

UNIVERSITY OF COLORADO DENVER

Business School Program Plan Revision 2

August 18, 2009

Business School Program Plan Revision 2

University of Colorado Denver

I. Executive Summary

The Business School Program Plan Revision 2 proposes to increase the scope and budget of the renovation project at 1475 Lawrence Street to better accommodate the programs and needs of the Business School of the University of Colorado Denver. The revised project includes 108,450 gsf and 65,991 asf including occupancy of much of the 1st floor of the building. The project cost is \$44,550,000 which reflects an increase of \$5,000,000. The project is a cash funded project; the additional \$5,000,000 will be funded by gifts.

This program plan revision is the second program plan revision regarding the Business School of the University of Colorado Denver (UC Denver). The original program plan dated October 25, 2007 was approved by the Board of Regents on November 29, 2007. It proposed the construction of a new facility to meet the growing needs of the Business School. The opportunity to purchase the facility at 1475 Lawrence Street, Denver, arose shortly thereafter, and the program plan was revised to include the purchase of 1475 Lawrence Street to meet the needs and requirements of the previously submitted program plan. The first program plan revision was dated March 13, 2008 and was approved by the Board of Regents on March 27, 2008. The program plan revision specified a project cost of \$39,550,000 to purchase the facility and to renovate it to house the UC Denver Business School. The building was purchased after a due diligence review was conducted, and the design firm of RNL was hired to begin the design of the facility for the program elements of the Business School. The project is a cash project. The building was purchased with a bond, and a capital campaign is underway to raise funds for the renovation.

The design firm of RNL was hired and led a program plan verification process of the building and of the requirements of the program plan revision. That process has just concluded along with the completion of schematic design plans which have been priced by 3 independent contractors.

The gross square footage for the project increased from 104,179 to 108,450. The increase is attributable to the enclosure of additional square footage in several areas including the currently open area under the building on the 1st floor, extension of a new stair outside the current building envelope on upper floors, and the enclosure of a deck on the 6th floor.

The assignable square footage for the program is currently designed at 65,991 asf. This compares to 61,438 asf of relevant space in the earlier program plan revision.

The most significant factors that changed the space elements, quantities, and square footages during the design process were:

- Location of most classrooms and high pedestrian traffic areas on the lower floors (1-3). This created 2 additional stairs and rest rooms on those floors, but avoided the need for additional elevators.
- Project inclusion of part of the first floor where a leased office suite and open outside space currently exist. This creates additional square footage to meet program needs for offices, a classroom, and a café and also creates both improved building/school identity as well as student ambient and study space. An open stair will create better connectivity to the lower predominantly student oriented floors.
- More detailed information on evolving departmental and staff needs.
- Engineering studies that identified the need to replace additional mechanical and infrastructure elements. The need for enlarged duct work resulted in considerably more demolition within the building creating more opportunities for design flexibility than existed previously.
- Increased requirements for rest rooms, tel/data equipment, IT requirements, and duct shafts were identified.

As a result, shifts of square footage within the building are summarized as follows:

- Office areas increased by 17 offices from 146 to 163. Office square footage decreased by 3,550 asf primarily by reducing office sizes to the campus standard.
- Conference rooms increased from 3 to 6 while square footage increased by 1,594 asf.
- Classrooms and seminar rooms reduced by 1 from 27 to 26, but square footage increased by 3,086 asf.
- Other areas increased in square footage by 3,423 asf due to a variety of programmatic changes.

Project cost increases are largely driven by the following factors:

- Increased scope of renovation including additional square footage on the 1st floor to create an additional classroom, office, and student areas along with an open stair that will facilitate easy connection between the lower 3 primarily student floors with less elevator use.
- Location of classrooms primarily on lower floors to encourage major pedestrian traffic areas at lower levels.

- Replacement of major mechanical system elements resulting from more detailed engineering studies.
- More extensive renovation due to installation of larger mechanical ducts throughout the facility.
- Greater understanding of LEED requirements necessary to achieve gold certification for this project.
- Better and more recent cost information resulting from detailed schematic drawings and subsequent pricing from 3 independent contractors.
- More specific product selection.
- Costs that are increased due to these increases in project scope and budget.

In summary, the Business School Program Plan Revision 2 proposes to increase the scope and budget of the renovations at 1475 Lawrence Street to better accommodate the programs and needs of the Business School of the University of Colorado Denver. The revised project includes 108,450 gsf and 65,991 asf including occupancy of much of the 1st floor of the building. The project cost is \$44,550,000 which reflects an increase of \$5,000,000. The project is a cash funded project; the additional \$5,000,000 will be funded by gifts.

II. Background

This program plan revision is the second program plan revision regarding the Business School of the University of Colorado Denver. The original program plan dated October 25, 2007 was approved by the Board of Regents on November 29, 2007. It proposed the construction of a new facility to meet the growing needs of the Business School. The opportunity to purchase the facility at 1475 Lawrence Street, Denver, arose shortly thereafter, and the program plan was revised to include the purchase of 1475 Lawrence Street to meet the needs and requirements of the previously submitted program plan. The first program plan revision was dated March 13, 2008 and was approved by the Board of Regents on March 27, 2008. The program plan revision specified a project cost of \$39,550,000 to purchase the facility and to renovate it to house the UC Denver Business School. The programmable portion of the facility (excluding underground parking) included 104,179 gross square feet (gsf) and 71,919 assignable square feet (asf).

The building was purchased after a due diligence review was conducted, and the design firm of RNL was hired to begin the design of the facility for the program elements of the Business School. The project is a cash project. The building was purchased with a bond, and a capital campaign is underway to raise funds for the renovation.

III. Program Verification & Schematic Design

RNL led a program plan verification process of the building and of the requirements of the program plan revision. That process has just been completed along with the completion of schematic design plans which have been priced by 3 independent contractors.

The design process involving architects at RNL, university representatives, and engineering consultants evaluated the location of classrooms on the lower floors of the building versus earlier thoughts at the time of the due diligence review that called for classrooms distributed throughout the building, reevaluated mechanical and infrastructure elements of the building concluding that many of the items thought to be reusable for a green academic building had either inadequate capacity to serve the project needs or had limited life remaining, modified slightly the space program of the Business School to reflect its evolving needs, evaluated uses of the 1st floor which had been previously unprogrammed, and considered later uses and interface of future phase 2 growth that might occupy a currently leased tenant suite and courtyard.

This program verification process and schematic design development produced a revised program and design documents that more appropriately meet the needs of the Business School and the potential of the building at 1475 Lawrence Street. The resulting plans involve occupying much of the 1st floor of the building which had been identified as an area of interest in the previous program plan revision but not included in the costs of the project. As such and for the reasons cited above and described in more detail in the following sections, the revised project now has a greater project cost (\$5 million) and different gsf and asf than the previously approved project.

The project remains a cash project, and the increased project costs are to be met by additional gifts to be secured in the capital campaign for the renovation of 1475 Lawrence Street for the Business School of the University of Colorado Denver.

The sections below describe the changes proposed by this second program plan revision to the earlier program plan revision; other elements of the earlier program plan revision remain unchanged and are thus not reiterated in this document.

IV. Square Footage

As a result of the design review process for the Business School, the resulting gross square footage is 108,450, and the resulting assignable square feet is 65,991.

The gross square footage for the project increased from 104,179 to 108,450. The increase is attributable to the enclosure of additional square footage in several areas including the currently open area under the building on the 1st floor, extension of the new stair outside the current building envelope on upper floors, and the enclosure of a deck on the 6th floor.

The assignable square footage for the program is currently designed at 65,991 asf. This compares to 61,438 asf of relevant space in the earlier program plan revision. The earlier document referenced 71,919 asf but included (1) 7,028 asf for future development on the 1st floor which was not a part of that project and was not budgeted as part of the project at that time, (2) 1,200 sf for entry lobby modifications which is not included as assignable square feet in the detailed space tables below, and (3) 2,253 sf in office circulation which is not included as assignable square feet in the space tables below. Adjusting the 71,919 asf from the old program plan revision by these factors results in the comparable 61,438 asf. The proposed increase of

4,553 asf from the former 61,438 asf to the currently designed 65,991 asf is attributable to capturing increased program space on the first floor and to enclosing a deck on the 6th floor. Neither of these areas were part of the budget or scope of the previously defined project. One might anticipate the capturing of those areas to produce and an even greater increase in programmable square feet, but the design process resulted in substantially wider corridors in many areas which (1) recognize appropriate circulation space requirements in student areas especially at high pedestrian traffic times between classes and (2) resulted in some areas where many existing 150 sf offices become 120 sf offices (the university office standard) resulting from greater than anticipated demolition of existing walls to accommodate the required larger air ducts and consequently creating more circulation and interaction space and less programmable office space at the reduced office size.

The detailed space table below lists the Business School space program which has resulted from the schematic design process. Current program data is compared to data from the earlier program plan revision.

**Business School
 Space Program Comparison Table**

	Quantity			Assignable Square Feet		
	2nd Revision Total	Orig Revision Total	Variance	2nd Revision Total	Orig Revision Total	Variance
<i>Offices</i>						
Dean & Assoc/Asst	4	4		713	810	
Deans Asst	1	2		124	160	
Waiting & Reception	2	1		665	330	
Faculty & Professional	63	77		7,844	12,620	
Industry Initiatives	12			1,610		
Office Support	1	1		500	512	
Budget & HR	4	4		522	608	
Budget & HR Assts	2			180		
PT Faculty	1	1		473	480	
Instructor	24	21		3,302	3,400	
Advising	20	8		2,672	1,144	
Advising Reception	1	1		129	180	
Advising Student Area	1			750		
Program Office Reception	-	1		-	240	
Prof Devel (Career Ctr)	3	1		483	624	
IT Office	3	2		534	286	
Intl Business	6	6		714	1,228	
Bard Office	6	6		1,072	1,215	
Bard Incubator	5	5		897	2,500	
11 Month Office	4	5		541	938	

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Total	163	146	17	23,725	27,275	(3,550)
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<i>Conference Rooms</i>	2nd Revision Total	Orig Revision Total	Variance	2nd Revision Total	Orig Revision Total	Variance
Conference 30	-	1		-	900	
Conference 20	-	1		-	462	
Conference 18	1			412		
Conference 14	2			590		
Dean's Conference 12	1			450		
Conference 10	1	1		248	280	
Enclosed Deck Mtg Room	1			1,536		
Total	6	3	3	3,236	1,642	1,594

<i>Classrooms & Seminar</i>	2nd Revision Total	Orig Revision Total	Variance	2nd Revision Total	Orig Revision Total	Variance
Classroom 60	-	1		-	1,680	
Classroom 50	-	2		-	2,558	
Classroom 49	2			3,492		
Classroom 48	1			1,405		
Classroom 46	2			3,557		
Classroom 45	-	7		-	8,246	
Classroom 42	2			2,266		
Classroom 41	1			1,702		
Classroom 36	5			5,591		
Seminar 25	-	6		-	4,562	
Seminar 22	2			1,385		
Seminar 20	1			620		
Seminar 16	4			1,933		
Seminar 10	1			244		
Breakout 16	-	7		-	2,626	
Breakout 14	1			446		
Breakout 12	3			999		
Breakout 10	-	4		-	1,064	
Breakout 4	1			182		
Total	26	27	(1)	23,822	20,736	3,086

2nd	Orig		2nd	Orig	
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<i>Other</i>	Revision Total	Revision Total	Variance	Revision Total	Revision Total	Variance
Trading Room	-	1		-	1,900	
Market Café (Eating Commons & Kit)	1	1		2,442	1,520	
Student Study/Interaction				5,206	2,632	
Library/Knowledge Center	1	1		475	500	
Staff Lounge/Break Room	2	2		674	864	
Computer Lab	2	3		3,225	1,174	
Server Room & IT Storage	1	1		450	430	
Showers	2	2		180	200	
GEM Video Production	1			320		
GEM Break Rm	1			167		
Advising Break Rm	1			83		
Bard Break Rm	1			110		
Storage	5	1		600	1,091	
File Room	1	1		232	288	
File Room HR & Budget	1	1		225	144	
Admissions/Records	1	1		300	384	
Copy Mail Fax (& Supply)	3	2		519	658	
Total	24	17	7	15,208	11,785	3,423

Total ASF				65,991	61,438	4,553
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Entry Lobby		1			1,200
Circulation		1			2,253
First Floor (Future Development)					7,028

Total from Original Program Plan Revision					71,919
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Office areas increased by 17 offices from 146 to 163 due to program growth and also a decision to include in the project the undergraduate advising staff along with the graduate advising staff. Office square footage decreased by 3,550 asf primarily by reducing office sizes to the campus standard when it was realized the more extensive wall demolition would occur due to enlarged air duct requirements and that many existing office walls could not be saved.

Conference rooms increased from 3 to 6, and their square footage increased by 1,594 asf primarily by including the enclosure of a deck area to create additional meeting space.

Classrooms and seminar rooms reduced by 1 from 27 to 26, but square footage increased by 3,086 asf. These changes resulted from locating most of the classroom space on the 2nd and 3rd floors and working with the building opportunities and constraints in those areas.

Other areas increased in square footage by 3,423 asf from a variety of changes. The most significant areas of impact are described in the remainder of this paragraph. A trading room was no longer deemed to be an important part of the program. More space is devoted to student study space, interaction areas, and the café area which all benefit student study and student life activities. More space is devoted to computer labs. Several new areas were identified such as a video production room and several separate break rooms for programs that may operate at odd hours and need to be more self contained.

The most significant factors that changed the space elements, quantities, and square footages during the design process were:

- Location of most classrooms and high pedestrian traffic areas on the lower floors (1-3). This created 2 additional stairs and rest rooms on those floors, but avoided the need for additional elevators.
- Project inclusion of part of the first floor where a leased office suite and open outside space currently exist. This creates additional square footage to meet program needs for offices, a classroom, and a café and also creates improved building /school identity as well as student ambient and study space. An open stair will create better connectivity to the lower predominantly student oriented floors.
- More detailed information on evolving departmental and staff needs.
- Engineering studies that identified the need to replace additional mechanical and infrastructure elements. The need for enlarged duct work resulted in considerably more demolition within the building and more opportunities for design flexibility than existed previously.
- Increased requirements for rest rooms, tel/data equipment, IT requirements, and duct shafts were identified.

The design process also explored future possibilities of enclosing a rear courtyard and occupying a currently leased tenant suite for impact on the proposed design.

V. Finance

This program plan revision projects costs that are \$5,000,000 greater than those of the previous approval. The total project cost is \$44,550,000 compared to the previous project cost of \$39,550,000. Note that \$24,550,000 of the project cost was for the building acquisition.

The table below lists the current project costs, the previous project costs, and a variance column.

Total Project Costs

		Total Project Costs	Prior- Year Appropriation(s)	Current Request FY 2010-11
A. Land Acquisition				
(1)	Building Acquisition	\$24,550,000	\$24,550,000	\$0
B. Professional Services				
(2)	Site Surveys, Investigations, Reports	\$50,000	\$50,000	\$0
(3)	Architectural/Engineering	\$1,236,024	\$920,188	\$315,836
(4)	Code Review/Inspection	\$20,000	\$0	\$20,000
(6)	Advertisements	\$3,001	\$3,001	
(8)	Other (LEED commissioning)	\$115,023	\$115,023	\$0
(9)	<i>Total Professional Services</i>	\$1,424,048	\$1,088,212	\$335,836
C. Construction or Improvement				
(1)	Infrastructure			
	(a) Service/Utilities	\$100,000	\$100,000	\$0
(2)	Structure/Systems			
	(b) Renovate GSF:	\$11,341,620	\$7,415,334	\$3,926,286
(3)	Other (Specify)	\$152,896	\$152,896	\$0
(4)	High Performance Certification Program	\$183,333	\$0	\$183,333
(6)	<i>Total Construction Costs</i>	\$11,777,849	\$7,668,230	\$4,109,619
D. Equipment and Furnishings				
(1)	Equipment	\$1,500,000	\$1,500,000	\$0
(2)	Furnishings			\$2,429,922
(3)	Communications	\$850,000	\$750,000	\$100,000
(5)	<i>Total Equipment and Furnishings Cost</i>	\$4,779,922	\$4,679,922	\$100,000
E. Miscellaneous				
(3)	Relocation Costs	\$200,000	\$200,000	\$0
(5)	<i>Total Misc. Costs</i>	\$200,000	\$200,000	\$0
F. Total Project Costs		\$42,731,819	\$38,186,364	\$4,545,455
G. Project Contingency				
(2)	10% for Renovation	\$1,818,181	\$1,363,636	\$454,545
(3)	<i>Total Contingency</i>	\$1,818,181	\$1,363,636	\$454,545
H. Total Budget Request		\$44,550,000	\$39,550,000	\$5,000,000

Cost increases in the above table that reflect cost increases in the non construction categories are as follows:

Non Construction Category Cost Variances

Category	Variance	Comment
Architecture/Engineering	\$315,836	Design services increase as construction costs increase.
Code Review	\$20,000	Previously planned to be done in-house, code review will be performed by a 3 rd party due to project size.
Communications	\$100,000	Better cost information.
Contingency	\$454,545	Increases by 10% as project costs increase.

The construction related cost increases are displayed and explained in more detail in the following table:

Construction Related Cost Increases

Item	Scope Change	Increased Cost	Comment
A	LEED Gold Certification.	\$ 183,333	Costs were not broken out previously. Cost estimates have been prepared by 3 independent contractors.
B	All new walls 6" above grid instead of to grid.	\$ 18,983	Improves acoustics which will be especially important in academic areas.
C	Sidelight and clerestory glazing detail at offices, and classrooms.	\$ 30,221	Enhances safety at doorways and improves interior ambience with increased natural light.
D	Millwork at Market Café and reception desks.	\$ 124,333	Prior to schematic design, millwork was not defined.
E	Installation of aluminum and glass overhead doors in 1st floor lobby	\$ 16,180	Increases circulation to courtyard and enhances student quality of life.
F	Acoustically wrapped panels at classrooms	\$ 50,833	Improves classroom acoustics ensuring optimum listening capability at each student station.

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G	Additional multifixture restrooms at classroom floors	\$ 125,200	Concentrating classroom locations on lower floors increases the requirements for restroom fixtures. Leaving the existing restrooms in tact and adding new restrooms is more cost effective than replacing the existing fixtures. Adding multistation restrooms is more cost effective than adding individual unisex restrooms.
H	Installation of sun shade window film.	\$ 43,300	Improves design aesthetics and enhances emergency efficiency.
I	Installation of tiered flooring in classrooms.	\$ 149,571	Tiered seating enhances student station visibility in fixed table lecture hall settings.
J	Wet seal at exterior windows.	\$ 42,260	Price escalation from due diligence study.
K	Demolition of all existing mechanical equipment in interior spaces.	\$ 75,333	Consolidation of classrooms onto lower floors necessitates larger duct systems for proper air flow which also requires demolition of the existing smaller ducts.
L	Increased mechanical shaft on floor 6 for outside air requirements.	\$ 41,382	Additional duct work requires additional shaft size. This accommodates a mechanical code requirement.
M	Replacement of all transformers	\$ 31,333	Engineering testing determined that the transformers were near the end of their useful life.
R	Replacement of all branch circuitry	\$ 79,333	Engineering studies determined that the age and complexity of the branch circuitry were such that project would be better served by replacing them than by further tracing the circuits and extending them.
S	Replacement and relocation of electrical panels	\$ 31,000	The age and lack of room in existing electrical closets necessitate the replacement and relocation of the electrical panels.
U	Replace air handling units	\$ 182,881	The earlier plan was to reuse both existing air handling units and add one new one; engineering studies indicate that both units should be replaced with larger units.

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W	Replacement of the Cooling Tower.	\$ 51,051	The due diligence review allocated \$2,827 for servicing of the tower. The tower is old and rusty and needs to be replaced at a more significant cost.
X	Install a new cooling system to serve the Computer Room and Data Closet	\$ 182,533	Computer rooms require supplemental cooling
N	Replace HVAC Pumps.	\$ 36,666	All new pumps are included for chilled water, heating, and the cooling tower. Additional engineering studies determined that the existing pumps are old and do not have sufficient capacity of serve the requirements of the project.
O	Replace Exhaust Fans in existing toilets.	\$ 15,000	The exhaust capacity of the exhaust fans in the existing toilets has been determined to be inadequate to meet current code requirements.
P	Install Stairwell Pressurization equipment.	\$ 50,000	The IBC requires the building to have a stairwell pressurization system for smoke control.
Q	Install new direct digital controls for the HVAC system.	\$ 164,750	Existing controls are outdated; new digital controls will increase occupant comfort, perform with energy efficiency, and comply with university building standards.
R	Replacement of ceiling grid, carpet, doors, door/sidelight frames, millwork, electrical rooms, IT rooms and light fixtures.	\$ 483,333	These items were previously believed to be reused and not replaced; replacement is required due to more extensive demolition resulting from the installation of larger air ducts.
S	Connecting Stair and Curtain Wall Enclosure	\$ 878,939	A stair connection from the first to second and third floors will greatly reduce elevator usage and provide greater access between the floors extensively used by students. Exterior improvements will enhance the building's identity.

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T	1st Floor Lobby Expansion	\$ 343,754	Provides program space for a classroom, professional development offices, and a café previously programmed for an upper floor that will enhance student life in a ground floor location with indoor/outdoor connectivity.
U	Enclose the 6th Floor Deck	\$ 472,993	Deck enclosure creates an additional meeting room and event space adjacent to the Dean's suite.
V	ADA Rest Room 6th Floor	\$ 24,007	While other floors require additional toilet fixtures to increased occupancy, the 6th floor does not; however, providing an ADA toilet would be highly desirable.
W	New Roof Insulation	\$ 55,840	A new roof will increase energy efficiency.
X	Replace Parking Garage Lights	\$ 8,364	Improved lighting will enhance parking and pedestrian safety.
Y	Luminaires at Tiered Classrooms	\$ 46,787	Improved lighting in the tiered classrooms will provide better coordination with ceiling mounted AV equipment.
Z	Aluminum Hand and Guard Rails at Stairs	\$ 70,122	Replacing painted handrails in the stairwells with aluminum ones will reduce future maintenance costs.
	Total	\$ 4,109,619	

The project cost increases shown in the tables above are largely driven by the following factors:

- Increased scope of renovation of the 1st floor to create additional classroom, office, and student areas along with an open stair that will facilitate easy connection between the lower 3 floors with less elevator use.
- Location of classrooms primarily on lower floors to encourage major pedestrian traffic areas at lower levels.
- Replacement of major mechanical system elements resulting from more detailed engineering studies.
- More extensive renovation due to installation of larger mechanical ducts throughout the facility.
- Greater understanding of LEED requirements necessary to achieve gold certification for this project.
- Better and more recent cost information resulting from detailed schematic drawings and subsequent pricing from 3 independent contractors.
- More specific product selection.
- Costs that are increased due to these increases in project scope and budget. Costs that are increased due to these increases in project scope and budget.

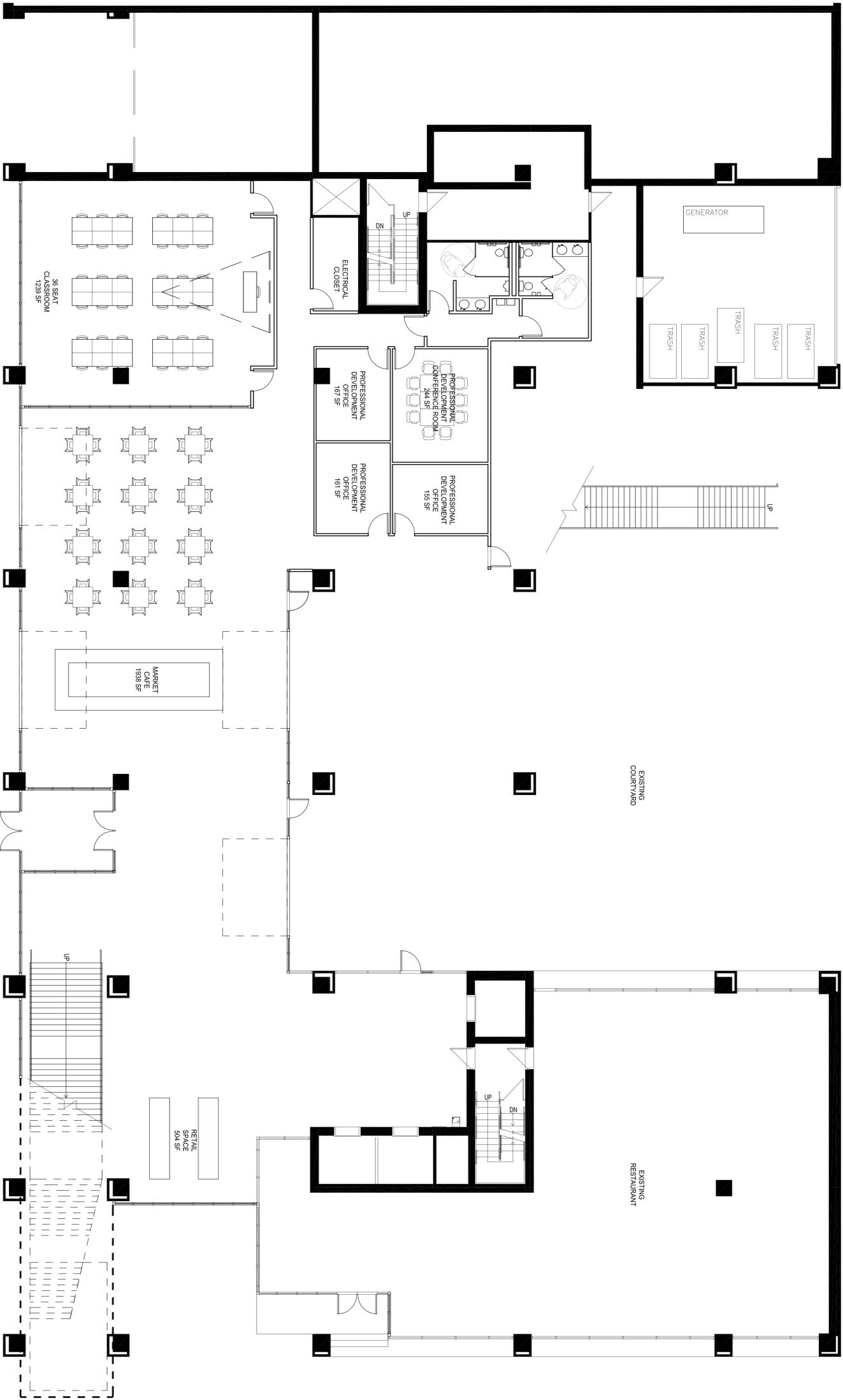
The \$5,000,000 in increased project costs is to be funded by cash from additional gifts that are being sought in the Business School capital campaign which is currently underway.

Summary

The Business School Program Plan Revision 2 proposes to increase the scope and budget of the renovations at 1475 Lawrence Street to better accommodate the programs and needs of the Business School of the University of Colorado Denver. The revised project includes 108,450 gsf and 65,991 asf including occupancy of much of the 1st floor of the building. The project cost is \$44,550,000 which reflects an increase of \$5,000,000. The project is a cash funded project; the additional \$5,000,000 will be funded by gifts.

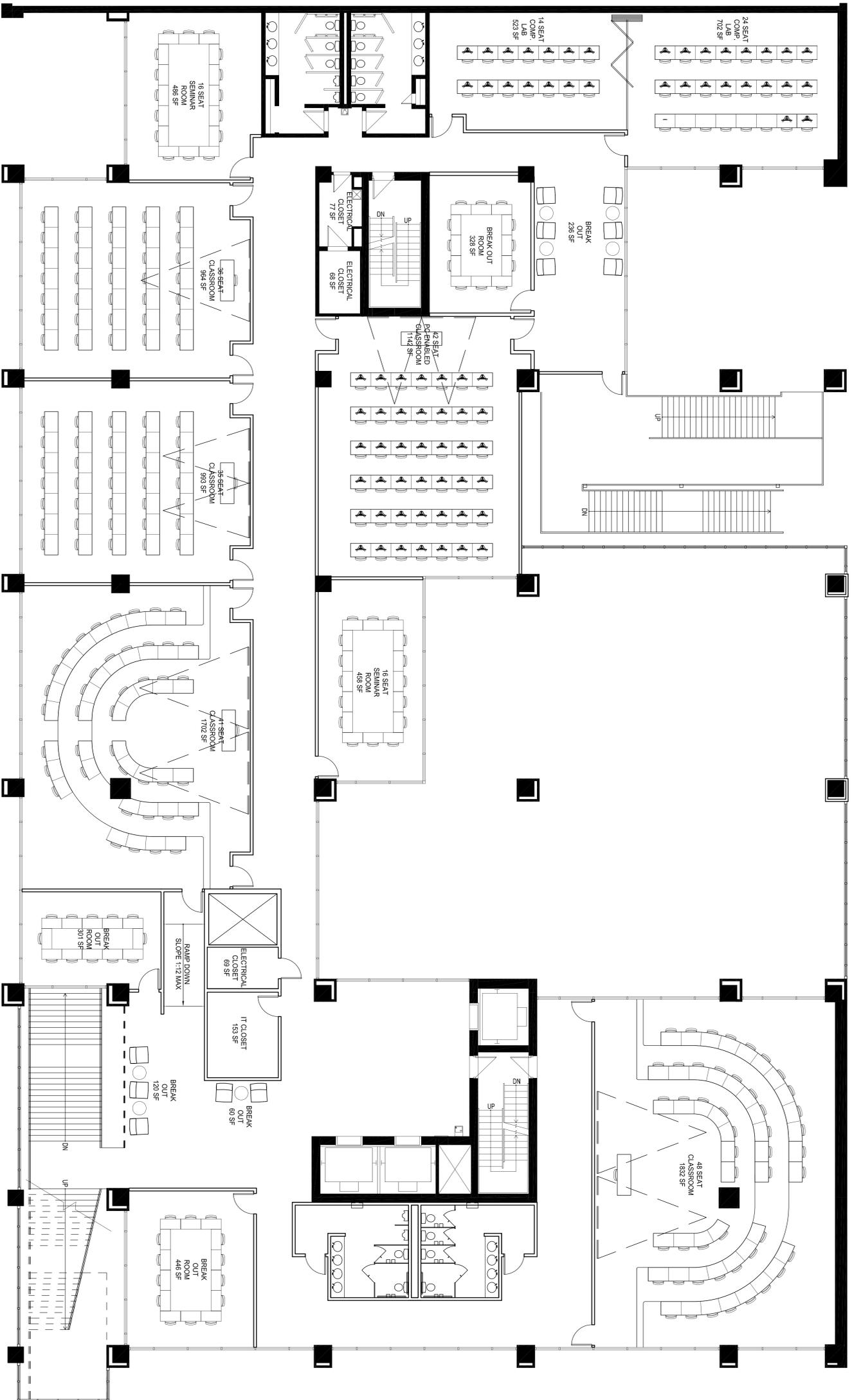
Appendices

The following pages include the schematic design plans for floors 1-6 of the proposed Business School renovation at 1475 Lawrence Street.

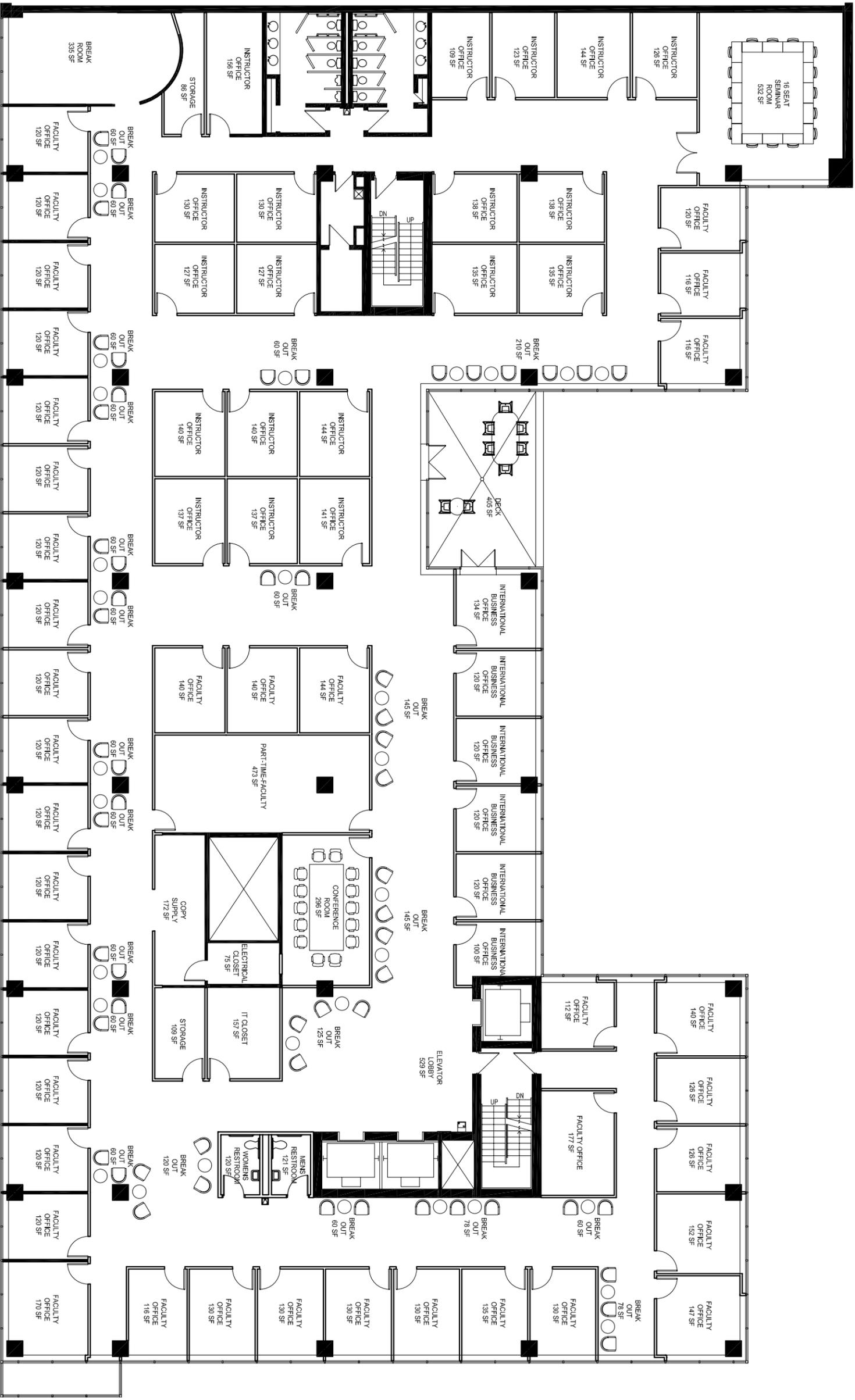


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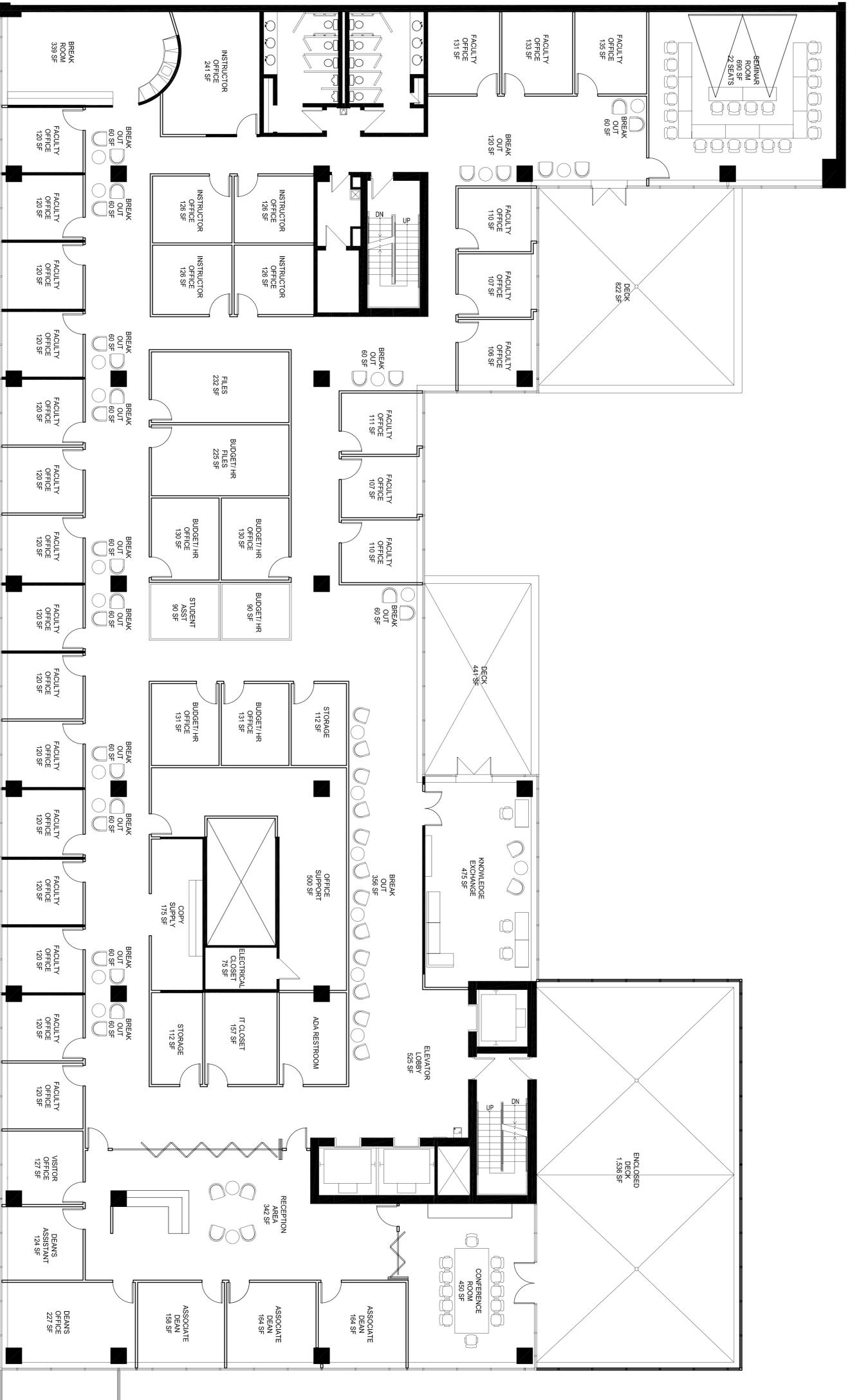
FLOOR 1
OPTION 1



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