.55	15					
175			Circuit Capacity			32							
176			Projected Actual Utilization			18.00%							
177			POT Bay Module										
178			Material Price			$90.000	$67.75	16					
179			Circuit Capacity			1							
180			Projected Actual Utilization			100.00%							
181													
182													

	A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	Q
183			**Note 1:** Assume 26Ga 100 Pr 806A cable OD=0.56"													
184			2' 6" Cable rack with max. 10"pileup													
185			Capacity = 30/.56 x 10/0.56 = 54 x 18 = 972 cables													
186			2wire Circuits = 972 x 100 = 97,200													
187			4wire circuits = 972 x 100/2 = 48600													
188																
189			**Note 2:** Assume 22Ga 616C 28 pair Cable OD = 0.64"													
190			2' 6" Cable rack with max. 10"pileup													
191			Capacity = 30/.64 x 10/.64 = 47 x 15 = 752 cables													
192			DS1 Circuits = 752 x 14 = 10,528													
193																
194			**Note 3:** DS3 cable pricing. BST standards: use 735A up to 250'. Beyond 250' use 734D. Assume an even distribution of cable lengths from 100' to 455'. 10% beyond 455' require repeaters. 90% less than 455'.													
195			Cables between 100 and 250 = 150/355 =42.3%. Cables between 250 and 455' = 205/355 = 57.7%													
196			735A cable utilization = .423 x 90% = 38%													
197			734D cable utilization = 100% - 38% = 62%													
198			734D = $.550/ft 735A = $.388/ft													
199			$/ft=(.550)x(.62)+(.388)(.38)= $.488/ft													
200																
201			**Note 4:** from note 3, 38% of DS3 cable is 735A, 62% is 734D													
202			735A OD = .122" , 734D OD = 0.236"													
203			735A cross section = .122 x .122 = .0149 sq. in.													
204			734D cross section = .236 x .236 = .0557 sq. in.													
205			Cabl rack cross section = 30" x 10" = 300 sq in													
206			Let X = total cables; 300 = (.62)(X)(.0557) + (.38)(X)(.0149)													
207			.034534X + .005662X = 300													
208			.040196X = 300													
209			X = 7463													
210			Capacity = 7463/2 = 3732													
211			735A cables = .38 (7463) = 2836													
212			734D cables = .62(7463) = 4627													
213																
214			**Note 5:** DSO POT Consists of following:													
215			Qty - 1 universal 7' rack @$239.46													
216			Qty - 14 angle mtg bars @$20.02 ea. = $280.28													
217			Total POT Bay = $519.74													
218																
219			Conn. Blk Matl per 25 2-wire ckts.													
220			Qty - 1 89B mtg bkts @$.85 ea.													
221			Qty: 1 66M1 Conn blk @$5.54 ea.													
222			Qty 50 C bridging clips @$.02 ea = $1.00													
223			Total DSO Conn Blk cost = $6.41													
224			Note 5 prices quoted from Alltel Supply 11/5/98													
225																
226			**Note 6:** DS1 and DS3 POT Bay consists of:													
227			Qty: 1ED-8C501-50 G1 7ft. Netwk Bay Frame @$457.80													
228			Qty: 1 ED-6C157-31 G6 Interconnect Hardware @$742.38													
229			Total Bay cost = $1,200.18													
230																
231			**Note 7:** 5" cable rack - length 9' 8.5"													
232			Qty of 1 ED4C685-72 G1 @$107.20 ea.													
233			Qty of 1 ED4C685-72 G10 @$88.40 ea.													
234			Total = $19.96/ft.+													
235																

24

Month	Active Cards
1	70,000
2	70,953
3	71,906
4	72,859
5	73,812
6	74,765
7	75,718
8	76,671
9	77,624
10	78,577
11	79,530
12	80,483
13	81,436
14	82,389
15	83,342
16	84,295
17	85,248
18	86,201
19	87,154
20	88,107
21	89,060
22	90,013
23	90,966
24	91,919
25	92,872
26	93,825
27	94,778
28	95,731
29	96,684
30	97,637
31	98,590
32	99,543
33	100,496
34	101,449
35	102,402
36	103,355

1,304	new card activation
351	card deactivation
953	net gain per month

86,678	Midpoint Active Cards
128,000	Apogee System Capacity

86,678 ÷ 128,000 = 67.72%

67.72% Projected Actual Utilization

STF 3-22 Please describe how the fill factors provided in response to STF 1-13 were calculated, and the information sources used to derive those factors.

Cable Support Structure cable rack - 50% - waiting on Bill McAllister

Cross Connects

The following equipment is part of the "normal" network equipment for the central office and is not specific to collocation or to a collocator; these pieces of equipment carry the general central office fill factor provided by Network Planning:

2-Wire Cross Connect	TDF	72.5% (now 85%)
	Connecting Block	72.5% (now 85%)
	Cable Rack	67% (see note 1)
4-Wire Cross Connect	TDF	72.5% (now 85%)
	Connecting Block	72.5% (now 85%)
	Cable Rack	67% (see note 1)
DS1 Cross Connect	DSX-1 Panel	70% (now 85%)
	Cable Rack	67% (see note 1)
DS3 Cross Connect	DSX-3 Panel	67% (now 85%)
	Cable Rack	67% (see note 1)

The following equipment is specific to a collocator and the utilizations are developed by determining the equipment required by the "typical" arrangement built and the "typical" 3-year average of circuits expected to be turned up.

2-Wire Cross Connect	Cable	85%
4-Wire Cross Connect	Cable	85%
DS1 Cross Connect	Cable	90%
	Repeater	100%
	Repeater Bay	30%
	Repeater Shelf	80%
DS3 Cross Connect	Cable	100%
	Repeater	100%
	Repeater Bay	35%
	Repeater Shelf	85%
2-Wire POT Bay	POT Bay	40%

	Termination Block	85%	
4-Wire POT Bay	POT Bay	40%	
	Termination Block	85%	
DS1 POT Bay	Connecting Block	98.7%	
	Shelf	80%	
	POT Bay	33%	(see note 2)
DS3 POT Bay	Module	100%	
	Shelf	18%	
	POT Bay	33%	(see note 2)

Note 1: The utilization of cables in the cable rack is 67%. To get the utilization on a per circuit basis, this 67% is multiplied by the utilization of circuits in the cable itself. This yields the following utilizations that are now in the study:

2-Wire Cross Connect - 85% * 67% = 56.95%
4-Wire Cross Connect - 85% * 67% = 56.95 %
DS1 Cross Connect - 90% * 67% = 60.3%
DS3 Cross Connect - 100% * 67% = ~~100%~~ 67%

Note 2: The DS1 and DS3 circuits terminate on the same POT Bay. There are 12 shelves in the POT Bay. The average customer configuration assumes that there will be 3 shelves used for DS1 circuits and 1 for DS3 circuits. This total of 4 shelves used yields the 33% utilization listed in STF 1-13. To get this utilization on a per circuit basis, the 33% utilization is multiplied by the circuit utilization of the shelf. This yields the following utilizations that are now in the study:

DS1 POT Bay - 80% * 33% = 26.4%
DS3 POT Bay - 18% * 33% = 5.94%

	A	B	C	D	E	F	G	H	I	J	K
1	Yr	ST	GLC	Location		Est.$ per Sq.Ft.		Proposed Weighting	Weighted Colloca.$ per Sq.Ft.		
2											
3											
4				**ALABAMA**							
5	00	AL	11734	Hanceville - CO Addition		$ 4.00		5.00%	$ 0.20		
6	00	AL	11813	Huntsville University CO Addition		$ 12.00		11.00%	$ 1.32		
7		AL		Parish CO - Addition		$ 4.00		5.00%	$ 0.20		
8		AL		Carbon Hill		$ 5.00		5.00%	$ 0.25		
9		AL		West Blocton - Addition		$ 6.00		5.00%	$ 0.30		
10		AL		Riverchase CO - Finish 2nd Story		$ 15.00		16.00%	$ 2.40		
11		AL		Sylacauga Main - Growth		$ 7.00		5.00%	$ 0.35		
12		AL		Huntsville Main - Rear Addition		$ 15.00		11.00%	$ 1.65		
13		AL		Alabaster CO - 2nd Floor Additon		$ 10.00		10.00%	$ 1.00		
14		AL		Rogersville Main - Front Addition		$ 4.00		5.00%	$ 0.20		
15		AL		Lafayette Main - Addition		$ 5.00		5.00%	$ 0.25		
16		AL		Oak Mountain CO - Rear Addition		$ 10.00		12.00%	$ 1.20		
17		AL		Belle Fountaine CO - Addition		$ 7.00		5.00%	$ 0.35		
18								100.00%	**$ 9.67**		
19				**FLORIDA**							
20		FL		Boca Raton		$ 15.00		12.00%	$ 1.80		
21		FL		Daytona Beach		$ 8.00		6.00%	$ 0.48		
22		FL		Holley-Navarre		$ 2.00		1.00%	$ 0.02		
23		FL		Jacksonville		$ 10.00		5.00%	$ 0.50		
24		FL		Lake Mary		$ 10.00		4.00%	$ 0.40		
25		FL		Miami		$ 12.00		14.00%	$ 1.68		
26		FL		North Dade		$ 12.00		20.00%	$ 2.40		
27		FL		West Palm Beach		$ 10.00		18.00%	$ 1.80		
28											
29				**Planned Additions**							
30		FL		Cross-City - Rear Addition		$ 2.00		1.00%	$ 0.02		
31		FL		JCVL Oceanway - Rear Addition		$ 4.00		1.00%	$ 0.04		
32		FL		Jacksonville Beachwood - Addition		$ 4.00		2.00%	$ 0.08		
33		FL		PNSC Ferry Pass Growth - Vert. Addn.		$ 5.00		2.00%	$ 0.10		
34		FL		Orlando Azalea Park - Addition		$ 10.00		2.00%	$ 0.20		
35		FL		Orlando Sandlake - Addition		$ 10.00		3.00%	$ 0.30		
36		FL		Weston CO - Addition		$ 20.00		1.00%	$ 0.20		
37		FL		FTLD Sawgrass - Rear Addition		$ 20.00		1.00%	$ 0.20		
38		FL		Coral Springs - Rear Addition		$ 15.00		3.00%	$ 0.45		
39		FL		FTLD Annex - Vertical Addition		$ 7.00		1.00%	$ 0.07		
40		FL		West Dade - Rear Toll Addition		$ 10.00		2.00%	$ 0.20		
41		FL		Sandalfoot CO - Addition		$ 15.00		1.00%	$ 0.15		
42								100.00%	**$ 11.09**		
43				**Kentucky**							
44		KY		LSVC - Westport Rd - Bldg Addition		$ 2.10		13.00%	$ 0.27		
45		KY		Pilotview - Bldg Addition		$ 0.65		7.60%	$ 0.05		
46		KY		Warfield - Bldg Addition		$ 0.65		7.60%	$ 0.05		
47		KY		Lebanon Jctn - Bldg Addition		$ 0.65		7.60%	$ 0.05		
48		KY		Bardstown CO - Bldg Addition		$ 1.60		16.00%	$ 0.26		
49		KY		Taylorsville - Bldg Addition		$ 0.65		7.60%	$ 0.05		
50		KY		Georgetown - Frame Bldg Addition		$ 1.85		10.00%	$ 0.19		
51		KY		McCarr - Bldg Addition		$ 0.65		7.60%	$ 0.05		
52		KY		Clinton - Bldg Addition		$ 0.65		7.60%	$ 0.05		
53		KY		Perryville Buckner - Bldg Addition		$ 0.65		7.60%	$ 0.05		
54		KY		Wayland - Bldg Addition		$ 0.65		7.70%	$ 0.05		
55								99.90%	**$ 1.11**		
56											

Attachment 4.
Item 2n

Forward Looking Studies - 2000-2002

CALCULATION OF FORWARD LOOKING LAND AND BUILDING LOADING FACTORS

		DATA SOURCE: EOY 1998	ALABAMA	FLORIDA	GEORGIA	KENTUCKY	LOUISIANA	MISSISSIPPI	NORTH CAROLINA	SOUTH CAROLINA	TENNESSEE	BELLSOUTH
1	ACCOUNT 2121 - BUILDING - 1998 EO	CSS	341,260,876	728,338,737	515,080,201	166,430,961	246,254,924	151,722,827	223,057,232	120,511,653	245,989,769	2,738,647,180
2	A/C2121, CP 2- BUILDINGS - CEN OFC	CSS	152,536,033	416,037,384	204,921,110	94,046,590	188,192,321	76,413,986	157,437,891	82,975,114	149,040,786	1,521,601,215
3	- CEN OFC % OF TOTAL BUILDINGS	LN 2/LN1	44.70%	57.12%	39.78%	56.51%	76.42%	50.36%	70.58%	68.85%	60.59%	55.56%
4	A/C2121, CP 8- BUILDINGS ASSOC W	CSS	29,348,445	64,572,959	28,801,928	1,300,636	524,187	27,472,510	5,116,442	731,611	29,563,650	187,432,368
5	- GPC % OF TOTAL BUILDINGS	LN 4/LN1	8.60%	8.87%	5.59%	0.78%	0.21%	18.11%	2.29%	0.61%	12.02%	6.84%
* 6	ACCOUNT 2111 - LAND - 1998 EOY	1999-2001 AVG	21,375	80,596	50,704	21,554	31,253	10,851	34,196	14,621	21,227	286,378
* 7	ACCOUNT 2121 - BUILDING	1999-2001 AVG	719,659	1,312,635	1,012,371	340,762	538,924	342,877	512,349	291,536	527,952	5,599,064
* 8	TOTAL LAND & BLDG	LN 6 + LN 7	741,034	1,393,231	1,063,075	362,316	570,177	353,728	546,546	306,157	549,179	5,885,442
9	ACCT 2124 - GEN PUR COMP	1999-2001 AVG	233,577	167,918	238,391	18,885	30,682	79,397	142,537	23,531	93,776	1,028,694
10	ACCOUNT 2200 - COE	1999-2001 AVG	2,268,020	6,355,708	3,482,883	1,311,476	2,442,871	1,414,184	2,677,279	1,578,946	2,872,223	24,403,601
11	A/C2121, BUILDINGS ASSOC W/COE	LN 3 * LN 7	321,672	749,796	402,765	192,557	411,855	172,687	361,626	200,729	319,877	3,133,563
12	A/C2121, BUILDINGS ASSOC W/GPC	LN 5 * LN 7	61,891	116,375	56,609	2,663	1,147	62,085	11,752	1,770	63,451	377,743
CALCULATION OF FORWARD LOOKING L&B FACTORS:												
13	CENTRAL OFFICE - LAND	(LN3)*(LN13)/LN10	0.0042120	0.0072440	0.0057920	0.0092870	0.0097770	0.0038640	0.0090150	0.0063760	0.0044780	0.0065200
14	CENTRAL OFFICE - BUILDING	LN 11 / LN 10	0.1418290	0.1179720	0.1156410	0.1468250	0.1685950	0.1221110	0.1350720	0.1271290	0.1113690	0.1284060
15	GEN PUR COMPUTER - LAND	(LN5)*(LN6)/LN9	0.0078700	0.0425530	0.0118930	0.0089200	0.0021680	0.0247470	0.0055030	0.0037720	0.0272050	0.0190530
16	GEN PUR COMPUTER - BUILDING	LN 12 / LN 9	0.2649700	0.6930470	0.2374640	0.1410130	0.0373890	0.7819540	0.0824500	0.0752160	0.6766200	0.3672060

Line 6 ÷ Line 8 = % Land

Eg Line 7 ÷ Line 8 = % Building

Lw 10/6/99

1/10/00