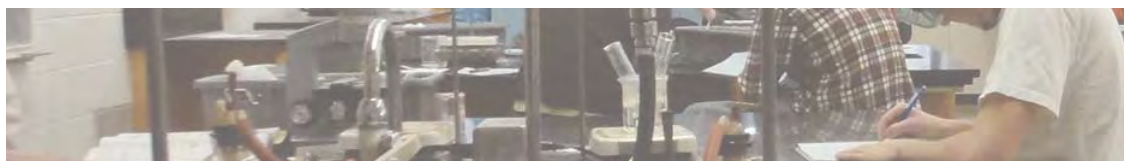


UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION



ARD EBERLE *Ballinger*



APPENDICES TO THE EXECUTIVE REPORT
VOLUME 2 OF 2

Aug. 3, 2012

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UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX A

FACILITY ASSESSMENT

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APPENDIX A - FACILITY ASSESSMENT

- RATING SYSTEM / EXISTING CONDITIONS
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EXISTING CONDITIONS

RATING SYSTEM

As each category of the facility was analyzed, each component was graded using the format provided by UW System. The item was given a number based on its condition and functionality from one to seven.

- Items graded one or two are in generally good condition and can remain in use with some or no maintenance or renovation. They are color-coded light green (see chart).
- Items graded three or four are in the fair to poor condition and can only remain in prolonged use or occupation with moderate to significant renovation. They are colored-coded yellow.
- Items graded five, six or seven have reached the end of their useful life. Remediation of items in this condition requires major renovation or repair to complete removal or replacement. They are color-coded red.

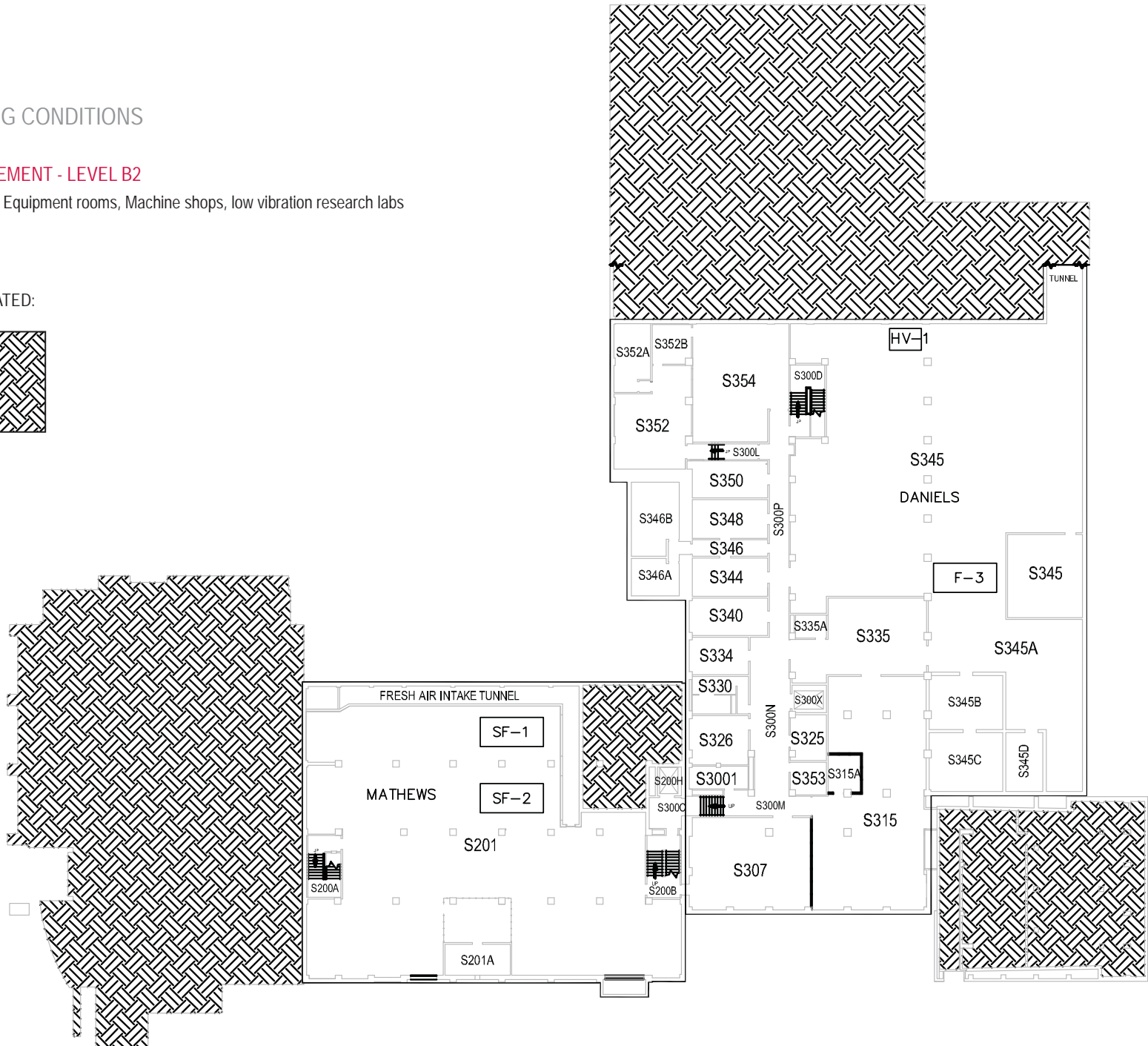
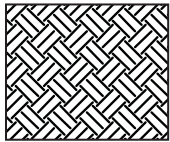
CODE	RATING	ACTION REQUIRED	RATING DESCRIPTION
1	Good	No Renovation	Suitable for continued use with normal operational maintenance.
2	Satisfactory	Minimal Renovation	Minor deterioration. Requires minor repair or restoration to present acceptable conditions.
3	Fair	Moderate Renovation	Moderate deterioration or partial obsolescence. Requires moderate restoration or updating.
4	Poor	Significant Renovation	Significant deterioration or obsolescence. Requires significant restoration, updating, or partial replacement of components.
5	Unsatisfactory	Major Renovation	Extensive deterioration or obsolescence. Requires extensive restoration, updating, and significant replacement of systems and components.
6	Replace	Complete Replacement	Is deteriorated beyond restoration, completely obsolete, or unsuitable for proposed use. Requires complete replacement of systems and components.
7	Abandonment	Demolition/ Removal	Not needed, not suitable for proposed use, should not be replaced. Demolition/removal required.

EXISTING CONDITIONS

SUB-BASEMENT - LEVEL B2

Mechanical Equipment rooms, Machine shops, low vibration research labs

UNEXCAVATED:

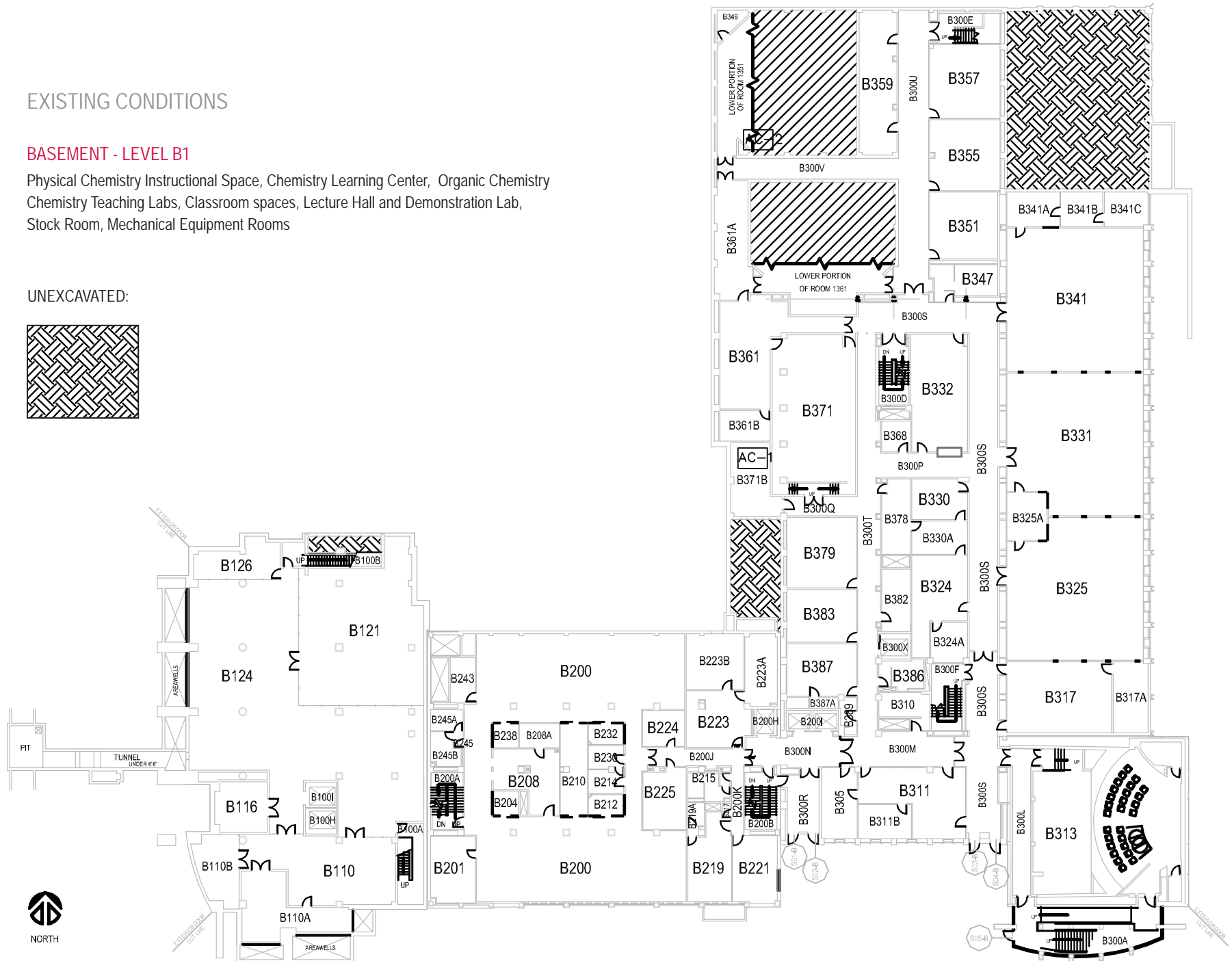
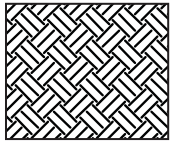


EXISTING CONDITIONS

BASEMENT - LEVEL B1

Physical Chemistry Instructional Space, Chemistry Learning Center, Organic Chemistry Chemistry Teaching Labs, Classroom spaces, Lecture Hall and Demonstration Lab, Stock Room, Mechanical Equipment Rooms

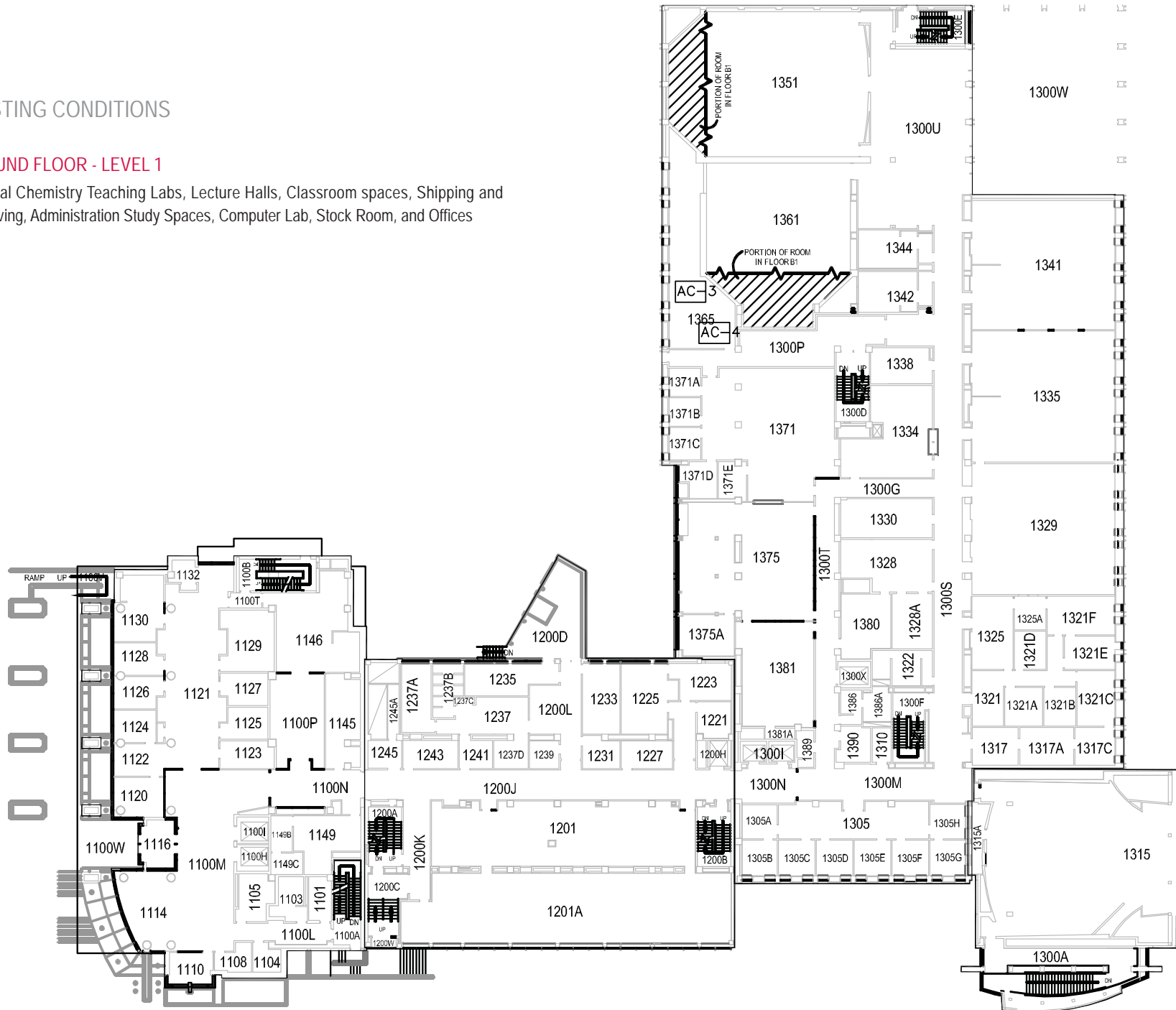
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EXISTING CONDITIONS

GROUND FLOOR - LEVEL 1

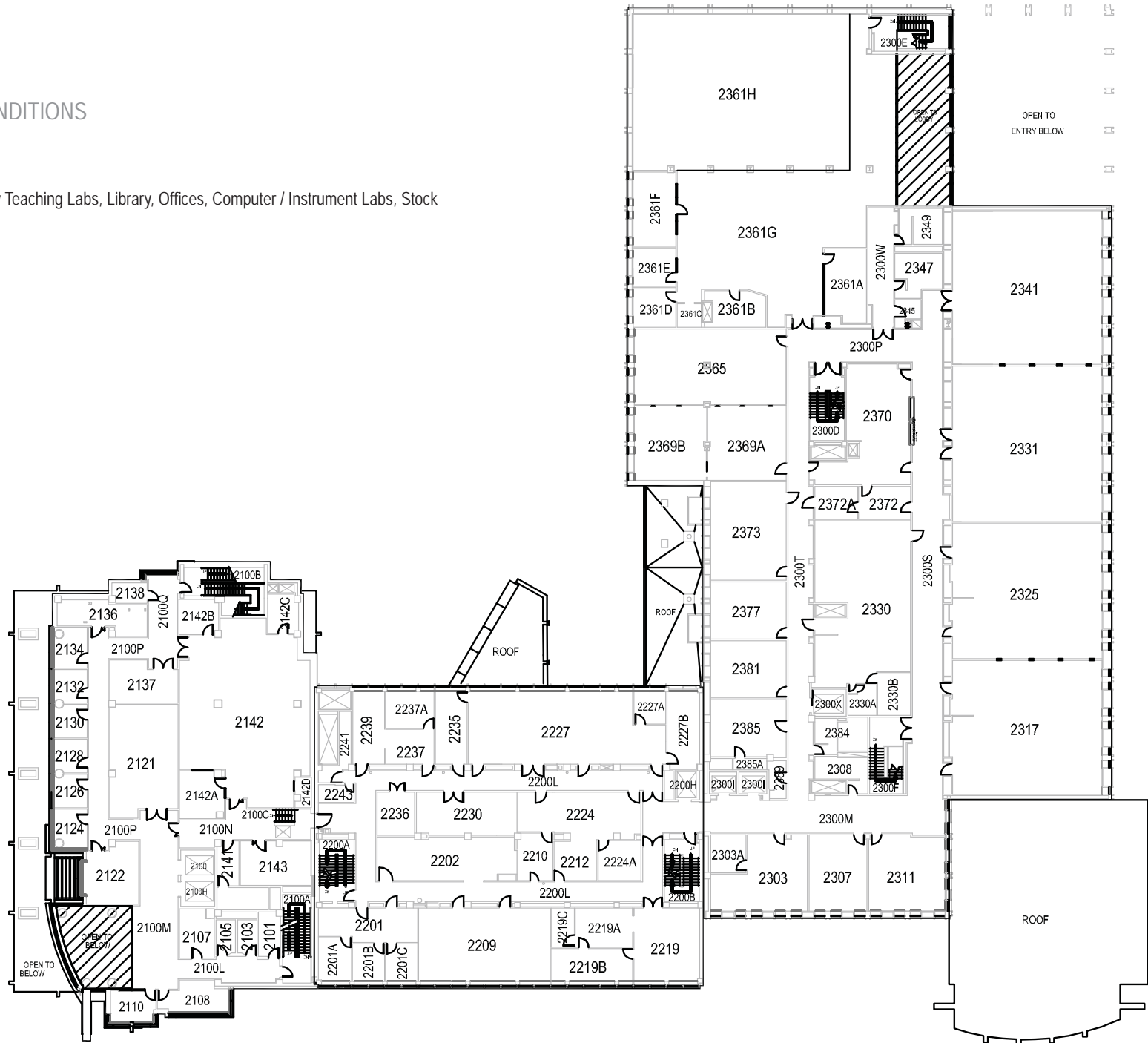
General Chemistry Teaching Labs, Lecture Halls, Classroom spaces, Shipping and Receiving, Administration Study Spaces, Computer Lab, Stock Room, and Offices



EXISTING CONDITIONS

LEVEL 2

Analytical Chemistry Teaching Labs, Library, Offices, Computer / Instrument Labs, Stock Room

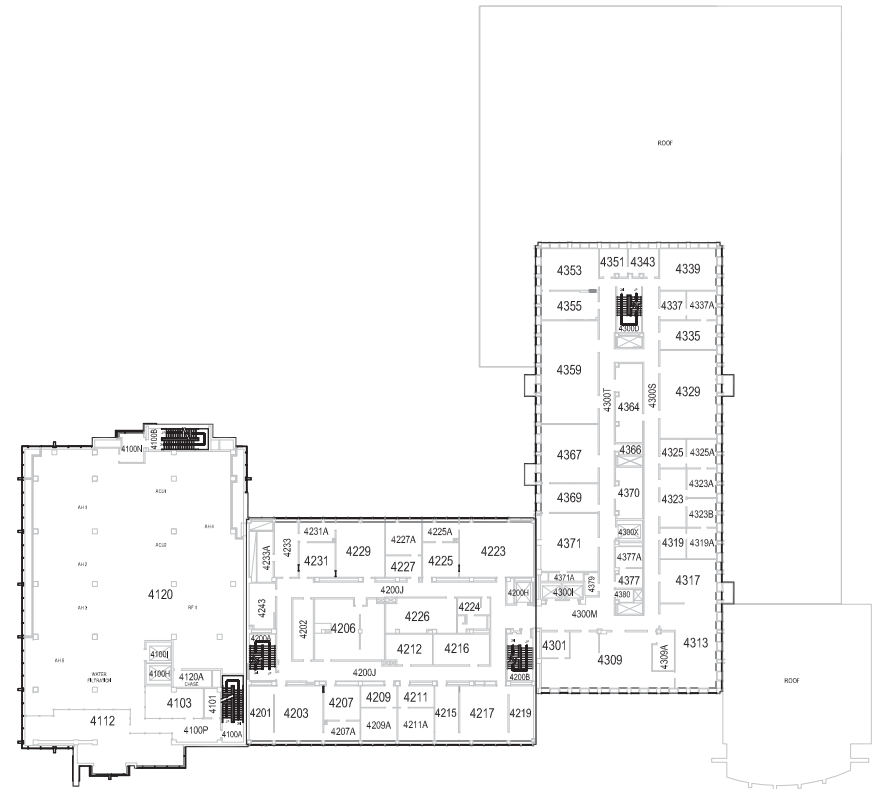


EXISTING CONDITIONS

LEVEL 3



LEVEL 4



NORTH

EXISTING CONDITIONS

LEVEL 5

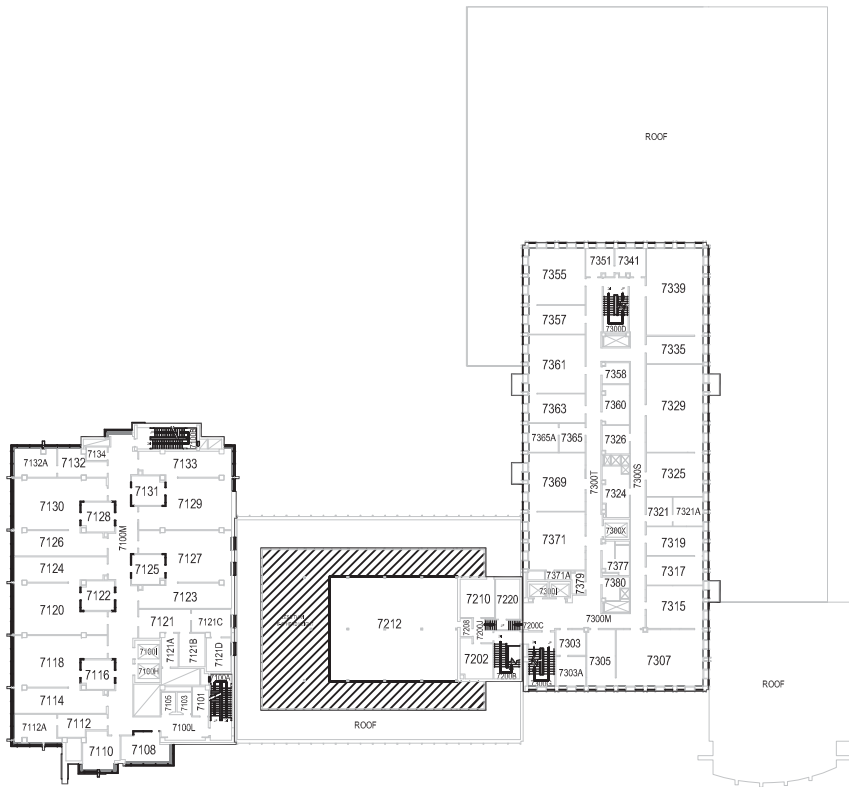


LEVEL 6

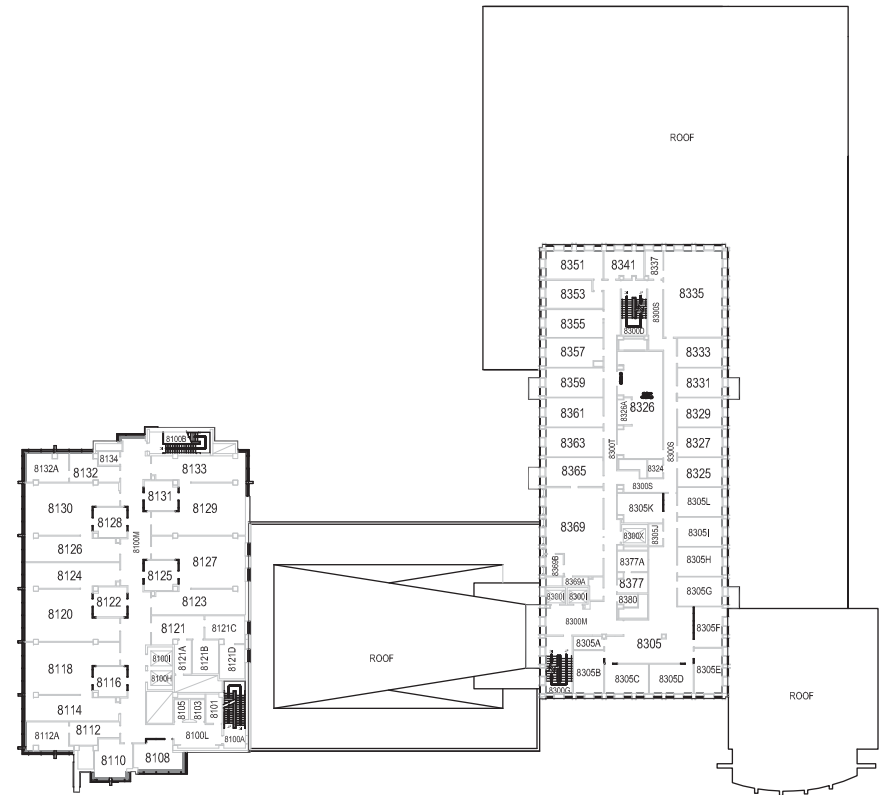


EXISTING CONDITIONS

LEVEL 7

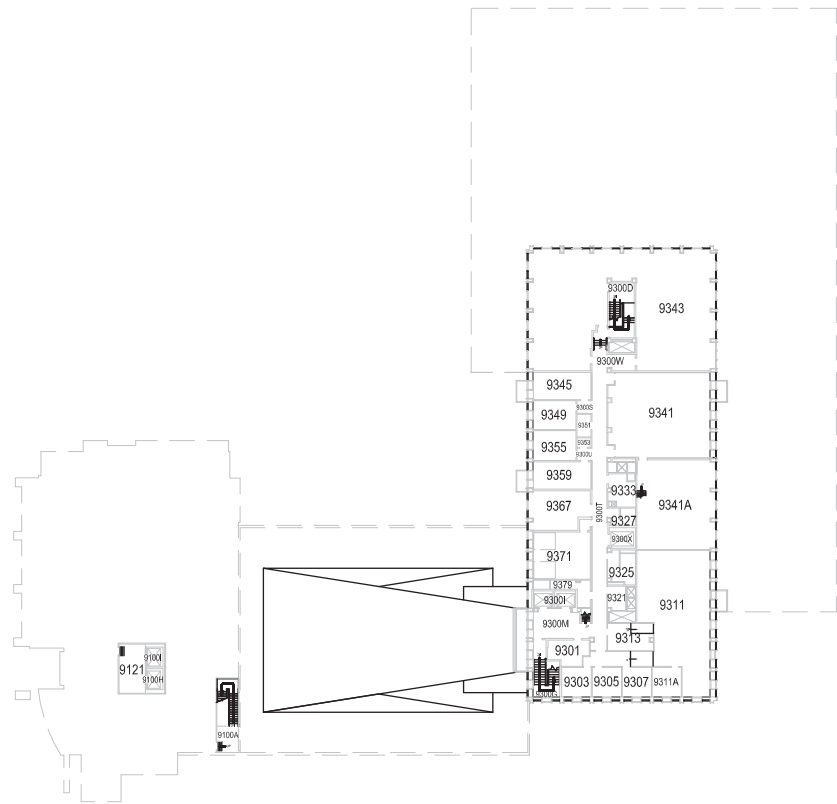


LEVEL 8

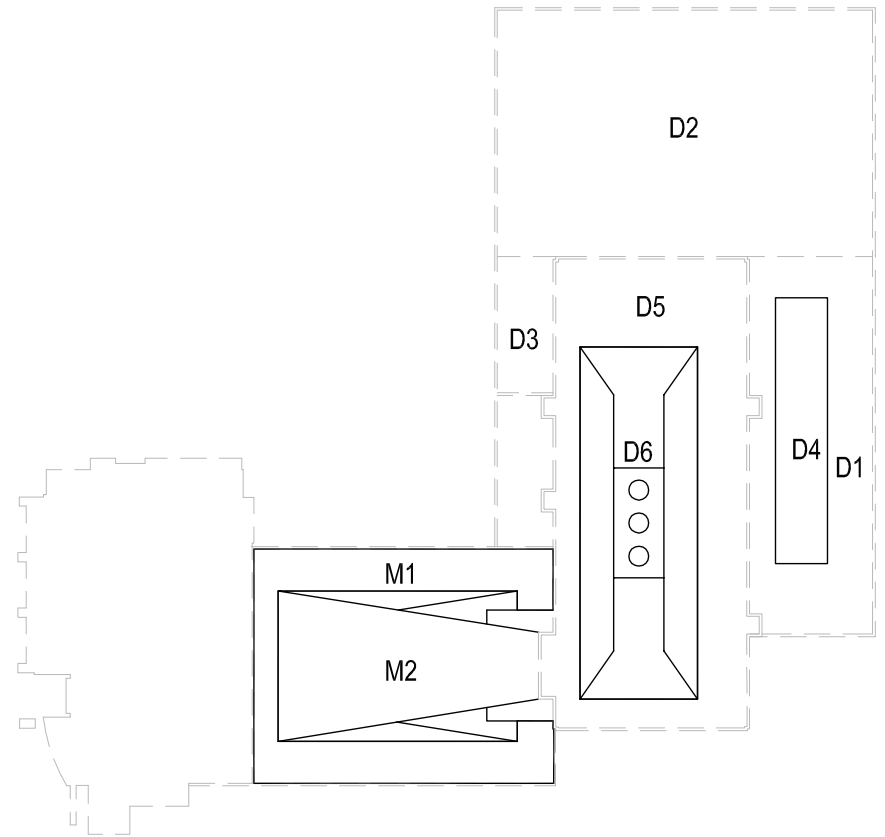


EXISTING CONDITIONS

LEVEL 9



ROOF LEVEL



UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

STRUCTURE / SHELL

STRUCTURE SHELL

DANIELS BUILDING

Construction of the Daniels Tower was completed in 1967. The building has a steel frame with cast in place concrete floors and roofs. The exterior skin comprises textured pre-cast concrete, brick, and an aluminum curtainwall system with glazed and infilled panels. Almost all of the elements of the exterior of the building are original. Minor modifications to the West facade were made circa 2000. Seminar Hall was added to the Southeast corner of the building around that time as well, covering portions of the existing facade.

Some recommendations for maintenance and repairs to the Structure and Shell of The Daniels Building have been captured in the Systems Repair Matrix, Appendix C.

MATHEWS BUILDING

Construction of the Mathews Building was completed in 1962. The Structure of the Mathews Building is cast-in-place concrete with steel reinforcement and it is in satisfactory condition. It too has a precast concrete facade that incorporates stick built aluminum window systems for the majority of the facades. Being the oldest of the buildings in the complex, it presents some major issues, especially having to do with the HVAC systems originally installed. Some of those issues will be addressed in the base project proposed in the Executive Report. Others will have to be addressed one by one as funds become available and the need arises.

CODE	RATING	ACTION REQUIRED	RATING DESCRIPTION
1	Good	No Renovation	Suitable for continued use with normal operational maintenance.
2	Satisfactory	Minimal Renovation	Minor deterioration. Requires minor repair or restoration to present acceptable conditions
3	Fair	Moderate Renovation	Moderate deterioration or partial obsolescence. Requires moderate restoration or updating.
4	Poor	Significant Renovation	Significant deterioration or obsolescence. Requires significant restoration, updating, or partial replacement of components.
5	Unsatisfactory	Major Renovation	Extensive deterioration or obsolescence. Requires extensive restoration, updating, and significant replacement of systems and components.
6	Replace	Complete Replacement	Is deteriorated beyond restoration, completely obsolete, or unsuitable for proposed use. Requires complete replacement of systems and components.
7	Abandonment	Demolition/ Removal	Not needed, not suitable for proposed use, should not be replaced. Demolition/removal required.

EXTERIOR								
DANIELS BUILDING								
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING
A	Structure							
A10	Foundations							
A1010	Standard Foundations	Spread Footings	Cast-in-place concrete (CIP) - Maximum allowable soil bearing pressure: 8000 PSF	Not visible				NA
A1020	Special Foundations	Strap Footings	Cast-in-place concrete - Maximum allowable soil bearing pressure: 8000 PSF	Not visible				NA
A20	Subgrade Enclosures							
A40	Slabs on Grade							
		Sub-basement floor	Cast-in-place concrete slab - 6" thick with 6X6 - 6/6 (6X6 W2.9/2.9)WWM	Good Condition		22655 SF		1
		Basement Floor	See B1010 - Floor Construction					
B	SHELL							
B10	SUPERSTRUCTURE							
B1010	Floor Construction							
		Basement Floor	CIP slab on grade - 5" thick with 6x6 - 6/6 (6X6 W2.9/2.9)WWM; CIP concrete slab on steel beams, Columns: Steel Wide Flange, various sizes; enclosed by 4" cmu or Clay Tile; with 2 hour fire rating - Live Load Design: Corridors 100PSF; Rooms 100 PSF; Library 150PSF; Storage Rooms 150 PSF.	Good Condition		36561 SF		1
		1st Floor	CIP concrete slab on steel beams, Columns: Steel Wide Flange, various sizes; enclosed by 4" cmu or Clay Tile; with 2 hour fire rating - Live Load Design: Corridors 100PSF; Rooms 100 PSF; Library 150PSF; Storage Rooms 150 PSF.	Good Condition		34212 SF		1
		2nd Floor	See 1st Floor	Good Condition		33065 SF		1
		3rd Floor	See 1st Floor	Good Condition		13825 SF		1
		4th Floor	See 1st Floor	Good Condition		13825 SF		1
		5th Floor	See 1st Floor	Good Condition		13825 SF		1
		6th Floor	See 1st Floor	Good Condition		13825 SF		1
		7th Floor	See 1st Floor	Good Condition		13825 SF		1
		8th Floor	See 1st Floor	Good Condition		13825 SF		1
		9th Floor	See 1st Floor	Good Condition		13825 SF		1
B1020	Roof Construction							

EXTERIOR								
DANIELS BUILDING								
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING
		Roof D1	Even with Level 3 - CIP Concrete on WF Steel Beams and Columns, Beams enclosed in plaster, columns enclosed in plaster or 4" cmu; 1 HR Rating; 30 PSF Live Load	Good Condition		6804 SF		1
		Roof D2	Even with Level 3 - CIP Concrete on WF Steel Beams and Columns, Beams enclosed in plaster, columns enclosed in plaster or 4" cmu; 1 HR Rating; 30 PSF Live Load; seperated from tower by expansion joint at GL16	Good Condition		13700 SF		1
		Roof D3	Even with Level 2 - CIP Concrete on WF Steel Beams and Columns, Beams enclosed in plaster, columns enclosed in plaster or 4" cmu; 1 HR Rating; 30 PSF Live Load	Good Condition		1123 SF		1
		Roof D4	Doghouse roof on roof D1 - Insulated Metal Panel on Steel Frame	Good Condition		2000 SF		1
		Roof D5	Above Level 9 - CIP Concrete on WF Steel Beams and Columns, Beams enclosed in plaster, columns enclosed in clay tile or 4" cmu; 1 HR Rating; 30 PSF Live Load	Good Condition		13253 SF		1
		Roof D6	Penthouse on D5 - Ribbed 22ga. Metal Roofing on Steel WF Framing - Live Load 30 PSF	Good Condition		6000 SF		1
B1080	Stairs							
		Stair 1	Steel reinforced CIP Concrete slab - 7-1/2" thick; live load 100 PSF; Rubber treads and nosings	Good Condition				1
		Stair 2	Steel reinforced CIP Concrete slab - 7-1/2" thick; live load 100 PSF; Rubber treads and nosings	Good Condition				1
B20	Exterior Vertical Enclosures							
B2010	Exterior Enclosure Walls							
North	Notes: Design Live Load for Wind: below 4th floor 20 PSF, above 4th floor 25 PSF. Total Area: 9800 S.F.; Average R-Value=3.50; 2009 IECC code standard average R-Value=12.86. Both averages include glazing	North Wall Type 1	3" Precast Concrete w/ 1" rigid insulation hung from slab	Rigid insulation approximately R4, precast in good condition - At duct locations in exterior wall	R4.24	2719 SF / 28%		3
		North Wall Type 2	3" Precast Concrete w/ 1" airspace, over 8" CMU	No insulation, precast in good condition	R2.35	3397 SF / 35%		3
		North Wall Type 3	3" Precast - no back-up	Used at penthouse	R.24	258 SF / 3%		3

EXTERIOR									
DANIELS BUILDING									
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING	
	area and R-values in calculation. All wall types need cleaning.	North Wall Type 4	Brick with 1" airspace on 8" concrete block	No insulation	R2.55	1152 SF / 12%		3	
		North Wall Type 5	Insulated Panel in Aluminum glazing system	R-Value for panel only - Frame most likely diminishes overall value	R5.91	1886 SF / 19%		3	
East	Notes: Design Live Load for Wind: below 4th floor 20 PSF, above 4th floor 25 PSF. Total Area: 23794 S.F.; Average R-Value=3.9; 2009 IECC code standard average R-Value=11.4. Both averages include glazing area and R-values in calculation. All wall types need cleaning.	East Wall Type 1	3" Precast Concrete w/ 1" rigid insulation hung from slab		R4.24	5968 SF / 25%		3	
		East Wall Type 2	3" Precast Concrete w/ 1" airspace, over 8" CMU		R2.35	5955 SF / 25%		3	
		East Wall Type 3	Brick with 1" airspace on 8" concrete block		R2.55	861 SF / 3%		3	
		East Wall Type 4	Insulated Panel in Aluminum glazing system	R-Value for panel only - Frame most likely diminishes overall value	R5.91	5373 SF / 23%		3	
		East Wall Type 5	Shaft Wall - Cement stucco over Gyp sheathing on metal studs with batt insulation	Added over existing wall, completed in 1984	R10	1621 SF / 7%		3	
South	Notes: Design Live Load for Wind: below 4th floor 20 PSF, above 4th floor 25 PSF. Total Area: 8880 S.F.; Average R-Value=3.64; 2009 IECC code standard average R-Value=11.62. Both averages include glazing area and R-Values in calculation. All wall types need cleaning .	South Wall Type 1	3" Precast Concrete w/ 1" rigid insulation hung from slab		R4.24	2412 SF / 27%		3	
		South Wall Type 2	3" Precast Concrete w/ 1" airspace, over 8" CMU		R2.35	2381 / 27%		3	
		South Wall Type 3	Brick with 1" airspace on 8" concrete block		R2.55	256 SF / 3%		3	
		South Wall Type 4	Insulated Panel in Aluminum glazing system	R-Value for panel only - Frame most likely diminishes overall value	R5.91	2488 SF / 28%		3	
West	Note: Design Live Load for Wind: below 4th floor 20 PSF, above 4th floor 25 PSF. Total Area: 15503 S.F.; Average R-Value=5; 2009 IECC code standard average R-Value=12.27. Both averages include glazing area and R-Values in calculation. All wall types need cleaning.	West Wall Type 1	3" Precast Concrete w/ 1" rigid insulation hung from slab		R4.24	4650 SF / 30%		3	
		West Wall Type 2	3" Precast Concrete w/ 1" airspace, over 8" CMU		R2.35	2945 SF / 19%		3	
		West Wall Type 3	Insulated Panel in Aluminum glazing system	R-Value for panel only - Frame most likely diminishes overall value	R5.91	3720 SF / 24%		3	
		West Wall Type 4	Shaft Wall - Cement stucco over Gyp sheathing on metal studs with batt insulation	Added over existing wall, completed in 1984	R10	2790 SF / 18%		3	
B2020	Exterior Windows								
	Notes: Storm Windows added in 1984. No issues with window leaking reported	North Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.		R1	388 SF / 4%		3	
	Notes: Storm Windows added in 1984. No issues with window leaking reported	East Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.		R1	4016 SF / 17%		3	
	Notes: Storm Windows added in 1984. No issues with window leaking reported	South Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.		R1	1343 SF / 15%		3	

EXTERIOR								
DANIELS BUILDING								
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING
	Notes: Storm Windows added in 1984. No issues with window leaking reported	West Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.		R1	1438 SF / 9%		3
B2050	Exterior Doors and Grills							
		East Entrance						
B2080	Exterior Wall Appurtenances							
B30	Roofing							
B3010	Roofing							
		Roof D1 - see key plan	EPDM Rubber with 2" Rock Ballast - roof over instructional Labs	replaced in 2003 - Leaks reported every year with snow melt as drifts accumulate behind doghouse - not scheduled for replacement until 2024		6804 SF	7139-7147	5
		Roof D2	EPDM Rubber with 2" Rock Ballast - roof over Library and Lobby	Original to Building - Prevalent moss and deterioration to felt beneath ballast		13700 SF	7134-7138	4
		Roof D3	Adhered EPDM	Replaced in 2006 - scheduled for replacement in 2036		1123 SF		4
		Roof D4 - doghouse	Corrugated Metal			2000 SF	7139-7146	3
		Roof D5	EPDM Rubber with 2" Rock Ballast -	Original to Building - Prevalent moss and deterioration to felt beneath ballast		13253 SF	7104-7113	4
		Roof D6	Corrugated Metal Penthouse roof			6000 SF	7104-7111	3
B3020	Roof Appurtenances							
		Railing	No railing Present on any of the roofs					
B3040	Traffinc Bearing Horizontal Enclosures							
B3060	Horizontal Openings							
B3080	Overhead exterior Enclosures							

EXTERIOR									
MATHEWS BUILDING									
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING	
A	Structure								
A10	Foundations								
A1010	Standard Foundations	Spread Footings	(CIP); 3000 PSF	Not visible					NA
A20	Subgrade Enclosures								
A40	Slabs on Grade								
		Sub-basement Floor	Cast-in-place concrete - 6" Concrete Slab with Steel reinforcement; either #3 Bars at 9" O.C. both ways or 4x4 #4 WWF	Good Condition		10854 SF			1
B	SHELL								
B10	SUPERSTRUCURE								
B1010	Floor Construction								
		Basement Floor	CIP concrete slab (reinforced with WWF or Steel bars - varies) on CIP concrete joists & beams; 2 hour fire rating.	Good Condition		10790 SF			1
		1st Floor	See Basement Floor	Good Condition		10790 SF			1
		2nd Floor	See Basement Floor	Good Condition		10790 SF			1
		3rd Floor	See Basement Floor	Good Condition		10790 SF			1
		4th Floor	See Basement Floor	Good Condition		10790 SF			1
		5th Floor	See Basement Floor	Good Condition		10790 SF			1
		6th Floor	See Basement Floor	Good Condition		10790 SF			1
B1020	Roof Construction								
		Roof M1 - see key plan	CIP concrete slab on CIP concrete joists & beams; 1 hr rating	Good Condition		10359 SF			1
	Roof M2 is built over M1 which is still in place beneath.	Roof M2 - see key plan	Ribbed 22ga. Metal Roofing on Steel WF Framing - Live Load 30 PSF	Good Condition		5883 SF			1
B1080	Stairs								
		Stair 1	Steel metal pan - 2" Concrete filled treads with WWM, 3" Concrete filled Landings with WWM, 1-1/4" Steel pipe railing; 6" masonry wall enclosure	Structure in Good Condition					1
		Stair 2	Steel metal pan - 2" Concrete filled treads with WWM, 3" Concrete filled Landings with WWM, 1-1/4" Steel pipe railing; 6" masonry wall enclosure	Structure in Good Condition					1
B20	Exterior Vertical Enclosures								

EXTERIOR									
MATHEWS BUILDING									
CODE	ITEM	DESCRIPTION	CONSTRUCTION	CONDITION	REMARKS	AREA	PHOTOS	RATING	
B2010	Exterior Enclosure Walls								
South	Notes: Total Area: 8414 S.F.; Average R-value=3.07 (-63% code); 2009 IEC code standard average R-value=8.13; Both averages include glazing area	South Wall Type 1	3" Precast Concrete Panels on 8" concrete block back-up with 1" asphalt impregnated rigid insulation on interior face of block		Approx. R5.34	4535 SF / 46%	7087-7089; 7091-7095	3	
		South Wall Type 2	4" Brick with 8" concrete block back-up		Approx.	372 SF /		3	
North	Notes: Total Area: 9215 S.F.; Average R-Value=3.23; 2009 IECC code standard average R-Value=8.11. Both averages include glazing area and R-value in calculation	North Wall Type 1	3" Precast Concrete Panels on 8" concrete block back-up with 1" asphalt impregnated rigid insulation		Approx. R5.34	3888 SF / 49%	7097, 7098	3	
		North Wall Type 2	4" Brick with 8" concrete block back-up and 1" asphalt impregnated rigid insulation		Approx. R4.54	367.5 SF / 4%		3	
B2020	Exterior Windows								
		South Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.	Prevalent moisture infiltration, apparent from rusting to lintel above window on interior side; Delamination of plastic film on interior, degraded gaskets and sealants	Approx. R1	4308 SF / 47%		5	
		North Wall	1/4" Single pane glazing in aluminum frame with 1/4" single pane aluminum storm window in the interior side.	Prevalent moisture infiltration, apparent from rusting to lintel above window on interior side; Delamination of plastic film on interior, degraded gaskets and sealants	Approx. R1	3809 SF / 45%		5	
B2050	Exterior Doors and Grills								
		South Doors	Pair of aluminum doors with 1/4" glazed half-lights, standard 5-knuckle hinges; set in curtainwall system	Satisfactory Condition			7095	3	
		North Doors	Hollow Metal Doors	Heavy Abuse				5	
B2080	Exterior Wall Appurtenances								
		NA							
B30	Roofing								
B3010	Roofing								
		Roof M1 - see key plan	EPDM Rubber, 2" Rock Ballast	May have been replaced ca. 1984, felt beneath ballast completely disintegrated, prevalent moss and organic material accumulation	approx R20	3695 SF / 36%	7114 - 7130	5	
	Build over existing roof M1, which was left in place	Roof M2	Corrugated Metal Roof	Foam blocks coming out of flutes @ end of panels, rust on edges	not insulated	6664 SF / 64%	7114 - 7130	4	
B3020	Roof Appurtenances								
		Railing	No railing Present on any of the roofs						
B3040	Traffinc Bearing Horizontal Enclosures								
		NA							
B3060	Horizontal Openings								
		NA							
B3080	Overhead exterior Enclosures								



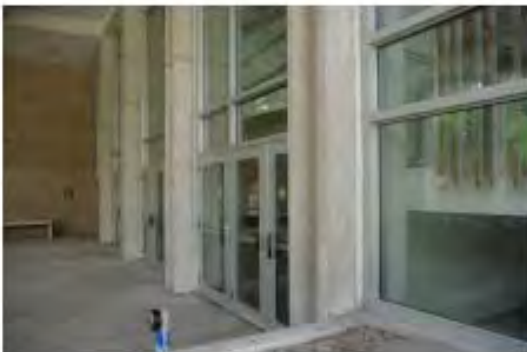
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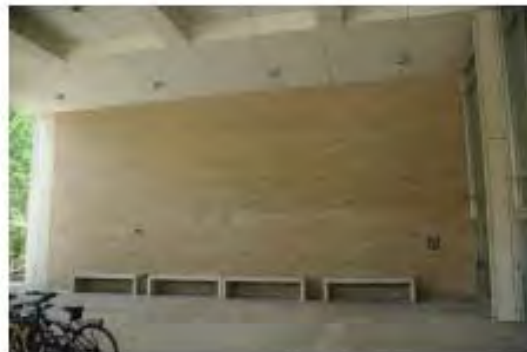
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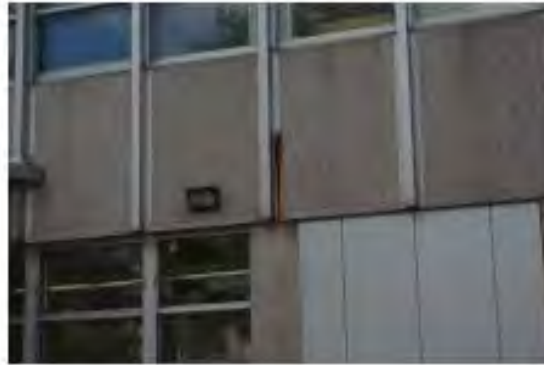
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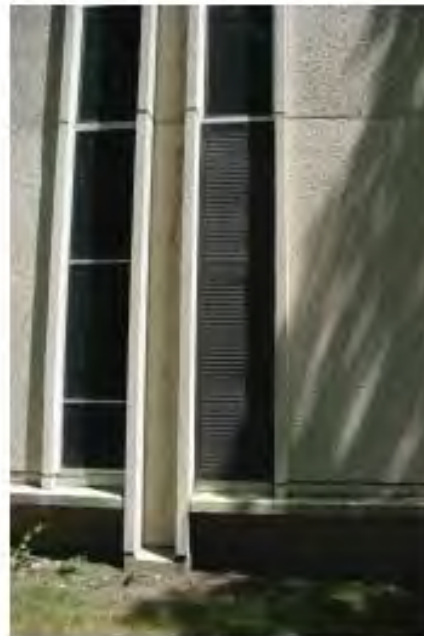
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IMGP7110.JPG



IMGP7111.JPG



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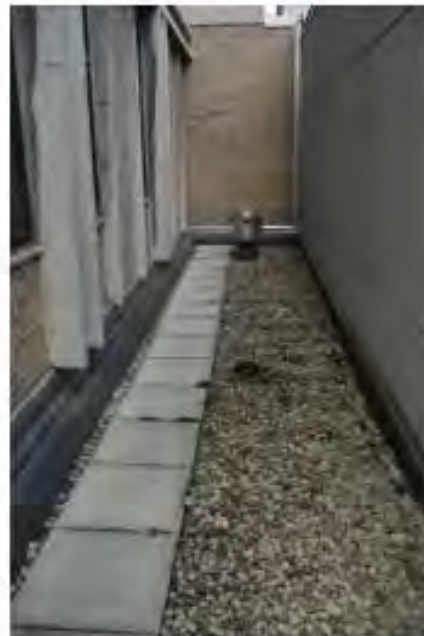
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UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

INTERIORS

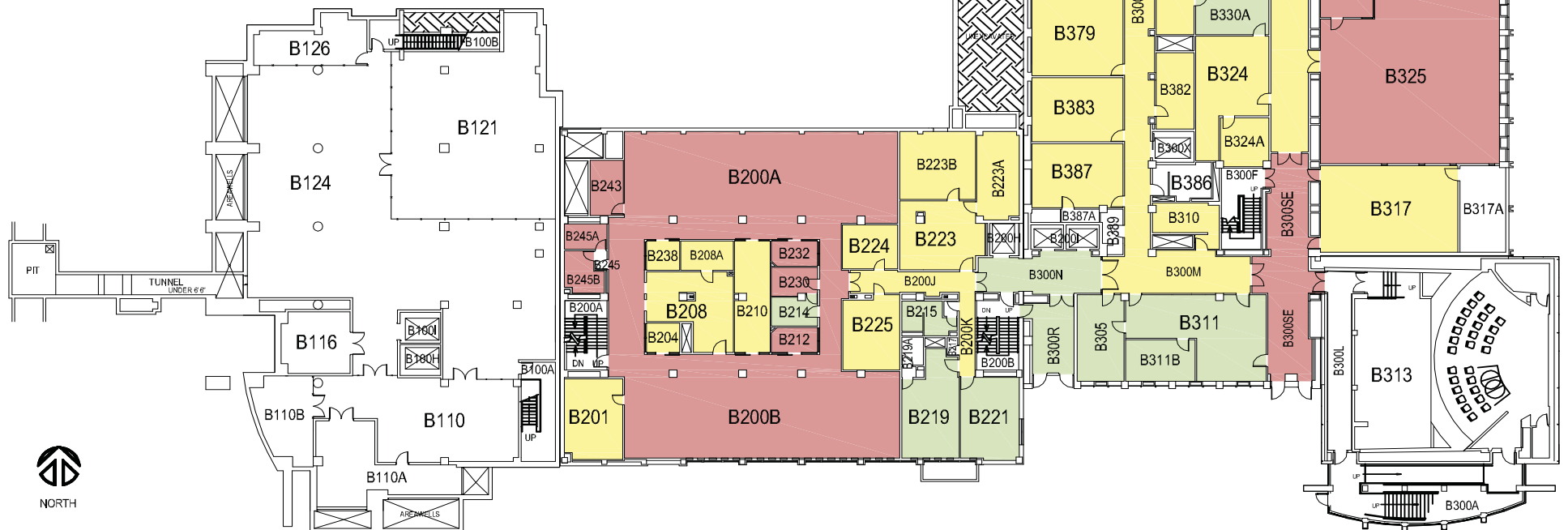
INTERIORS

CONDITION DIAGRAMS

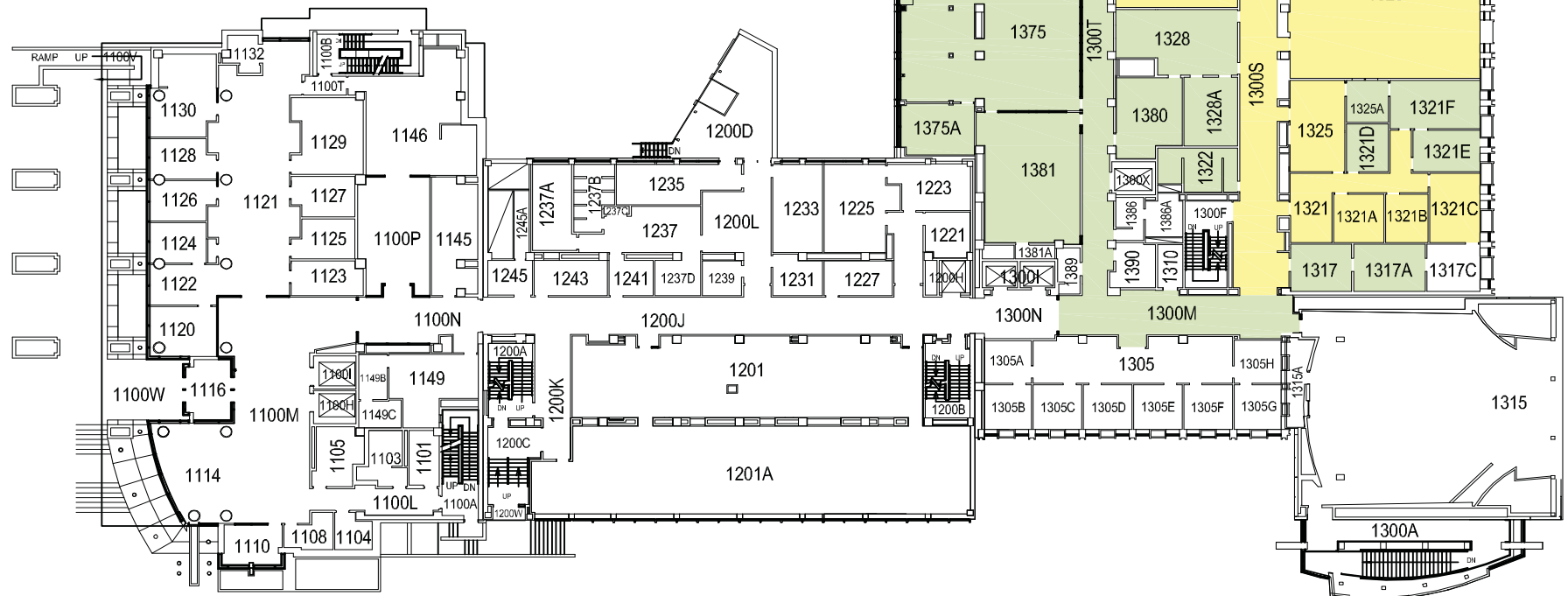
The condition diagrams use the color coded condition rating system (described on page two) to give an "at-a-glance" picture of the spatial conditions. Only the instructional spaces that were the subject of the overall study were appraised. Area that were not evaluated were left white.

COMPRESSED INTERIOR ASSESSMENT BY ROOM

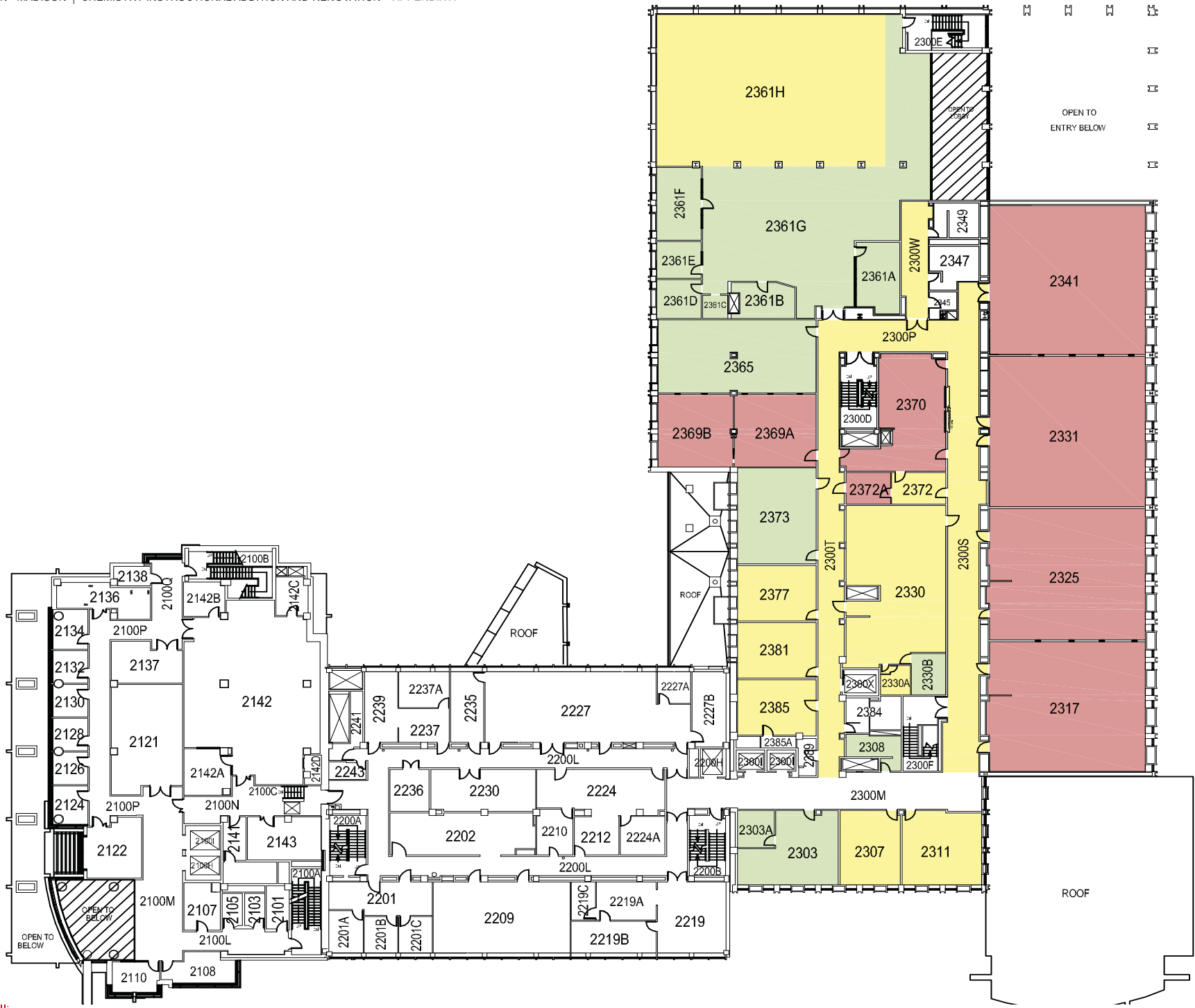
The compressed room by room spreadsheets give a limited amount of information about the condition of each space that was evaluated. They offer a quick reference to the type of a space, to the area of a space, and they reference the photograph numbers for each space. More detailed information about each room can be found in the room by room spreadsheets following the compressed spreadsheets.



CODE	RATING	ACTION REQUIRED	RATING DESCRIPTION
1	Good	No Renovation	Suitable for continued use with normal operational maintenance.
2	Satisfactory	Minimal Renovation	Minor deterioration. Requires minor repair or restoration to present acceptable conditions
3	Fair	Moderate Renovation	Moderate deterioration or partial obsolescence. Requires moderate restoration or updating.
4	Poor	Significant Renovation	Significant deterioration or obsolescence. Requires significant restoration, updating, or partial replacement of components.
5	Unsatisfactory	Major Renovation	Extensive deterioration or obsolescence. Requires extensive restoration, updating, and significant replacement of systems and components.
6	Replace	Complete Replacement	Is deteriorated beyond restoration, completely obsolete, or unsuitable for proposed use. Requires complete replacement of systems and components.
7	Abandonment	Demolition/ Removal	Not needed, not suitable for proposed use, should not be replaced. Demolition/removal required.



NORTH



INTERIOR

ROOM#	ROOM TYPE	ROOM DESCRIPTION	COMMENTS	PHOTOS	RATING	Room Sq. Ft.
B200A	Laboratory	P-Chem		6604-6609	5	1939
B200B	Laboratory	P-Chem Lab - South		6614-6620	5	1873
B200J	Corridor			6666-6668	3	188
B200K	Corridor				3	91
B201	Laboratory	Laser Lab		6627-6628	3	320
B204	Laboratory	P-chem lab support			4	67
B208	Stock Room			6639-6644	3	382
B208A	Stock Room	Chemical Storage		6645-6647	4	106
B210	Computer Lab	P-Chem Comp lab		6624	3	267
B212	Storage	P-Chem Coat Room			5	78
B214	Office	Office/Storage		6653	2	92
B215	Restroom	Mens			2	106
B219	Office	P-Chem Director		6663-6665	2	372
B221	Office	TA Office			2	332
B223	Discussion Room	CLC		6654-6655	3	382
B223A	Discussion Room	CLC			3	251
B223B	Discussion Room	CLC			3	352
B224	Computer Lab	CLC computer room		6656-6658	3	169
B225	Computer Lab	CLC - Computer room		6659-66692	4	285
B230	Office	Office/Storage		6652	3	87
B232	Laboratory	Balance Room		6624	4	78
B238	Computer Lab			6623	3	67
B243	Storage	p-chem storage		6633-6638	5	126
B245A	Laboratory	Dark Room			4	75
B245B	Laboratory	Dark Room		6629-6630	4	99
B300SE	Corridor				3	1707
B300SN	Corridor				3	514
B300T	Corridor				3	909
B300U	Corridor			6690-6692	4	802
B300V	Corridor				4	423
B305	Office			6669-6671	2	275
B310	Restroom	Men's Bathroom	low rating due to not meeting current ADA guidelines. Bathroom stall #1 is too small		4	161
B311	Office	CLC office		6672-6674	2	620
B311B	Office				2	197
B317	Office	TA Office		6686-6688	3	819
B324	Laboratory			6676-6680	4	471
B325	Laboratory	Organic Chemistry		6495-6501	5	2040
B325A	Laboratory	Lab Prep		6518-6519	5	211
B330	Laboratory	Lab next to B3330A		6682-6685	3	234
B330A	Office				2	203
B331	Laboratory	Organic Chemistry		6520-6525	5	2040
B332	Stock Room	Manned stock room		6588-6603	5	727
B341	Laboratory	Organic Chem		6534-6538	3	2149
B341A	Storage	Adj to B341 Lab			5	202
B341B	Storage	Adj to B341 Lab			5	162
B351	Classroom			6487-6491	3	500
B355	Classroom				3	543

INTERIOR

ROOM#	ROOM TYPE	ROOM DESCRIPTION	COMMENTS	PHOTOS	RATING	Room Sq. Ft.
B357	Classroom			6584-6587	4	566
B359	Storage	Under Lecture Hall 1351			4	591
B361	Stock Room	Demonstration Prep		6483-6486	5	772
B361A	Stock Room	Demo Prep Storage		6475-6482	5	459
B361B	Office				4	169
B371	Lecture Hall			6468-6474	5	1452
B378	Computer Lab				4	227
B379	Classroom				4	540
B382	Miscellaneous	Staff Lounge			4	197
B383	Classroom				4	402
B387	Classroom				4	399
1300M	Corridor			6757	2	597
1300P	Corridor	Exit Passage	Rated Construction	6759	3	644
1300S	Corridor			6758	3	1659
1300T	Corridor			6760-6762	2	606
1317	Office				2	175
1317A	Office				2	204
1321	Office			6753-6754	4	289
1321A	Office				4	146
1321B	Office				4	121
1321C	Office			6755	4	211
1322	Restroom	Men's	No ADA stall		2	198
1325	Office	Suite of Office rooms			4	303
1328	Office	Office suite			2	440
1328A	Office				2	223
1329	Laboratory	Gen Chem		6548-6553	4	1872
1330	Storage			6756	3	356
1334	Stock Room	Manned stock room		6733-6752	5	663
1335	Laboratory	Gen Chem			5	1884
1338	Stock Room	Unmanned Stock Rm	Sign outside says 1387, plan says 1338	6723-6728	5	219
1341	Laboratory			6554-6560	5	1851
1351	Lecture Hall	Medium Lecture Hall			5	2730
1361	Lecture Hall	Large Lecture hall		6572-6579	5	2097
1371	Miscellaneous	Study Room			2	1534
1371A	Miscellaneous	1371A,B,C,D study rooms			2	89
1375	Computer Lab				2	1553
1381	Computer Lab	Computer classroom		6720-6722	2	769
2300M	Corridor	South Corridor			3	805
2300P	Corridor	Corridor North			4	465
2300S	Corridor	Corridor East		6460-6461	3	1299
2300T	Corridor	West Corridor		6462-6463	4	918
2303	Office	TA Office			2	547
2303A	Office				2	124
2307	Classroom			6362-6365	4	408
2308	Restroom	Men's Restroom			2	134
2311	Classroom			6418-6421	3	533
2317	Laboratory				5	1862

INTERIOR

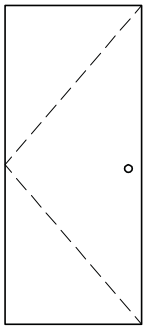
ROOM#	ROOM TYPE	ROOM DESCRIPTION	COMMENTS	PHOTOS	RATING	Room Sq. Ft.
2325	Laboratory	Analytical			5	1884
2330	Laboratory	Instrument Lab		6440-6449	4	1374
2330A	Laboratory	Dark Room		6451-6453	4	80
2330B	Office	Lab Director			2	130
2331	Laboratory	Analytical		6388-6396, 6414-6417	5	2149
2341	Laboratory	Analytical		6397, 6422-6427	5	2122
2361A	Library	Library Copy room			1	275
2361B	Library	Study rooms 2361B-F			1	187
2361G	Library	Library Commons			1	2762
2361H	Library	Stacks			3	3124
2365	Laboratory	Analytical		6432-6438	1	1056
2369A	Laboratory	Computer/Instrument			5	542
2369B	Storage	Prep/storage		6383-6387	5	495
2370	Stock Room	manned stock room		6398-6405	5	766
2372	Miscellaneous	Conference Room		6454-6455	3	157
2372A	Stock Room	Unmanned Stock room		6456-6458	5	129
2377	Classroom			6372-6376	3	399
2381	Classroom			6366-6371	3	399
2385	Classroom				3	397

INTERIORS

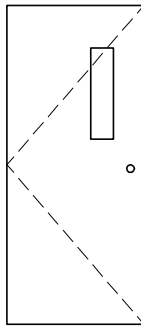
EXPANDED ROOM BY ROOM EVALUATION

The expanded room by room spreadsheets describe the various condition of the components within each room. Door types, finishes, wall constructions, for example, are described and given a condition rating. One can also find descriptions and pictures for the fixed furnishings and equipment. Generally, moveable furniture was not evaluated.

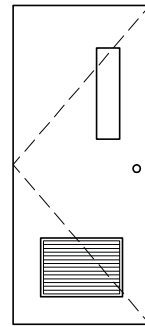
DOOR TYPES DIAGRAM:



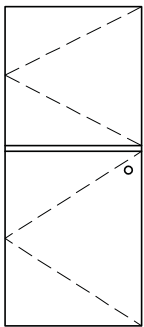
DOOR TYPE A



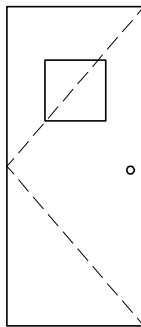
DOOR TYPE B



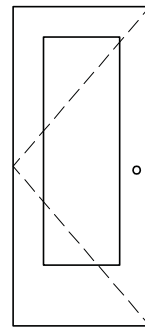
DOOR TYPE C



DOOR TYPE D



DOOR TYPE E



DOOR TYPE F

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B200A					
B200A	B200A	Laboratory	P-Chem	6604-6609	5
B200A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B200A	C	INTERIORS			
B200A	C10	Interior Construction			
B200A	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B200A					
B200A	C1010.40	Interior Demountable Partitions			
B200A	C1010.50	Interior Operable Partitions			
B200A	C1020	Interior Windows			
B200A	C1030	Interior Doors	1 Wood doors - type E - no security into lab, heavy veneer damage		6
B200A			2 Wood doors - type E - no security into lab, heavy veneer damage		6
B200A					
B200A	C1040	Interior Grilles & Gates			
B200A	C1060	Raised Floor Construction			
B200A	C1070	Suspended Ceiling Construction			
B200A	C1090	Interior Specialities -			
B200A	C20	Finishes			
B200A	C2010	Wall Finishes	Paint in CMU	Very old, peeling off walls and columns	6
B200A			VWB	Many patches, large gaps, pieces missing	4
B200A	C2030	Flooring	12" VCT		3
B200A					
B200A	C2040	Stair Finishes			
B200A	C2050	Ceiling Finishes	Painted Structure	peeling staining	5
B200A					
B200A	E20	Furnishings			
B200A	E2010	Fixed Furnishings			
B200A					
B200A					
B200A					
B200A	E2050	Movable Equipment			
B200A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B200B					
B200B	B200B	Laboratory	P-Chem Lab - South	6614-6620	5
B200B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B200B	C	INTERIORS			
B200B	C10	Interior Construction			
B200B	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B200B					
B200B	C1010.40	Interior Demountable Partitions			
B200B	C1010.50	Interior Operable Partitions			
B200B	C1020	Interior Windows			
B200B	C1030	Interior Doors			
B200B					
B200B					
B200B	C1040	Interior Grilles & Gates			
B200B	C1060	Raised Floor Construction			
B200B	C1070	Suspended Ceiling Construction			
B200B	C1090	Interior Specialities -			
B200B	C20	Finishes			
B200B	C2010	Wall Finishes	Paint on CMU	paint is cracking and peeling	5
B200B			VWB		5
B200B	C2030	Flooring	Concrete		5
B200B					
B200B	C2040	Stair Finishes			
B200B	C2050	Ceiling Finishes	Paint on Structure	stained, cracked, potential for lead	5
B200B					
B200B	E20	Furnishings			
B200B	E2010	Fixed Furnishings	Chalk Board	1 large, 1 small - Need new tack rails - serviceable	6617
B200B			Lab Sink	Basin sink, wood base - deterioration to base, staining to sink	6618
B200B			Work Bench	4' lin. - water damage at legs	6618
B200B			Lab Benches	(6-1/2) Cabinet door finish peeling off, tops ok	6614-6617
B200B			Lab Sink	Basin sink, wood base - deterioration to base, staining to sink	6620
B200B	E2050	Movable Equipment	Fume Hood		
B200B			Eyewash Station	New	6618
B200B			Water Baths	6619-6620	3

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B200J	B200J	Corridor		6666-6668	3	
B200J	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B200J	C	INTERIORS				
B200J	C10	Interior Construction				
B200J	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		
B200J						
B200J	C1010.40	Interior Demountable Partitions				
B200J	C1010.50	Interior Operable Partitions				
B200J	C1020	Interior Windows				
B200J	C1030	Interior Doors	1	pair with 2 - Panic hardware on both, very beat up, mismatched finished on front and back	4	
B200J			2		4	
B200J						
B200J	C1040	Interior Grilles & Gates				
B200J	C1060	Raised Floor Construction				
B200J	C1070	Suspended Ceiling Construction	ACT		1	
B200J	C1090	Interior Specialities -				
B200J	C20	Finishes				
B200J	C2010	Wall Finishes	Paint on CMU		3	
B200J			Mosaic tile at niche	Had been patched with different color tiles - former site of drinking fountains	4	
B200J			VWB		3	
B200J	C2030	Flooring	12" VCT		3	
B200J						
B200J	C2040	Stair Finishes				
B200J	C2050	Ceiling Finishes	ACT	tegular edge tile - dirty near hvac grill	6667	3
B200J						
B200J	E20	Furnishings				
B200J	E2010	Fixed Furnishings				
B200J						
B200J						
B200J	E2050	Movable Equipment				
B200J						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B200K	B200K	Corridor			3	
B200K	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B200K	C	INTERIORS				
B200K	C10	Interior Construction				
B200K	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		
B200K						
B200K	C1010.40	Interior Demountable Partitions				
B200K	C1010.50	Interior Operable Partitions				
B200K	C1020	Interior Windows				
B200K	C1030	Interior Doors	1	pair with 2 - Panic hardware on both, very beat up, mismatched finished on front and back	4	
B200K			2		4	
B200K						
B200K	C1040	Interior Grilles & Gates				
B200K	C1060	Raised Floor Construction				
B200K	C1070	Suspended Ceiling Construction	ACT		1	
B200K	C1090	Interior Specialities -				
B200K	C20	Finishes				
B200K	C2010	Wall Finishes	Paint on CMU		3	
B200K			Mosaic tile at niche	Had been patched with different color tiles - former site of drinking fountains	4	
B200K			VWB		3	
B200K	C2030	Flooring	12" VCT		3	
B200K						
B200K	C2040	Stair Finishes				
B200K	C2050	Ceiling Finishes	ACT	tegular edge tile - dirty near hvac grill	6667	3
B200K						
B200K	E20	Furnishings				
B200K	E2010	Fixed Furnishings				
B200K						
B200K						
B200K	E2050	Movable Equipment				
B200K						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B201	B201	Laboratory	Laser Lab	6627-6628	3	
B201	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B201	C	INTERIORS				
B201	C10	Interior Construction				
B201	C1010.10	Interior Fixed Partitions	CMU/Concrete walls		1	
B201						
B201	C1010.40	Interior Demountable Partitions				
B201	C1010.50	Interior Operable Partitions				
B201	C1020	Interior Windows				
B201	C1030	Interior Doors				
B201						
B201						
B201						
B201	C1040	Interior Grilles & Gates				
B201	C1060	Raised Floor Construction				
B201	C1070	Suspended Ceiling Construction				
B201	C1090	Interior Specialities -				
B201	C20	Finishes				
B201	C2010	Wall Finishes	Paint on CMU	Some peeling and cracking, possible lead	4	
B201			VWB		3	
B201	C2030	Flooring	12" VCT			
B201						
B201	C2040	Stair Finishes				
B201	C2050	Ceiling Finishes	Paint on Structure		3	
B201						
B201	E20	Furnishings				
B201	E2010	Fixed Furnishings	Sink Cabinet	Stainless Steel Sink - cut and modified, no sidesplash	6	
B201			Workbench	Wood base, black top	4	
B201						
B201						
B201	E2050	Movable Equipment	Laser table	6628	1	
B201			Wood Benches	6627	4	
B201			Carts		5	

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B204	B204	Laboratory	P-chem lab support		4	
B204	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B204	C	INTERIORS				
B204	C10	Interior Construction				
B204	C1010.10	Interior Fixed Partitions				
B204						
B204	C1010.40	Interior Demountable Partitions				
B204	C1010.50	Interior Operable Partitions				
B204	C1020	Interior Windows	HM Borrowed Lights -		2	
B204	C1030	Interior Doors	1 Surface mounted sliding door - non ADA accessible hardware - peeling paint above sliding hardware	6650-6651	3	
B204						
B204						
B204						
B204	C1040	Interior Grilles & Gates				
B204	C1060	Raised Floor Construction				
B204	C1070	Suspended Ceiling Construction				
B204	C1090	Interior Specialities -	Roller Shades	qty (2)	2	
B204	C20	Finishes				
B204	C2010	Wall Finishes	Paint on CMU		4	
B204			VWB			
B204	C2030	Flooring	12" VCT		2	
B204						
B204	C2040	Stair Finishes				
B204	C2050	Ceiling Finishes	Paint on Structure		3	
B204						
B204	E20	Furnishings				
B204	E2010	Fixed Furnishings	Chalk Board		2	
B204						
B204						
B204						
B204	E2050	Movable Equipment	Cart	Laminate top w/ steel frame	2	
B204			Workbench	Solid surface top/steel base	1	
B204			Workbench	Wood bench, lam top damaged	3	

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B208	B208	Stock Room		6639-6644	3	
B208	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B208	C	INTERIORS				
B208	C10	Interior Construction				
B208	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B208						
B208	C1010.40	Interior Demountable Partitions				
B208	C1010.50	Interior Operable Partitions				
B208	C1020	Interior Windows				
B208	C1030	Interior Doors	1 Wood Door - type A - Obsolete hardware		3	
B208			2 (2) operable counter doors - no longer used	6644	3	
B208						
B208	C1040	Interior Grilles & Gates				
B208	C1060	Raised Floor Construction				
B208	C1070	Suspended Ceiling Construction				
B208	C1090	Interior Specialities -				
B208	C20	Finishes				
B208	C2010	Wall Finishes	Paint on CMU	Mostly covered with shelves		
B208			VWB	dry and cracked	5	
B208	C2030	Flooring	9" tile	could be asbestos	5	
B208						
B208	C2040	Stair Finishes				
B208	C2050	Ceiling Finishes	Painted Structure		3	
B208						
B208	E20	Furnishings				
B208	E2010	Fixed Furnishings	Wood Shelves	66' lin. - in good condition	6640-6643	3
B208			Service Counter	10' long - wood with p-lam top	6644	3
B208			Key Storage Locker	no longer used	7	
B208			Computer Desk	metal and p-lam	3	
B208	E2050	Movable Equipment				
B208						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B208A					
B208A	B208A	Stock Room	Chemical Storage	6645-6647	4
B208A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B208A	C	INTERIORS			
B208A	C10	Interior Construction			
B208A	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B208A					
B208A	C1010.40	Interior Demountable Partitions			
B208A	C1010.50	Interior Operable Partitions			
B208A	C1020	Interior Windows			
B208A	C1030	Interior Doors	1 Wood door - type C sim -		4
B208A					
B208A					
B208A	C1040	Interior Grilles & Gates			
B208A	C1060	Raised Floor Construction			
B208A	C1070	Suspended Ceiling Construction			
B208A	C1090	Interior Specialities -			
B208A	C20	Finishes			
B208A	C2010	Wall Finishes	Paint on CMU		3
B208A			VWB		5
B208A	C2030	Flooring	9" tile		5
B208A					
B208A	C2040	Stair Finishes			
B208A	C2050	Ceiling Finishes	Painted Structure		3
B208A					
B208A	E20	Furnishings			
B208A	E2010	Fixed Furnishings	Sink Cabinet	Asbestos top - worn through finish, cracked and peeling veneer	6
B208A			Work Table	Decent condition for age	4
B208A			Storage Shelve	14' lin. Feet	3
B208A					
B208A	E2050	Movable Equipment	Plastic Fume hood	6647	4
B208A					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B210	B210	Computer Lab	P-Chem Comp lab	6624	3	
B210	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B210	C	INTERIORS				
B210	C10	Interior Construction				
B210	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B210	C1010.40	Interior Demountable Partitions				
B210	C1010.50	Interior Operable Partitions				
B210	C1020	Interior Windows	4	HM borrowed lights -	2	
B210	C1030	Interior Doors	1	Surface mounted sliding door - Wood veneer, 1/2 light	3	
B210			2	Surface mounted sliding door - Wood veneer, 1/2 light - damage to veneer and finish	4	
B210	C1040	Interior Grilles & Gates				
B210	C1060	Raised Floor Construction				
B210	C1070	Suspended Ceiling Construction				
B210	C1090	Interior Specialities -				
B210	C20	Finishes				
B210	C2010	Wall Finishes	Paint on CMU	stained, peeling, faded	4	
B210			VWB		4	
B210	C2030	Flooring	12" VCT	worn from chairs	4	
B210	C2040	Stair Finishes				
B210	C2050	Ceiling Finishes	Paint on Structure	Peeling, cracking, staining	4	
B210	E20	Furnishings				
B210	E2010	Fixed Furnishings	60' lin computer desk	decent shape	6624	3
B210						
B210						
B210	E2050	Movable Equipment				
B210						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B212	B212	Storage	P-Chem Coat Room		5	
B212	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B212	C	INTERIORS				
B212	C10	Interior Construction				
B212	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		1
B212						
B212	C1010.40	Interior Demountable Partitions				
B212	C1010.50	Interior Operable Partitions				
B212	C1020	Interior Windows	3	Hollow metal borrowed lights		3
B212	C1030	Interior Doors	1	surface mounted sliding door, wood veneer, half light		3
B212						
B212						
B212	C1040	Interior Grilles & Gates				
B212	C1060	Raised Floor Construction				
B212	C1070	Suspended Ceiling Construction	none			
B212	C1090	Interior Specialities -				
B212	C20	Finishes				
B212	C2010	Wall Finishes	Paint on CMU			4
B212			VWB			4
B212	C2030	Flooring	12" VCT	heavy wear marks		4
B212						
B212	C2040	Stair Finishes				
B212	C2050	Ceiling Finishes	Paint on Structure	peeling and staining		4
B212						
B212	E20	Furnishings				
B212	E2010	Fixed Furnishings	9' lin. Coat rack	Metal with plastic hooks - 25% hooks broken		4
B212						
B212						
B212						
B212	E2050	Movable Equipment				
B212						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B214	B214	Office	Office/Storage	6653	2	
B214	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B214	C	INTERIORS				
B214	C10	Interior Construction				
B214	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B214						
B214	C1010.40	Interior Demountable Partitions				
B214	C1010.50	Interior Operable Partitions				
B214	C1020	Interior Windows				
B214	C1030	Interior Doors	1 Wood door - Type A - Door is damaged, hardware obsolete, damage to finish		4	
B214						
B214						
B214	C1040	Interior Grilles & Gates				
B214	C1060	Raised Floor Construction				
B214	C1070	Suspended Ceiling Construction	ACT		1	
B214	C1090	Interior Specialities -				
B214	C20	Finishes				
B214	C2010	Wall Finishes	Paint on CMU			
B214			VWB			
B214	C2030	Flooring	Carpet	Ca. 2002	2	
B214						
B214	C2040	Stair Finishes				
B214	C2050	Ceiling Finishes	ACT	tegular edge tile - missing tile in ceiling	2	
B214						
B214	E20	Furnishings				
B214	E2010	Fixed Furnishings	(2) 6' Wooden Shelves	Missin sliding doors	3	
B214						
B214						
B214						
B214	E2050	Movable Equipment				
B214						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B215	B215	Restroom	Mens		2
B215	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B215	C	INTERIORS			
B215	C10	Interior Construction			
B215	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B215	C1010.40	Interior Demountable Partitions	Plastic	Like New	1
B215	C1010.50	Interior Operable Partitions			
B215	C1020	Interior Windows			
B215	C1030	Interior Doors	1	Wood - Type A - obsolete hardware, damaged veneer, rusty HM frames	4
B215			2	Wood - Type A - obsolete hardware, damaged veneer, rusty HM frames	4
B215	C1040	Interior Grilles & Gates			
B215	C1060	Raised Floor Construction			
B215	C1070	Suspended Ceiling Construction	suspended plaster		2
B215	C1090	Interior Specialities -			
B215	C20	Finishes			
B215	C2010	Wall Finishes	Paint on CMU	lumpy substrate - needs restoration	4
B215			ceramic tile		2
B215	C2030	Flooring	ceramic mosaic tile		2
B215	C2040	Stair Finishes			
B215	C2050	Ceiling Finishes	paint on plaster		2
B215	E20	Furnishings			
B215	E2010	Fixed Furnishings			
B215					
B215					
B215	E2050	Movable Equipment	(2) paper towel disp.	need to be replaced	4
B215					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B219	B219	Office	P-Chem Director	6663-6665	2	
B219	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B219	C	INTERIORS				
B219	C10	Interior Construction				
B219	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B219	C1010.40	Interior Demountable Partitions				
B219	C1010.50	Interior Operable Partitions				
B219	C1020	Interior Windows				
B219	C1030	Interior Doors	1 Wood Type E - Obsolete Hardware		3	
B219			2 Wood Type A - Obsolete Hardware		3	
B219			3 Wood Type A - Obsolete Hardware		3	
B219	C1040	Interior Grilles & Gates				
B219	C1060	Raised Floor Construction				
B219	C1070	Suspended Ceiling Construction				
B219	C1090	Interior Specialities -				
B219	C20	Finishes				
B219	C2010	Wall Finishes	Paint on CMU		2	
B219			VWB		2	
B219	C2030	Flooring	Carpet	ca. 2002	2	
B219	C2040	Stair Finishes				
B219	C2050	Ceiling Finishes				
B219	E20	Furnishings				
B219	E2010	Fixed Furnishings	16' lin. feet book shelf	6664	2	
B219			8' lin. storage cabinet	6665	3	
B219	E2050	Movable Equipment				

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B221					
B221	B221	Office	TA Office		2
B221	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B221	C	INTERIORS			
B221	C10	Interior Construction			
B221	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B221					
B221	C1010.40	Interior Demountable Partitions			
B221	C1010.50	Interior Operable Partitions			
B221	C1020	Interior Windows			
B221	C1030	Interior Doors	1 Wood - Type A - obsolete hardware		3
B221					
B221					
B221	C1040	Interior Grilles & Gates			
B221	C1060	Raised Floor Construction			
B221	C1070	Suspended Ceiling Construction	ACT		1
B221	C1090	Interior Specialities -	mini blinds		2
B221	C20	Finishes			
B221	C2010	Wall Finishes	Paint on CMU		2
B221					
B221	C2030	Flooring	Carpet	ca. 2002	2
B221					
B221	C2040	Stair Finishes			
B221	C2050	Ceiling Finishes	ACT	tegular edge tile	1
B221					
B221	E20	Furnishings			
B221	E2010	Fixed Furnishings			
B221					
B221					
B221					
B221	E2050	Movable Equipment	Refrigerator		2
B221					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B223	B223	Discussion Room	CLC	6654-6655	3
B223	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B223	C	INTERIORS			
B223	C10	Interior Construction			
B223	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	2
B223			Drywall		2
B223	C1010.40	Interior Demountable Partitions			
B223	C1010.50	Interior Operable Partitions			
B223	C1020	Interior Windows			
B223	C1030	Interior Doors	1	Wood - type F - heavy marking, obsolete hardware	4
B223					
B223					
B223	C1040	Interior Grilles & Gates			
B223	C1060	Raised Floor Construction			
B223	C1070	Suspended Ceiling Construction	ACT		1
B223	C1090	Interior Specialities -			
B223	C20	Finishes			
B223	C2010	Wall Finishes	Paint on CMU	Dirty	3
B223			Paint on GWB	needs patching, painting	3.5
B223					
B223	C2030	Flooring			
B223					
B223	C2040	Stair Finishes			
B223	C2050	Ceiling Finishes	ACT	Some dirty tiles	2
B223					
B223	E20	Furnishings			
B223	E2010	Fixed Furnishings	(2) chalk boards		2
B223					
B223					
B223	E2050	Movable Equipment	1 projection screen		2
B223					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B223a	B223a	Discussion Room	CLC		3	
B223a	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B223a	C	INTERIORS				
B223a	C10	Interior Construction				
B223a	C1010.10	Interior Fixed Partitions	S,W - CMU		1	
B223a			N, E - exterior			
B223a	C1010.40	Interior Demountable Partitions				
B223a	C1010.50	Interior Operable Partitions				
B223a	C1020	Interior Windows				
B223a	C1030	Interior Doors	1 Wood - Type E - obsolete hardware		3	
B223a						
B223a						
B223a	C1040	Interior Grilles & Gates				
B223a	C1060	Raised Floor Construction				
B223a	C1070	Suspended Ceiling Construction	ACT		1	
B223a	C1090	Interior Specialities -				
B223a	C20	Finishes				
B223a	C2010	Wall Finishes	N,E - Paint on Concrete	Peeling, dirty	4	
B223a			S,W - Paint on CMU		3	
B223a			VWB	Dry, wide gaps, covered in floor wax	4	
B223a	C2030	Flooring	12" VCT		3	
B223a						
B223a	C2040	Stair Finishes				
B223a	C2050	Ceiling Finishes	ACT		2	
B223a						
B223a	E20	Furnishings				
B223a	E2010	Fixed Furnishings	(3) Chalkboards	decent condition	2	
B223a						
B223a						
B223a	E2050	Movable Equipment				
B223a						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B223b	B223b	Discussion Room	CLC		3	
B223b	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B223b	C	INTERIORS				
B223b	C10	Interior Construction				
B223b	C1010.10	Interior Fixed Partitions	North - Concrete		1	
B223b			E,W - CMU		1	
B223b			South - GWB/MTL stud		1	
B223b	C1020	Interior Windows				
B223b	C1030	Interior Doors	1 Wood - type F - Like New		1	
B223b						
B223b						
B223b	C1040	Interior Grilles & Gates				
B223b	C1060	Raised Floor Construction				
B223b	C1070	Suspended Ceiling Construction	ACT		1	
B223b	C1090	Interior Specialities -				
B223b	C20	Finishes				
B223b	C2010	Wall Finishes	Paint on CMU/Concrete	Needs Touch up	3	
B223b			paint on GWB	Needs Touch up	3	
B223b			VWB		3	
B223b	C2030	Flooring	12" VCT	condition ok	3	
B223b						
B223b	C2040	Stair Finishes				
B223b	C2050	Ceiling Finishes	ACT		2	
B223b						
B223b	E20	Furnishings				
B223b	E2010	Fixed Furnishings				
B223b						
B223b						
B223b	E2050	Movable Equipment				
B223b						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B224					
B224	B224	Computer Lab	CLC computer room	6656-6658	3
B224	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B224	C	INTERIORS			
B224	C10	Interior Construction			
B224	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B224					
B224	C1010.40	Interior Demountable Partitions			
B224	C1010.50	Interior Operable Partitions			
B224	C1020	Interior Windows			
B224	C1030	Interior Doors	1 Wood - Type A - obsolete hardware		3
B224					
B224					
B224	C1040	Interior Grilles & Gates			
B224	C1060	Raised Floor Construction			
B224	C1070	Suspended Ceiling Construction	ACT		1
B224	C1090	Interior Specialities -			
B224	C20	Finishes			
B224	C2010	Wall Finishes	Paint on CMU		3
B224			VWB		3
B224	C2030	Flooring	12" VCT		3
B224					
B224	C2040	Stair Finishes			
B224	C2050	Ceiling Finishes	ACT	tegular edge tile	2
B224					
B224	E20	Furnishings			
B224	E2010	Fixed Furnishings	1 Chalk Board		2
B224			1 Dry Erase Board		3
B224					
B224					
B224	E2050	Movable Equipment			
B224					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B225	B225	Computer Lab	CLC - Computer room	6659-66692	4
B225	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B225	C	INTERIORS			
B225	C10	Interior Construction			
B225	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B225	C1010.40	Interior Demountable Partitions			
B225	C1010.50	Interior Operable Partitions			
B225	C1020	Interior Windows			
B225	C1030	Interior Doors	1 Wood - Type A - obsolete hardware		3
B225					
B225					
B225	C1040	Interior Grilles & Gates	HVAC	Grills in wall - louvered - very dirty	3
B225	C1060	Raised Floor Construction			
B225	C1070	Suspended Ceiling Construction	ACT		1
B225	C1090	Interior Specialities -			
B225	C20	Finishes			
B225	C2010	Wall Finishes	Paint on CMU	extensive damage, peeling paint	5
B225			VWB	Cracked and Broken	5
B225	C2030	Flooring	12" VCT	Heavy wear pattern	4
B225					
B225	C2040	Stair Finishes			
B225	C2050	Ceiling Finishes	ACT	tegular edge tile - 2 stained tiles need replacement	2
B225					
B225	E20	Furnishings			
B225	E2010	Fixed Furnishings	1 Dry Erase Board	moderate condition	3
B225					
B225					
B225					
B225	E2050	Movable Equipment			
B225					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B230	B230	Office	Office/Storage	6652	3
B230	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B230	C	INTERIORS			
B230	C10	Interior Construction			
B230	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B230	C1010.40	Interior Demountable Partitions			
B230	C1010.50	Interior Operable Partitions			
B230	C1020	Interior Windows			
B230	C1030	Interior Doors	1 Wood - type C sim - Rusty frame		4
B230					
B230					
B230	C1040	Interior Grilles & Gates			
B230	C1060	Raised Floor Construction			
B230	C1070	Suspended Ceiling Construction	ACT		1
B230	C1090	Interior Specialities -			
B230	C20	Finishes			
B230	C2010	Wall Finishes	Paint on CMU		2
B230			VWB		2
B230	C2030	Flooring	Carpet	ca. 2002	2
B230					
B230	C2040	Stair Finishes			
B230	C2050	Ceiling Finishes	ACT	Water damage, missing tile	3
B230					
B230	E20	Furnishings			
B230	E2010	Fixed Furnishings			
B230					
B230					
B230					
B230	E2050	Movable Equipment			
B230					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B232	B232	Laboratory	Balance Room	6624	4	
B232	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B232	C	INTERIORS				
B232	C10	Interior Construction				
B232	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		
B232						
B232	C1010.40	Interior Demountable Partitions				
B232	C1010.50	Interior Operable Partitions				
B232	C1020	Interior Windows	3	HM borrowed lights	3	
B232	C1030	Interior Doors	1	surface mounted sliding door - 1/2" light - damaged wood veneer, random holes drilled	4	
B232						
B232						
B232						
B232	C1040	Interior Grilles & Gates				
B232	C1060	Raised Floor Construction				
B232	C1070	Suspended Ceiling Construction				
B232	C1090	Interior Specialities -				
B232	C20	Finishes				
B232	C2010	Wall Finishes	Paint on CMU		5	
B232			VWB		4	
B232	C2030	Flooring	12" VCT		4	
B232						
B232	C2040	Stair Finishes				
B232	C2050	Ceiling Finishes	Paint on structure	decent	3	
B232						
B232	E20	Furnishings				
B232	E2010	Fixed Furnishings	12' Lin. Work surface	not suited well for use (too low for standing height)	5	
B232						
B232						
B232						
B232	E2050	Movable Equipment				
B232						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B238	B238	Computer Lab		6623	3
B238	CODE	ITEM	DESCRIPTION	CONDITION	RATING
B238	C	INTERIORS			
B238	C10	Interior Construction			
B238	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B238	C1010.40	Interior Demountable Partitions			
B238	C1010.50	Interior Operable Partitions			
B238	C1020	Interior Windows	HM borrowed lights	(3) - good condition	2
B238	C1030	Interior Doors	1	surface mounted sliding door, half light, wood veneer	3
B238					
B238					
B238	C1040	Interior Grilles & Gates			
B238	C1060	Raised Floor Construction			
B238	C1070	Suspended Ceiling Construction			
B238	C1090	Interior Specialities -			
B238	C20	Finishes			
B238	C2010	Wall Finishes	Paint on CMU	discolored, stained	4
B238			VWB	Dry, gaps at seams	4
B238	C2030	Flooring	12" VCT		3
B238					
B238	C2040	Stair Finishes			
B238	C2050	Ceiling Finishes	Painted Structure		3
B238					
B238	E20	Furnishings			
B238	E2010	Fixed Furnishings	1 Wood desk -	has 2 work stations	3
B238					
B238					
B238					
B238	E2050	Movable Equipment	NMR spectrometer	eft-60	6623
B238					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B243	B243	Storage	p-chem storage	6633-6638	5	
B243	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B243	C	INTERIORS				
B243	C10	Interior Construction				
B243	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		
B243						
B243	C1010.40	Interior Demountable Partitions				
B243	C1010.50	Interior Operable Partitions				
B243	C1020	Interior Windows				
B243	C1030	Interior Doors	1	Frame only - door missing	6	
B243						
B243						
B243	C1040	Interior Grilles & Gates				
B243	C1060	Raised Floor Construction				
B243	C1070	Suspended Ceiling Construction	ACT		6	
B243	C1090	Interior Specialities -				
B243	C20	Finishes				
B243	C2010	Wall Finishes	Paint on CMU	needs complete repaint	5	
B243						
B243	C2030	Flooring	9" tile	possible asbestos, cracked and loose	6634, 6635	6
B243						
B243	C2040	Stair Finishes				
B243	C2050	Ceiling Finishes		Ceiling filled with mechanical equipment, most of it has moisture damage.		
B243						
B243	E20	Furnishings				
B243	E2010	Fixed Furnishings	Base Cabinet	with counter - irreparable	6	
B243						
B243						
B243						
B243	E2050	Movable Equipment				
B243						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B245A	B245A	Laboratory	Dark Room		4
B245A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B245A	C	INTERIORS			
B245A	C10	Interior Construction			
B245A	C1010.10	Interior Fixed Partitions			
B245A					
B245A	C1010.40	Interior Demountable Partitions			
B245A	C1010.50	Interior Operable Partitions			
B245A	C1020	Interior Windows			
B245A	C1030	Interior Doors			
B245A					
B245A					
B245A					
B245A	C1040	Interior Grilles & Gates			
B245A	C1060	Raised Floor Construction			
B245A	C1070	Suspended Ceiling Construction			
B245A	C1090	Interior Specialities -			
B245A	C20	Finishes			
B245A	C2010	Wall Finishes	Paint on CMU	peeling and deterioration on concrete wall	4
B245A			VWB		4
B245A	C2030	Flooring	12" VCT	Some staining by metal corrosion at floor	2
B245A					
B245A	C2040	Stair Finishes			
B245A	C2050	Ceiling Finishes	Paint on Structure	Some peeling, cracking	4
B245A			ACT in vestibule		2
B245A	E20	Furnishings			
B245A	E2010	Fixed Furnishings	Sink Cabinet	Good condition	6632
B245A			Counter	Black top	6631
B245A					
B245A					
B245A	E2050	Movable Equipment	Armature	Aluminum apparatus for conducting science experiments	6631
B245A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B245B					
B245B	B245B	Laboratory	Dark Room	6629-6630	4
B245B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B245B	C	INTERIORS			
B245B	C10	Interior Construction			
B245B	C1010.10	Interior Fixed Partitions	CMU/Concrete		
B245B					
B245B	C1010.40	Interior Demountable Partitions			
B245B	C1010.50	Interior Operable Partitions			
B245B	C1020	Interior Windows			
B245B	C1030	Interior Doors	1 Wood door - type A - with transfer grill - bad finish, obsolete hardware		4
B245B			2 Wood door - type A - with transfer grill - bad finish, obsolete hardware		4
B245B			3 Wood door - type A - with transfer grill - bad finish, obsolete hardware		4
B245B					
B245B	C1040	Interior Grilles & Gates	(2) interior access panels		2
B245B	C1060	Raised Floor Construction			
B245B	C1070	Suspended Ceiling Construction			
B245B	C1090	Interior Specialities -			
B245B	C20	Finishes			
B245B	C2010	Wall Finishes	Paint on CMU	peeling and deterioration on concrete wall	4
B245B			VWB		4
B245B	C2030	Flooring	12" VCT	Some staining by metal corrosion at floor	2
B245B					
B245B	C2040	Stair Finishes			
B245B	C2050	Ceiling Finishes	Paint on Structure	Some peeling, cracking	4
B245B			ACT in vestibule		2
B245B	E20	Furnishings			
B245B	E2010	Fixed Furnishings	Workbench	Veneer good, countertop good.	6629
B245B			Counter with Sink	Stainless steel top corroded - cabinet veneer is peeling	6630
B245B					
B245B					
B245B	E2050	Movable Equipment			
B245B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B300SN					
B300SN	B300SN	Corridor			3
B300SN	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B300SN	C	INTERIORS			RATING
B300SN	C10	Interior Construction			
B300SN	C1010.10	Interior Fixed Partitions			
B300SN					
B300SN	C1010.40	Interior Demountable Partitions			
B300SN	C1010.50	Interior Operable Partitions			
B300SN	C1020	Interior Windows			
B300SN	C1030	Interior Doors			
B300SN					
B300SN					
B300SN					
B300SN	C1040	Interior Grilles & Gates			
B300SN	C1060	Raised Floor Construction			
B300SN	C1070	Suspended Ceiling Construction	ACT		3
B300SN	C1090	Interior Specialities -			
B300SN	C20	Finishes			
B300SN	C2010	Wall Finishes	Paint on Plaster	Needs Repaint	3
B300SN			VWB		4
B300SN	C2030	Flooring	Terrazzo		2
B300SN					
B300SN	C2040	Stair Finishes			
B300SN	C2050	Ceiling Finishes	ACT	Stained, damaged 50%	4
B300SN					
B300SN	E20	Furnishings			
B300SN	E2010	Fixed Furnishings	Staff Mailboxes	Not in use	6689
B300SN					7
B300SN					
B300SN					
B300SN	E2050	Movable Equipment			
B300SN					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B300SW	B300SW	Corridor			3	
B300SW	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B300SW	C	INTERIORS				
B300SW	C10	Interior Construction				
B300SW	C1010.10	Interior Fixed Partitions				
B300SW						
B300SW	C1010.40	Interior Demountable Partitions				
B300SW	C1010.50	Interior Operable Partitions				
B300SW	C1020	Interior Windows				
B300SW	C1030	Interior Doors				
B300SW						
B300SW						
B300SW	C1040	Interior Grilles & Gates				
B300SW	C1060	Raised Floor Construction				
B300SW	C1070	Suspended Ceiling Construction	ACT		3	
B300SW	C1090	Interior Specialities -				
B300SW	C20	Finishes				
B300SW	C2010	Wall Finishes	Corner Guards		3	
B300SW			Paint on Plaster	Needs repaint	4	
B300SW			VWB		3	
B300SW	C2030	Flooring	Terrazzo	Some cracks	3	
B300SW						
B300SW	C2040	Stair Finishes				
B300SW	C2050	Ceiling Finishes	ACT	mismatched, 50% of tiles are damaged	4	
B300SW						
B300SW	E20	Furnishings				
B300SW	E2010	Fixed Furnishings	Display Case	not in use	3	
B300SW						
B300SW						
B300SW	E2050	Movable Equipment				
B300SW						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B300U	B300U	Corridor		6690-6692	4
B300U	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B300U	C	INTERIORS			
B300U	C10	Interior Construction			
B300U	C1010.10	Interior Fixed Partitions			
B300U					
B300U	C1010.40	Interior Demountable Partitions			
B300U	C1010.50	Interior Operable Partitions			
B300U	C1020	Interior Windows			
B300U	C1030	Interior Doors			
B300U					
B300U					
B300U					
B300U	C1040	Interior Grilles & Gates			
B300U	C1060	Raised Floor Construction			
B300U	C1070	Suspended Ceiling Construction	ACT		3
B300U	C1090	Interior Specialities -			
B300U	C20	Finishes			
B300U	C2010	Wall Finishes	Paint on Plaster		3
B300U			VWB	Some is missing	5
B300U	C2030	Flooring	Terrazzo	Water Damage, some scratching	4
B300U					
B300U	C2040	Stair Finishes			
B300U	C2050	Ceiling Finishes	ACT	mismatch tiles - some damage (20%)	3
B300U					
B300U	E20	Furnishings			
B300U	E2010	Fixed Furnishings			
B300U					
B300U					
B300U					
B300U	E2050	Movable Equipment			
B300U					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B300V	B300V	Corridor			4
B300V	CODE	ITEM	DESCRIPTION	CONDITION	RATING
B300V	C	INTERIORS			
B300V	C10	Interior Construction			
B300V	C1010.10	Interior Fixed Partitions			
B300V	C1010.40	Interior Demountable Partitions			
B300V	C1010.50	Interior Operable Partitions			
B300V	C1020	Interior Windows			
B300V	C1030	Interior Doors			
B300V					
B300V					
B300V	C1040	Interior Grilles & Gates			
B300V	C1060	Raised Floor Construction			
B300V	C1070	Suspended Ceiling Construction	ACT		3
B300V	C1090	Interior Specialities -			
B300V	C20	Finishes			
B300V	C2010	Wall Finishes	Paint on Plaster		3
B300V			VWB	Some is missing	5
B300V	C2030	Flooring	Terrazzo	Water Damage, some scratching	4
B300V					
B300V	C2040	Stair Finishes			
B300V	C2050	Ceiling Finishes	ACT	mismatch tiles - some damage (20%)	3
B300V					
B300V	E20	Furnishings			
B300V	E2010	Fixed Furnishings			
B300V					
B300V					
B300V	E2050	Movable Equipment			
B300V					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B305	B305	Office		6669-6671	2
B305	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B305	C	INTERIORS			RATING
B305	C10	Interior Construction			
B305	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	2
B305	C1010.40	Interior Demountable Partitions			
B305	C1010.50	Interior Operable Partitions			
B305	C1020	Interior Windows			
B305	C1030	Interior Doors	1 Wood - HM frame - obsolete hardware		3
B305			2 Wood - HM frame - obsolete hardware - damage to veneer		4
B305	C1040	Interior Grilles & Gates			
B305	C1060	Raised Floor Construction			
B305	C1070	Suspended Ceiling Construction	ACT		1
B305	C1090	Interior Specialities -			
B305	C20	Finishes			
B305	C2010	Wall Finishes	paint on plaster	exhibiting major wear and tear	3
B305			VWB		2
B305	C2030	Flooring	12" VCT		2
B305	C2040	Stair Finishes			
B305	C2050	Ceiling Finishes	ACT	tegular edge tile	2
B305	E20	Furnishings			
B305	E2010	Fixed Furnishings	1 Upper Storage Cab	6670	1
B305			1 Chalk Board		1
B305			1 sm. Storage Cupboard	6671	1
B305	E2050	Movable Equipment			

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B310	B310	Restroom	Men's Bathroom	low rating due to not meeting current ADA guidelines. Bathroom stall #1 is too small		4
B310	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B310	C	INTERIORS				
B310	C10	Interior Construction				
B310	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		1
B310	C1010.40	Interior Demountable Partitions	Plastic	Toilet partitions like new		1
B310	C1010.50	Interior Operable Partitions				
B310	C1020	Interior Windows				
B310	C1030	Interior Doors	1	Wood door - type A -		4
B310						
B310						
B310	C1040	Interior Grilles & Gates				
B310	C1060	Raised Floor Construction				
B310	C1070	Suspended Ceiling Construction	Suspended plaster	somewhat obsolete system		2
B310	C1090	Interior Specialities -				
B310	C20	Finishes				
B310	C2010	Wall Finishes	Ceramic Tile			2
B310						
B310	C2030	Flooring	Mosaic Tile			2
B310						
B310	C2040	Stair Finishes				
B310	C2050	Ceiling Finishes	Paint on plaster			2
B310						
B310	E20	Furnishings				
B310	E2010	Fixed Furnishings				
B310						
B310						
B310						
B310	E2050	Movable Equipment	Hand dryers (2)	older equipment, ca. 1980's or 90's		3
B310						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B311	B311	Office	CLC office	6672-6674	2	
B311	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B311	C	INTERIORS				
B311	C10	Interior Construction				
B311	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B311			GWB on Metal Stud		1	
B311	C1010.40	Interior Demountable Partitions				
B311	C1010.50	Interior Operable Partitions				
B311	C1020	Interior Windows				
B311	C1030	Interior Doors	1	Wood - Type F - obsolete hardware, marring and abrasion	3	
B311			2	Wood - Type F - obsolete hardware, marring and abrasion	3	
B311						
B311	C1040	Interior Grilles & Gates				
B311	C1060	Raised Floor Construction				
B311	C1070	Suspended Ceiling Construction	ACT		1	
B311	C1090	Interior Specialities -				
B311	C20	Finishes				
B311	C2010	Wall Finishes	Paint on CMU	satisfactory condition	2	
B311			paint on plaster	satisfactory condition	2	
B311			paint on GWB	satisfactory condition	2	
B311			VWB		2	
B311	C2030	Flooring	12" VCT		2	
B311						
B311	C2040	Stair Finishes				
B311	C2050	Ceiling Finishes	ACT	tegular edge tile	1	
B311						
B311	E20	Furnishings				
B311	E2010	Fixed Furnishings	Upper Cabinet	6673	1	
B311			Sink Cabinet	may not meet ADA requirements for height at sink	2	
B311			Storage Cubby	above desk	6675	1
B311						
B311	E2050	Movable Equipment				
B311						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B311a	B311a	Office			2
B311a	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B311a	C	INTERIORS			
B311a	C10	Interior Construction			
B311a	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B311a					
B311a	C1010.40	Interior Demountable Partitions			
B311a	C1010.50	Interior Operable Partitions			
B311a	C1020	Interior Windows			
B311a	C1030	Interior Doors			
B311a					
B311a					
B311a	C1040	Interior Grilles & Gates			
B311a	C1060	Raised Floor Construction			
B311a	C1070	Suspended Ceiling Construction			
B311a	C1090	Interior Specialities -			
B311a	C20	Finishes			
B311a	C2010	Wall Finishes	Paint on CMU		2
B311a			Paint on GWB		2
B311a			VWB		2
B311a	C2030	Flooring	Carpet	ca. 2002	2
B311a					
B311a	C2040	Stair Finishes			
B311a	C2050	Ceiling Finishes	ACT	tegular edge tile	1
B311a					
B311a	E20	Furnishings			
B311a	E2010	Fixed Furnishings			
B311a					
B311a					
B311a	E2050	Movable Equipment			
B311a					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B317	B317	Office	TA Office	6686-6688	3
B317	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B317	C	INTERIORS			
B317	C10	Interior Construction			
B317	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B317					
B317	C1010.40	Interior Demountable Partitions			
B317	C1010.50	Interior Operable Partitions			
B317	C1020	Interior Windows			
B317	C1030	Interior Doors			
B317			1 Wood Door - Type E -		4
B317			2 Wood Door - Type E -		4
B317			3 Wood Door - Type A -		4
B317					
B317	C1040	Interior Grilles & Gates	Access panels	Wood - into neighboring Lab Space	3
B317	C1060	Raised Floor Construction			
B317	C1070	Suspended Ceiling Construction	ACT		1
B317	C1090	Interior Specialities -			
B317	C20	Finishes			
B317	C2010	Wall Finishes	Paint in CMU		2
B317			VWB		2
B317	C2030	Flooring	Carpet	heavily soiled, and worn	3
B317					
B317	C2040	Stair Finishes			
B317	C2050	Ceiling Finishes	ACT		2
B317					
B317	E20	Furnishings			
B317	E2010	Fixed Furnishings	3 Chalkboards		2
B317					
B317					
B317					
B317	E2050	Movable Equipment	(13) systems fum work stations		2
B317					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B320	B320	Laboratory	Lab next to B3330A	6682-6685	3	
B320	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B320	C	INTERIORS				
B320	C10	Interior Construction				
B320	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B320						
B320	C1010.40	Interior Demountable Partitions				
B320	C1010.50	Interior Operable Partitions				
B320	C1020	Interior Windows				
B320	C1030	Interior Doors	1 Wood - type C - 4 - heavy abrasion, marring,		4	
B320						
B320						
B320	C1040	Interior Grilles & Gates				
B320	C1060	Raised Floor Construction				
B320	C1070	Suspended Ceiling Construction	ACT	Old, dirty, yellowed	4	
B320	C1090	Interior Specialities -				
B320	C20	Finishes				
B320	C2010	Wall Finishes	Paint on CMU		2	
B320			VWB		3	
B320	C2030	Flooring	9" tile	possibly asbestos	5	
B320						
B320	C2040	Stair Finishes				
B320	C2050	Ceiling Finishes	ACT		3	
B320						
B320	E20	Furnishings				
B320	E2010	Fixed Furnishings	Lab Sink/Base	Asbestos Backsplash - mismatched base	6685	5
B320			Lab Bench		6684	4
B320						
B320						
B320	E2050	Movable Equipment	Fume Hood	New	6683	1
B320			Vented Cabinet	Wood - new	6682	1

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B324	B324	Laboratory		6676-6680	4	
B324	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B324	C	INTERIORS				
B324	C10	Interior Construction				
B324	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B324	C1010.40	Interior Demountable Partitions	2	Partial Height demountable walls into B324A ca. 1970s	4	
B324	C1010.50	Interior Operable Partitions				
B324	C1020	Interior Windows				
B324	C1030	Interior Doors	1	Wood Door - type A - with transfer grill - marred, chipped, abraded	4	
B324						
B324						
B324	C1040	Interior Grilles & Gates				
B324	C1060	Raised Floor Construction				
B324	C1070	Suspended Ceiling Construction	ACT	yellowed, stained	4	
B324	C1090	Interior Specialities -				
B324	C20	Finishes				
B324	C2010	Wall Finishes	Paint on Plaster		4	
B324			VWB	Dried out.	4	
B324	C2030	Flooring	9" tile	could be asbestos tile	5	
B324						
B324	C2040	Stair Finishes				
B324	C2050	Ceiling Finishes	ACT	discolored, sagging, some tiles missing, soiled	5	
B324						
B324	E20	Furnishings				
B324	E2010	Fixed Furnishings	Lab Work Bench	West wall, lower cabs, missing doors, damaged veneer, damage to tops	6677	5
B324			Base Cabinet	South Wall	6680	4
B324			Tack Board		4	
B324			Dry Erase Board		3	
B324	E2050	Movable Equipment	Refrigerator	like new	1	
B324			Microwave		2	

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B325	B325	Laboratory	Organic Chemistry	6495-6501	5	
B325	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B325	C	INTERIORS				
B325	C10	Interior Construction				
B325	C1010.10	Interior Fixed Partitions	CMU		2	
B325	C1010.40	Interior Demountable Partitions				
B325	C1010.50	Interior Operable Partitions				
B325	C1020	Interior Windows				
B325	C1030	Interior Doors	1 Wood Door - Type B -		4	
B325			2 Wood Door - Type B -		4	
B325						
B325	C1040	Interior Grilles & Gates	Egress Panels	Qty (4) Wood panels for egress into adjacent Lab - has locks which render it obsolete	6502	4
B325	C1060	Raised Floor Construction				
B325	C1070	Suspended Ceiling Construction				
B325	C1090	Interior Specialities -				
B325	C20	Finishes				
B325	C2010	Wall Finishes	Paint on Cmu	Recently redone - dirty near floor		3
B325						
B325	C2030	Flooring	Sealed Concrete			
B325			VWB	missing in many places		6
B325	C2040	Stair Finishes				
B325	C2050	Ceiling Finishes	Painted Structure			2
B325						
B325	E20	Furnishings				
B325	E2010	Fixed Furnishings	Lab Benches	Qty (7) - 20' in length - widespread veneer damage, missing toekick material, chemical sinks are leaky and stained, granite countertops	6503-6510	5
B325			Shelf	Equipment Shelf Qty (6) - finish surfaces are degraded	6511	4
B325			Shelf	Wall Hung	6511	4
B325			Cubbies		6512	6
B325			Coat Hooks	Some broken rungs, metal finish dull	6512	4
B325	E2050	Movable Equipment	Fume Hoods	Qty (4) - Ca 2000	6513-6515	2
B325			Demo Carts		6516-6517	6

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS		PHOTOS	OVERALL RATING
B325A						
B325A	B325A	Laboratory	Lab Prep		6518-6519	5
B325A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B325A	C	INTERIORS				
B325A	C10	Interior Construction				
B325A	C1010.10	Interior Fixed Partitions	CMU			
B325A						
B325A	C1010.40	Interior Demountable Partitions				
B325A	C1010.50	Interior Operable Partitions				
B325A	C1020	Interior Windows	Borrowed Lights	Qty (2) L-shaped borrowed lights		3
B325A	C1030	Interior Doors		1 Wood Door - Type C - damaged veneer, corroded hardware		4
B325A				2 Wood Door - Type C - damaged veneer, corroded hardware		4
B325A						
B325A						
B325A	C1040	Interior Grilles & Gates				
B325A	C1060	Raised Floor Construction				
B325A	C1070	Suspended Ceiling Construction				
B325A	C1090	Interior Specialities -				
B325A	C20	Finishes				
B325A	C2010	Wall Finishes	Paint on CMU			3
B325A			VWB			4
B325A	C2030	Flooring	Sealed Concrete			4
B325A						
B325A	C2040	Stair Finishes				
B325A	C2050	Ceiling Finishes	Painted Structure			2
B325A						
B325A	E20	Furnishings				
B325A	E2010	Fixed Furnishings	Lab Benches	West Wall - 15 linear feet	6518	4
B325A			Work Surface	East wall - 22 lin. Feet work surface, corroded hardware, damaged veneer, tops degraded		6
B325A			Cabinets	Qty (3) upper cabinets, 30" each - a lot of wear and tear	6519	4
B325A						
B325A	E2050	Movable Equipment				
B325A						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B330a	B330a	Office			2
B330a	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B330a	C	INTERIORS			
B330a	C10	Interior Construction			
B330a	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B330a	C1010.40	Interior Demountable Partitions			
B330a	C1010.50	Interior Operable Partitions			
B330a	C1020	Interior Windows			
B330a	C1030	Interior Doors	1	Wood - type a - obsolete hardware	3
B330a			2	Wood - type a - obsolete hardware	3
B330a	C1040	Interior Grilles & Gates			
B330a	C1060	Raised Floor Construction			
B330a	C1070	Suspended Ceiling Construction	ACT		1
B330a	C1090	Interior Specialities -			
B330a	C20	Finishes			
B330a	C2010	Wall Finishes	Paint on CMU		2
B330a			VWB		2
B330a	C2030	Flooring	Carpet		2
B330a	C2040	Stair Finishes			
B330a	C2050	Ceiling Finishes	ACT	tegular edge tile	2
B330a	E20	Furnishings			
B330a	E2010	Fixed Furnishings			
B330a					
B330a					
B330a	E2050	Movable Equipment			
B330a					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B331	B331	Laboratory	Organic Chemistry		6520-6525	5
B331	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B331	C	INTERIORS				
B331	C10	Interior Construction				
B331	C1010.10	Interior Fixed Partitions	CMU			2
B331						
B331	C1010.40	Interior Demountable Partitions				
B331	C1010.50	Interior Operable Partitions				
B331	C1020	Interior Windows				
B331	C1030	Interior Doors	1 Wood Door - Type B - Poor Condition			4
B331			2 Wood Door - Type B - Poor Condition			4
B331						
B331	C1040	Interior Grilles & Gates				
B331	C1060	Raised Floor Construction				
B331	C1070	Suspended Ceiling Construction				
B331	C1090	Interior Specialities -				
B331	C20	Finishes				
B331	C2010	Wall Finishes	Paint on CMU	needs touch-up		3
B331			VWB	Missing in many locations		5
B331	C2030	Flooring	Stained Concrete			
B331						
B331	C2040	Stair Finishes				
B331	C2050	Ceiling Finishes	Painted Structure			2
B331						
B331	E20	Furnishings				
B331	E2010	Fixed Furnishings	Lab Benches	Widespread veneer damage, missing toekcick material, leaky lab sinks, granite tops	6527-6531	5
B331			Chalkboards	Qty (5)		3
B331			Shelves	East Wall	6532	4
B331						
B331	E2050	Movable Equipment	Fume Hoods	Qty (4) - ca 2000		2
B331			Demo Carts	Qty (2)		6

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B332	B332	Stock Room	Manned stock room	6588-6603	5	
B332	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B332	C	INTERIORS				
B332	C10	Interior Construction				
B332	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
B332						
B332	C1010.40	Interior Demountable Partitions				
B332	C1010.50	Interior Operable Partitions				
B332	C1020	Interior Windows				
B332	C1030	Interior Doors	1 Wood door - type A - corroded hinges, obsolete hardware		4	
B332			2 Wood door - type A - corroded hinges, obsolete hardware		4	
B332			3 (2) counter doors, flush wood, with counterweight, deteriorated hardware	6569 (partial)	6	
B332						
B332	C1040	Interior Grilles & Gates				
B332	C1060	Raised Floor Construction				
B332	C1070	Suspended Ceiling Construction				
B332	C1090	Interior Specialities -				
B332	C20	Finishes				
B332	C2010	Wall Finishes	Paint on CMU	peeling and cracking - possible lead paint	5	
B332			VWB		5	
B332	C2030	Flooring	Concrete			
B332						
B332	C2040	Stair Finishes				
B332	C2050	Ceiling Finishes	Painted Structure		5	
B332						
B332	E20	Furnishings				
B332	E2010	Fixed Furnishings	Prep Workbench	South side of West wall, beyond repair	6588	6
B332			Upper Shelves	corrosion on brackets, not deep enough for use	6589	6
B332			Prep Workbench	North side of West wall, beyond repair	sim 6588	6
B332			Vented Glass Case	first case from west wall - glass, two sided case, 24' lin. - missing handles on glass panels, crystalization on glass	6590-6593	6
B332			Service Counter	desk is badly damaged, all veneer is abraded, p-lam is stained and abraded	6594, 6595	6
B332			Wood Storage Shelves	middle of the room, 26' lin. Open wood shelves, 9' vented glass. Structurally sound, very soiled, some warping, damage to vinyl toe kick, corrosion to metal brackets	6596-6598	6
B332			Wood Storage Shelves	35' lin. Along west wall - widespread cosmetic damage - chipping and staining of veneer, structurally adequate		4
B332			Coat Closet	Doesn't close, hardware corroded, side panel is warped		5
B332			Upper Shelf	North wall - not used, heavily corroded		7
B332						

INTERIOR						
B332	E2050	Movable Equipment	Fume Hood	New	6599	1
B332			Flammable Storage Cabinet	Benchtop unit - 36" tall - rust on door, deterioration of duct	6600	3
B332			Flammable Storage Cabinet	Floor unit - 5' tall - corroded finish on hardware, paint loss and scuffing	6601	3
B332			Flammable Storage Cabinet	Floor unit - 5' tall - corroded finish on hardware, paint loss and scuffing	6602	3
B332			Refrigerator	Beyond useful life	6601	6
B332						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B341	B341	Laboratory	Organic Chem	6534-6538	3	
B341	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B341	C	INTERIORS				
B341	C10	Interior Construction				
B341	C1010.10	Interior Fixed Partitions	CMU			
B341						
B341	C1010.40	Interior Demountable Partitions				
B341	C1010.50	Interior Operable Partitions				
B341	C1020	Interior Windows				
B341	C1030	Interior Doors	1 Wood Door - Type B - Poor condition		4	
B341			2 Wood Door - Type B - Poor condition		4	
B341						
B341						
B341	C1040	Interior Grilles & Gates				
B341	C1060	Raised Floor Construction				
B341	C1070	Suspended Ceiling Construction				
B341	C1090	Interior Specialities -				
B341	C20	Finishes				
B341	C2010	Wall Finishes	Paint on CMU		3	
B341			VWB		3	
B341	C2030	Flooring	Concrete			
B341						
B341	C2040	Stair Finishes				
B341	C2050	Ceiling Finishes	Paint on Structure		2	
B341						
B341	E20	Furnishings				
B341	E2010	Fixed Furnishings	Lab Benches	(7) Trough drain in middle, Steel bottoms, plastic tops - with end sinks, plastic with steel base - decent shape	6540-6544	3
B341			Chalk board	qty (5)		3
B341			Shelf	Wall hung - east wall -	6511 sim.	4
B341			Wooden Shelf	west wall	6545	4
B341						
B341						
B341						
B341	E2050	Movable Equipment	Fume Hood	(3) ca 2002	6537, 6538	2
B341			Fume Hood	(1) New	6547	1

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B341A	B341A	Storage	Adj to B341 Lab		5	
B341A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B341A	C	INTERIORS				
B341A	C10	Interior Construction				
B341A	C1010.10	Interior Fixed Partitions	CMU			
B341A						
B341A	C1010.40	Interior Demountable Partitions				
B341A	C1010.50	Interior Operable Partitions				
B341A	C1020	Interior Windows	1 HM borrowed light		3	
B341A	C1030	Interior Doors	1 Wood door - Type A		4	
B341A			2 Wood door - Type A		6	
B341A						
B341A	C1040	Interior Grilles & Gates				
B341A	C1060	Raised Floor Construction				
B341A	C1070	Suspended Ceiling Construction				
B341A	C1090	Interior Specialities -				
B341A	C20	Finishes				
B341A	C2010	Wall Finishes	Paint on CMU		5	
B341A						
B341A	C2030	Flooring	Concrete			
B341A						
B341A	C2040	Stair Finishes				
B341A	C2050	Ceiling Finishes	Paint on Structure		5	
B341A						
B341A	E20	Furnishings				
B341A	E2010	Fixed Furnishings	Work Bench		5	
B341A			Sink		5	
B341A			Wood Shelf	6' Lin.	5	
B341A						
B341A	E2050	Movable Equipment				
B341A						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B341B					
B341B	B341B	Storage	Adj to B341 Lab		5
B341B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B341B	C	INTERIORS			
B341B	C10	Interior Construction			
B341B	C1010.10	Interior Fixed Partitions			
B341B					
B341B	C1010.40	Interior Demountable Partitions			
B341B	C1010.50	Interior Operable Partitions			
B341B	C1020	Interior Windows			
B341B	C1030	Interior Doors			
B341B					
B341B					
B341B					
B341B	C1040	Interior Grilles & Gates			
B341B	C1060	Raised Floor Construction			
B341B	C1070	Suspended Ceiling Construction			
B341B	C1090	Interior Specialities -			
B341B	C20	Finishes			
B341B	C2010	Wall Finishes	Paint on CMU		5
B341B					
B341B	C2030	Flooring	Concrete		
B341B					
B341B	C2040	Stair Finishes			
B341B	C2050	Ceiling Finishes	Paint on Structure		5
B341B					
B341B	E20	Furnishings			
B341B	E2010	Fixed Furnishings			
B341B					
B341B					
B341B					
B341B	E2050	Movable Equipment			
B341B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B351	B351	Classroom		6487-6491	3
B351	CODE	ITEM	DESCRIPTION	CONDITION	RATING
B351	C	INTERIORS			
B351	C10	Interior Construction			
B351	C1010.10	Interior Fixed Partitions	CMU		2
B351					
B351	C1010.40	Interior Demountable Partitions			
B351	C1010.50	Interior Operable Partitions			
B351	C1020	Interior Windows			
B351	C1030	Interior Doors	1 Wood Door - Type C - veay beat up, obselete hardware		4
B351					
B351					
B351	C1040	Interior Grilles & Gates	access panel	access panel in east wall	3
B351	C1060	Raised Floor Construction			
B351	C1070	Suspended Ceiling Construction	ACT		2
B351	C1090	Interior Specialities -			
B351	C20	Finishes			
B351	C2010	Wall Finishes	Paint on CMU	Dirty, needs patching	4
B351			VWB		3
B351	C2030	Flooring	12" VCT	Badly discolored	4
B351					
B351	C2040	Stair Finishes			
B351	C2050	Ceiling Finishes	ACT	tegular edge tile - some damaged tiles	3
B351					
B351	E20	Furnishings			
B351	E2010	Fixed Furnishings	Chalk board	Qty (4) -	3
B351			Tackboard	Qty (1)	3
B351					
B351					
B351	E2050	Movable Equipment	Projection screen	very old	3
B351					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B355	B355	Classroom			3
B355	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B355	C	INTERIORS			RATING
B355	C10	Interior Construction			
B355	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B355					
B355	C1010.40	Interior Demountable Partitions			
B355	C1010.50	Interior Operable Partitions			
B355	C1020	Interior Windows			
B355	C1030	Interior Doors	1	Wood door - type C -	4
B355					
B355					
B355	C1040	Interior Grilles & Gates			
B355	C1060	Raised Floor Construction			
B355	C1070	Suspended Ceiling Construction	ACT	discolored track	3
B355	C1090	Interior Specialities -			
B355	C20	Finishes			
B355	C2010	Wall Finishes	Paint on CMU		4
B355			VWB		3
B355	C2030	Flooring	12" VCT	Some discoloration	3
B355					
B355	C2040	Stair Finishes			
B355	C2050	Ceiling Finishes	ACT	old and saggy	4
B355					
B355	E20	Furnishings			
B355	E2010	Fixed Furnishings	Chalkboards	(3) - loose tack strips	3
B355			Tack Board		3
B355					
B355					
B355	E2050	Movable Equipment	Projection screen	old	4
B355					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B357	B357	Classroom		6584-6587	4
B357	CODE	ITEM	DESCRIPTION	CONDITION	RATING
B357	C	INTERIORS			
B357	C10	Interior Construction			
B357	C1010.10	Interior Fixed Partitions	CMU		1
B357					
B357	C1010.40	Interior Demountable Partitions			
B357	C1010.50	Interior Operable Partitions			
B357	C1020	Interior Windows			
B357	C1030	Interior Doors	1 Wood Door - Type C - Obsolete hardware, damaged veneer		4
B357					
B357					
B357	C1040	Interior Grilles & Gates			
B357	C1060	Raised Floor Construction			
B357	C1070	Suspended Ceiling Construction	ACT	Yellowed	3
B357	C1090	Interior Specialities -			
B357	C20	Finishes			
B357	C2010	Wall Finishes	Paint on CMU		4
B357			VWB	Peeling off at west wall	4
B357	C2030	Flooring	12" VCT		3
B357					
B357	C2040	Stair Finishes			
B357	C2050	Ceiling Finishes	ACT	Old saggy tiles	4
B357					
B357	E20	Furnishings			
B357	E2010	Fixed Furnishings	Chalkboards	(4) qty - average condition	3
B357					
B357					
B357	E2050	Movable Equipment	Projection screen	Old	4
B357					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B359	B359	Storage	Under Lecture Hall 1351		4	
B359	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B359	C	INTERIORS				
B359	C10	Interior Construction				
B359	C1010.10	Interior Fixed Partitions	CMU		2	
B359						
B359	C1010.40	Interior Demountable Partitions				
B359	C1010.50	Interior Operable Partitions				
B359	C1020	Interior Windows				
B359	C1030	Interior Doors	1 Wood Door - Type A		3	
B359			2 Wood Door - Type A		3	
B359						
B359	C1040	Interior Grilles & Gates				
B359	C1060	Raised Floor Construction				
B359	C1070	Suspended Ceiling Construction				
B359	C1090	Interior Specialities -				
B359	C20	Finishes				
B359	C2010	Wall Finishes				
B359						
B359	C2030	Flooring				
B359						
B359	C2040	Stair Finishes				
B359	C2050	Ceiling Finishes				
B359						
B359	E20	Furnishings				
B359	E2010	Fixed Furnishings	8'X3' Wood shelves		3	
B359						
B359						
B359						
B359	E2050	Movable Equipment				
B359						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B361	B361	Stock Room	Demonstration Prep	6483-6486	5	
B361	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B361	C	INTERIORS				
B361	C10	Interior Construction				
B361	C1010.10	Interior Fixed Partitions	CMU		2	
B361						
B361	C1010.40	Interior Demountable Partitions				
B361	C1010.50	Interior Operable Partitions				
B361	C1020	Interior Windows				
B361	C1030	Interior Doors	1 Wood Door - Type C -		4	
B361			2 Wood Door - Type C -		4	
B361						
B361	C1040	Interior Grilles & Gates				
B361	C1060	Raised Floor Construction				
B361	C1070	Suspended Ceiling Construction				
B361	C1090	Interior Specialities -				
B361	C20	Finishes				
B361	C2010	Wall Finishes	Paint on Plaster		4	
B361						
B361	C2030	Flooring	Sealed Concrete			
B361						
B361	C2040	Stair Finishes				
B361	C2050	Ceiling Finishes	Paint on Structure		4	
B361						
B361	E20	Furnishings				
B361	E2010	Fixed Furnishings	Shelves	Wood Storage Shelves - 125 linear feet - fair to poor condition	4	
B361			Lab Benches	30 linear feet with lower cabs and drawers. Damaged tops, sinks corroded, toe kicks missing vinyl	6	
B361						
B361						
B361	E2050	Movable Equipment	Fume Hood	Brand New	1	
B361			Demo Carts	Qty (4) - extensive wear	6	

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
B361A	B361A	Stock Room	Demo Prep Storage	6475-6482	5	
B361A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
B361A	C	INTERIORS				
B361A	C10	Interior Construction				
B361A	C1010.10	Interior Fixed Partitions	CMU		2	
B361A						
B361A	C1010.40	Interior Demountable Partitions				
B361A	C1010.50	Interior Operable Partitions				
B361A	C1020	Interior Windows				
B361A	C1030	Interior Doors	1 Wood Door - Type B - Damaged, Chipped Veneer, disfunctional closer		4	
B361A			2 Wood Door - Type B - Heavy Damage from Demo Carts, door nob bent		5	
B361A			3 Wood Door - Type B - Manual Flushbolts		5	
B361A						
B361A	C1040	Interior Grilles & Gates				
B361A	C1060	Raised Floor Construction				
B361A	C1070	Suspended Ceiling Construction				
B361A	C1090	Interior Specialities -				
B361A	C20	Finishes				
B361A	C2010	Wall Finishes	Plaster on CMU/Conc	Poor Condition	4	
B361A						
B361A	C2030	Flooring	Sealed Concrete	Poor Condition	4	
B361A						
B361A	C2040	Stair Finishes				
B361A	C2050	Ceiling Finishes	Paint on Structure			
B361A						
B361A	E20	Furnishings				
B361A	E2010	Fixed Furnishings	Shelf	South Wall - wood with metal brackets, dirty has minor damage, has been repaired slightly	6478	3
B361A			Shelf	South Side West Wall - wood with metal brackets, minor damage, dirty	6479	3
B361A			Base Cabinet and Sink	East wall - open shelves very dirty, stainless steel sink, very corroded, counter is delaminated - very soiled	6481	6
B361A			Fixed Shelving	Steel Brackets, Heavy soiling, mismatched shelf panels, heavy abrasion		4
B361A			Shelf	East Wall Above sink - decent shape		3
B361A			Pipe Storage Rack	Stainless Steel Brackets on a 2x4		3
B361A	E2050	Movable Equipment	Fume Hood	"canopy enclosure only, not a chemicle fume hood" very old	6482	6
B361A						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B361B	B361B	Office			4
B361B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B361B	C	INTERIORS			
B361B	C10	Interior Construction			
B361B	C1010.10	Interior Fixed Partitions	CMU		2
B361B	C1010.40	Interior Demountable Partitions			
B361B	C1010.50	Interior Operable Partitions			
B361B	C1020	Interior Windows			
B361B	C1030	Interior Doors	1 Wood Door - Type A -		3
B361B					
B361B					
B361B	C1040	Interior Grilles & Gates			
B361B	C1060	Raised Floor Construction			
B361B	C1070	Suspended Ceiling Construction	ACT		
B361B	C1090	Interior Specialities -			
B361B	C20	Finishes			
B361B	C2010	Wall Finishes	Paint on Plaster		
B361B	C2030	Flooring	12" VCT	No Wax	4
B361B	C2040	Stair Finishes			
B361B	C2050	Ceiling Finishes	ACT	Saggy Tiles	4
B361B	E20	Furnishings			
B361B	E2010	Fixed Furnishings	Shelf	8 linear feet	3
B361B					
B361B					
B361B	E2050	Movable Equipment			
B361B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B371	B371	Lecture Hall		6468-6474	5
B371	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B371	C	INTERIORS			RATING
B371	C10	Interior Construction			
B371	C1010.10	Interior Fixed Partitions	CMU		2
B371					
B371	C1010.40	Interior Demountable Partitions			
B371	C1010.50	Interior Operable Partitions			
B371	C1020	Interior Windows			
B371	C1030	Interior Doors			
B371			1 HM Door - Type A - Panic Bar, Broken Closer, Heavy Wear		4
B371			2 HM Door - Type A - Panic Bar, Broken Closer, Heavy Wear		4
B371			3 HM Door - Type A - Corroded and pitted HW, frame and door		5
B371			4 HM Door - Type A -		5
B371	C1040	Interior Grilles & Gates	HVAC Grills	Old and Dirty	4
B371	C1060	Raised Floor Construction			
B371	C1070	Suspended Ceiling Construction			
B371	C1090	Interior Specialities -	Acoustic Panels	5 acoustic panels of various tiles	3
B371	C20	Finishes			
B371	C2010	Wall Finishes	Wood Veneer	Wood veneer inset panels	4
B371			Paint on Plaster	heavy wear on columns	4
B371	C2030	Flooring	9x9 tile	tile border around sealed concrete floor	4
B371					
B371	C2040	Stair Finishes			
B371	C2050	Ceiling Finishes	ACT		3
B371					
B371	E20	Furnishings			
B371	E2010	Fixed Furnishings	Demo Table	Abraised top and veneer, drawer faces and cabinets heavily damaged	6470
B371			Lab Sink		4
B371			Seating	Veneer is worn from years of use, prevalent graffiti, pitted rusting desk hardware	4
B371			Chalk board	Fair condition	3
B371	E2050	Movable Equipment			
B371					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B378	B378	Computer Lab			4
B378	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B378	C	INTERIORS			
B378	C10	Interior Construction			
B378	C1010.10	Interior Fixed Partitions	CMU	South Wall - cracking	3
B378			CMU	W, E, N	2
B378	C1010.40	Interior Demountable Partitions			
B378	C1010.50	Interior Operable Partitions			
B378	C1020	Interior Windows			
B378	C1030	Interior Doors	1	Wood door - type c -	4
B378					
B378					
B378	C1040	Interior Grilles & Gates			
B378	C1060	Raised Floor Construction			
B378	C1070	Suspended Ceiling Construction	ACT		1
B378	C1090	Interior Specialities -			
B378	C20	Finishes			
B378	C2010	Wall Finishes	Paint on CMU		3
B378			VWB		3
B378	C2030	Flooring	9" tile -	could be asbestos	4
B378					
B378	C2040	Stair Finishes			
B378	C2050	Ceiling Finishes	ACT	tegular edge tile	2
B378					
B378	E20	Furnishings			
B378	E2010	Fixed Furnishings			
B378					
B378					
B378					
B378	E2050	Movable Equipment	Projection Screen		2
B378					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B379	B379	Classroom			4
B379	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B379	C	INTERIORS			
B379	C10	Interior Construction			
B379	C1010.10	Interior Fixed Partitions	CMU		1
B379	C1010.40	Interior Demountable Partitions			
B379	C1010.50	Interior Operable Partitions			
B379	C1020	Interior Windows			
B379	C1030	Interior Doors	1 Wood Door - Type C - Obsolete hardware, damaged veneer		4
B379					
B379					
B379	C1040	Interior Grilles & Gates			
B379	C1060	Raised Floor Construction			
B379	C1070	Suspended Ceiling Construction	ACT	Yellowed	3
B379	C1090	Interior Specialities -			
B379	C20	Finishes			
B379	C2010	Wall Finishes	Paint on CMU		4
B379			VWB	Peeling off at west wall	4
B379	C2030	Flooring	12" VCT		3
B379					
B379	C2040	Stair Finishes			
B379	C2050	Ceiling Finishes	ACT	Old saggy tiles	4
B379					
B379	E20	Furnishings			
B379	E2010	Fixed Furnishings	Chalkboards	(4) qty - average condition	3
B379					
B379					
B379	E2050	Movable Equipment			
B379					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B382	B382	Miscellaneous	Staff Lounge		4
B382	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B382	C	INTERIORS			
B382	C10	Interior Construction			
B382	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
B382					
B382	C1010.40	Interior Demountable Partitions			
B382	C1010.50	Interior Operable Partitions			
B382	C1020	Interior Windows			
B382	C1030	Interior Doors	1	Wood door - type A -	
B382					
B382					
B382	C1040	Interior Grilles & Gates			
B382	C1060	Raised Floor Construction			
B382	C1070	Suspended Ceiling Construction	ACT		1
B382	C1090	Interior Specialities -			
B382	C20	Finishes			
B382	C2010	Wall Finishes	Paint on Plaster		4
B382			Paint on CMU		3
B382			VWB		3
B382	C2030	Flooring	9" VCT	could be asbestos	4
B382					
B382	C2040	Stair Finishes			
B382	C2050	Ceiling Finishes	ACT	tegular edge tile, some soiling, staining	2
B382					
B382	E20	Furnishings			
B382	E2010	Fixed Furnishings	Sink Cabinet	Does not meet current ADA height requirements, missing laminate, chipped paint	4
B382					
B382					
B382	E2050	Movable Equipment			
B382					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B383	B383	Classroom			4
B383	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B383	C	INTERIORS			
B383	C10	Interior Construction			
B383	C1010.10	Interior Fixed Partitions	CMU		1
B383					
B383	C1010.40	Interior Demountable Partitions			
B383	C1010.50	Interior Operable Partitions			
B383	C1020	Interior Windows			
B383	C1030	Interior Doors	1 Wood Door - Type C - Obsolete hardware, damaged veneer		4
B383					
B383					
B383	C1040	Interior Grilles & Gates			
B383	C1060	Raised Floor Construction			
B383	C1070	Suspended Ceiling Construction	ACT	Yellowed	3
B383	C1090	Interior Specialities -			
B383	C20	Finishes			
B383	C2010	Wall Finishes	Paint on CMU		4
B383			VWB	Peeling off at west wall	4
B383	C2030	Flooring	12" VCT		3
B383					
B383	C2040	Stair Finishes			
B383	C2050	Ceiling Finishes	ACT	Old saggy tiles	4
B383					
B383	E20	Furnishings			
B383	E2010	Fixed Furnishings	Chalkboards	(4) qty - average condition	3
B383					
B383					
B383					
B383	E2050	Movable Equipment			
B383					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
B387	B387	Classroom			4
B387	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
B387	C	INTERIORS			
B387	C10	Interior Construction			
B387	C1010.10	Interior Fixed Partitions	CMU		1
B387					
B387	C1010.40	Interior Demountable Partitions			
B387	C1010.50	Interior Operable Partitions			
B387	C1020	Interior Windows			
B387	C1030	Interior Doors	1 Wood Door - Type C - Obsolete hardware, damaged veneer		4
B387					
B387					
B387	C1040	Interior Grilles & Gates			
B387	C1060	Raised Floor Construction			
B387	C1070	Suspended Ceiling Construction	ACT	Yellowed	3
B387	C1090	Interior Specialities -			
B387	C20	Finishes			
B387	C2010	Wall Finishes	Paint on CMU		4
B387			VWB	Peeling off at west wall	4
B387	C2030	Flooring	12" VCT		3
B387					
B387	C2040	Stair Finishes			
B387	C2050	Ceiling Finishes	ACT	Old saggy tiles	4
B387					
B387	E20	Furnishings			
B387	E2010	Fixed Furnishings	Chalkboards	(4) qty - average condition	3
B387					
B387					
B387					
B387	E2050	Movable Equipment			
B387					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1300M	1300M	Corridor		6757	2	
1300M	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1300M	C	INTERIORS				
1300M	C10	Interior Construction				
1300M	C1010.10	Interior Fixed Partitions				
1300M						
1300M	C1010.40	Interior Demountable Partitions				
1300M	C1010.50	Interior Operable Partitions				
1300M	C1020	Interior Windows				
1300M	C1030	Interior Doors				
1300M						
1300M						
1300M	C1040	Interior Grilles & Gates				
1300M	C1060	Raised Floor Construction				
1300M	C1070	Suspended Ceiling Construction				
1300M	C1090	Interior Specialities -				
1300M	C20	Finishes				
1300M	C2010	Wall Finishes	Paint on Plaster		2	
1300M			Corner Guards		3	
1300M			VWB		3	
1300M	C2030	Flooring	Terrazzo		2	
1300M						
1300M	C2040	Stair Finishes				
1300M	C2050	Ceiling Finishes	ACT	tegular edge tile	2	
1300M						
1300M	E20	Furnishings				
1300M	E2010	Fixed Furnishings				
1300M						
1300M						
1300M	E2050	Movable Equipment				
1300M						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1300P	1300P	Corridor	Exit Passage	6759	3
1300P	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1300P	C	INTERIORS			
1300P	C10	Interior Construction			
1300P	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	
1300P					
1300P	C1010.40	Interior Demountable Partitions			
1300P	C1010.50	Interior Operable Partitions			
1300P	C1020	Interior Windows			
1300P	C1030	Interior Doors			
1300P					
1300P					
1300P	C1040	Interior Grilles & Gates			
1300P	C1060	Raised Floor Construction			
1300P	C1070	Suspended Ceiling Construction	Suspended GWB	2 hour rated construction	
1300P	C1090	Interior Specialities -			
1300P	C20	Finishes			
1300P	C2010	Wall Finishes	Paint on plaster/GWB	soiled and marked	4
1300P			VWB		3
1300P			Corner Guards		3
1300P	C2030	Flooring	Terrazzo	inconsistent color	3
1300P					
1300P	C2040	Stair Finishes			
1300P	C2050	Ceiling Finishes	paint on GWB		2
1300P					
1300P	E20	Furnishings			
1300P	E2010	Fixed Furnishings			
1300P					
1300P					
1300P	E2050	Movable Equipment			
1300P					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1300S	1300S	Corridor		6758	3
1300S	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1300S	C	INTERIORS			
1300S	C10	Interior Construction			
1300S	C1010.10	Interior Fixed Partitions			
1300S					
1300S	C1010.40	Interior Demountable Partitions			
1300S	C1010.50	Interior Operable Partitions			
1300S	C1020	Interior Windows			
1300S	C1030	Interior Doors			
1300S					
1300S					
1300S	C1040	Interior Grilles & Gates			
1300S	C1060	Raised Floor Construction			
1300S	C1070	Suspended Ceiling Construction	ACT		
1300S	C1090	Interior Specialities -			
1300S	C20	Finishes			
1300S	C2010	Wall Finishes	Paint		2
1300S			Corner Guards		3
1300S			VWB		3
1300S	C2030	Flooring	Terrazzo	mix of old and new, cracking, staining	4
1300S					
1300S	C2040	Stair Finishes			
1300S	C2050	Ceiling Finishes	ACT	tegular edge	2
1300S					
1300S	E20	Furnishings			
1300S	E2010	Fixed Furnishings			
1300S					
1300S					
1300S	E2050	Movable Equipment			
1300S					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1300T	1300T	Corridor		6760-6762	2
1300T	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1300T	C	INTERIORS			
1300T	C10	Interior Construction			
1300T	C1010.10	Interior Fixed Partitions	Metal Stud		
1300T			CMU	does not account for proper location of partitions	
1300T	C1010.40	Interior Demountable Partitions			
1300T	C1010.50	Interior Operable Partitions			
1300T	C1020	Interior Windows			
1300T	C1030	Interior Doors			
1300T					
1300T					
1300T	C1040	Interior Grilles & Gates			
1300T	C1060	Raised Floor Construction			
1300T	C1070	Suspended Ceiling Construction	ACT		1
1300T	C1090	Interior Specialities -			
1300T	C20	Finishes			
1300T	C2010	Wall Finishes	Paint on GWB	Damage on West wall by elevator and utility	3
1300T			CG		3
1300T			VWB		2
1300T	C2030	Flooring	Terrazzo	some cracks and staining	3
1300T					
1300T	C2040	Stair Finishes			
1300T	C2050	Ceiling Finishes			1
1300T					
1300T	E20	Furnishings			
1300T	E2010	Fixed Furnishings			
1300T					
1300T					
1300T	E2050	Movable Equipment			
1300T					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1317	1317	Office			2
1317	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1317	C	INTERIORS			
1317	C10	Interior Construction			
1317	C1010.10	Interior Fixed Partitions			1
1317					
1317	C1010.40	Interior Demountable Partitions			
1317	C1010.50	Interior Operable Partitions			
1317	C1020	Interior Windows			
1317	C1030	Interior Doors			2
1317					
1317					
1317	C1040	Interior Grilles & Gates			
1317	C1060	Raised Floor Construction			
1317	C1070	Suspended Ceiling Construction			
1317	C1090	Interior Specialities -			
1317	C20	Finishes			
1317	C2010	Wall Finishes			2
1317					
1317	C2030	Flooring	carpet	ca. 2002	2
1317					
1317	C2040	Stair Finishes			
1317	C2050	Ceiling Finishes	ACT	tegular edge tile	2
1317					
1317	E20	Furnishings			
1317	E2010	Fixed Furnishings			
1317					
1317					
1317					
1317	E2050	Movable Equipment			
1317					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1317A	1317A	Office			2
1317A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1317A	C	INTERIORS			
1317A	C10	Interior Construction			
1317A	C1010.10	Interior Fixed Partitions			1
1317A	C1010.40	Interior Demountable Partitions			
1317A	C1010.50	Interior Operable Partitions			
1317A	C1020	Interior Windows			
1317A	C1030	Interior Doors			2
1317A					
1317A					
1317A	C1040	Interior Grilles & Gates			
1317A	C1060	Raised Floor Construction			
1317A	C1070	Suspended Ceiling Construction			
1317A	C1090	Interior Specialities -			
1317A	C20	Finishes			
1317A	C2010	Wall Finishes			2
1317A					
1317A	C2030	Flooring	carpet	ca. 2002	2
1317A					
1317A	C2040	Stair Finishes			
1317A	C2050	Ceiling Finishes	ACT	tegular edge tile	2
1317A					
1317A	E20	Furnishings			
1317A	E2010	Fixed Furnishings			
1317A					
1317A					
1317A	E2050	Movable Equipment			
1317A					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1321	1321	Office		6753-6754	4	
1321	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1321	C	INTERIORS				
1321	C10	Interior Construction				
1321	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
1321						
1321	C1010.40	Interior Demountable Partitions				
1321	C1010.50	Interior Operable Partitions				
1321	C1020	Interior Windows				
1321	C1030	Interior Doors	1	Wood door - Type F -	3	
1321						
1321						
1321	C1040	Interior Grilles & Gates				
1321	C1060	Raised Floor Construction				
1321	C1070	Suspended Ceiling Construction	ACT	Yellowed	4	
1321	C1090	Interior Specialities -				
1321	C20	Finishes				
1321	C2010	Wall Finishes	Paint on Plaster		3	
1321			VWB		4	
1321	C2030	Flooring	9" tile	could be asbestos	5	
1321						
1321	C2040	Stair Finishes				
1321	C2050	Ceiling Finishes	ACT	Old and Saggy	4	
1321						
1321	E20	Furnishings				
1321	E2010	Fixed Furnishings				
1321						
1321						
1321						
1321	E2050	Movable Equipment				
1321						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1321A	1321A	Office			4
1321A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1321A	C	INTERIORS			
1321A	C10	Interior Construction			
1321A	C1010.10	Interior Fixed Partitions			
1321A					
1321A	C1010.40	Interior Demountable Partitions			
1321A	C1010.50	Interior Operable Partitions			
1321A	C1020	Interior Windows			
1321A	C1030	Interior Doors	1 Wood Door - Type A - obsolete hardware		3
1321A					
1321A					
1321A	C1040	Interior Grilles & Gates			
1321A	C1060	Raised Floor Construction			
1321A	C1070	Suspended Ceiling Construction			
1321A	C1090	Interior Specialities -			
1321A	C20	Finishes			
1321A	C2010	Wall Finishes			
1321A					
1321A	C2030	Flooring			
1321A					
1321A	C2040	Stair Finishes			
1321A	C2050	Ceiling Finishes			
1321A					
1321A	E20	Furnishings			
1321A	E2010	Fixed Furnishings			
1321A					
1321A					
1321A					
1321A	E2050	Movable Equipment			
1321A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1321B	1321B	Office			4
1321B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1321B	C	INTERIORS			RATING
1321B	C10	Interior Construction			
1321B	C1010.10	Interior Fixed Partitions			
1321B					
1321B	C1010.40	Interior Demountable Partitions			
1321B	C1010.50	Interior Operable Partitions			
1321B	C1020	Interior Windows			
1321B	C1030	Interior Doors	1 Wood Door - Type A - obsolete hardware		3
1321B					
1321B					
1321B	C1040	Interior Grilles & Gates			
1321B	C1060	Raised Floor Construction			
1321B	C1070	Suspended Ceiling Construction			
1321B	C1090	Interior Specialities -			
1321B	C20	Finishes			
1321B	C2010	Wall Finishes			
1321B					
1321B	C2030	Flooring			
1321B					
1321B	C2040	Stair Finishes			
1321B	C2050	Ceiling Finishes			
1321B					
1321B	E20	Furnishings			
1321B	E2010	Fixed Furnishings			
1321B					
1321B					
1321B					
1321B	E2050	Movable Equipment			
1321B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1321C	1321C	Office		6755	4
1321C	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1321C	C	INTERIORS			
1321C	C10	Interior Construction			
1321C	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
1321C	C1010.40	Interior Demountable Partitions			
1321C	C1010.50	Interior Operable Partitions			
1321C	C1020	Interior Windows			
1321C	C1030	Interior Doors	1 Wood Door - type A - obsolete hardware, damaged veneer		3
1321C			2 Wood Door - type A - obsolete hardware, damaged veneer		3
1321C	C1040	Interior Grilles & Gates			
1321C	C1060	Raised Floor Construction			
1321C	C1070	Suspended Ceiling Construction			
1321C	C1090	Interior Specialities -			
1321C	C20	Finishes			
1321C	C2010	Wall Finishes	Paint on Plaster	Marked and dirty	4
1321C			VWB		3
1321C	C2030	Flooring	9" Tile	Could be asbestos	5
1321C	C2040	Stair Finishes			
1321C	C2050	Ceiling Finishes			
1321C	E20	Furnishings			
1321C	E2010	Fixed Furnishings	Sink Cabinet	Not ADA height,	4
1321C	E2050	Movable Equipment			

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1322	1322	Restroom	Men's	No ADA stall	2
1322	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1322	C	INTERIORS			
1322	C10	Interior Construction			
1322	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
1322	C1010.40	Interior Demountable Partitions	Plastic toilet partitions	like new	1
1322	C1010.50	Interior Operable Partitions			
1322	C1020	Interior Windows			
1322	C1030	Interior Doors	1	Wood door - type A -	3
1322					
1322					
1322	C1040	Interior Grilles & Gates			
1322	C1060	Raised Floor Construction			
1322	C1070	Suspended Ceiling Construction		suspended plaster	2
1322	C1090	Interior Specialities -			
1322	C20	Finishes			
1322	C2010	Wall Finishes	Ceramic Tile		2
1322					
1322	C2030	Flooring	ceramic mosaic tile		2
1322					
1322	C2040	Stair Finishes			
1322	C2050	Ceiling Finishes	Paint on plaster		2
1322					
1322	E20	Furnishings			
1322	E2010	Fixed Furnishings			
1322					
1322					
1322					
1322	E2050	Movable Equipment			
1322					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1325	1325	Office	Suite of Office rooms		4	
1325	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1325	C	INTERIORS				
1325	C10	Interior Construction				
1325	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		1
1325	C1010.40	Interior Demountable Partitions				
1325	C1010.50	Interior Operable Partitions				
1325	C1020	Interior Windows				
1325	C1030	Interior Doors		1 Wood door - Type F -		3
1325				2 Wood door - type A		3
1325				3 Wood door - type A		3
1325				4 Wood door - type A		3
1325	C1040	Interior Grilles & Gates				
1325	C1060	Raised Floor Construction				
1325	C1070	Suspended Ceiling Construction	ACT	Yellowed		4
1325	C1090	Interior Specialities -				
1325	C20	Finishes				
1325	C2010	Wall Finishes	Paint on Plaster			3
1325			VWB			4
1325	C2030	Flooring	12" VCT			3
1325	C2040	Stair Finishes				
1325	C2050	Ceiling Finishes				
1325	E20	Furnishings				
1325	E2010	Fixed Furnishings				
1325						
1325						
1325	E2050	Movable Equipment				
1325						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1328	1328	Office	Office suite		2
1328	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1328	C	INTERIORS			
1328	C10	Interior Construction			
1328	C1010.10	Interior Fixed Partitions			1
1328	C1010.40	Interior Demountable Partitions			
1328	C1010.50	Interior Operable Partitions			
1328	C1020	Interior Windows			
1328	C1030	Interior Doors			2
1328					
1328					
1328	C1040	Interior Grilles & Gates			
1328	C1060	Raised Floor Construction			
1328	C1070	Suspended Ceiling Construction			
1328	C1090	Interior Specialities -			
1328	C20	Finishes			
1328	C2010	Wall Finishes			2
1328					
1328	C2030	Flooring	carpet	ca. 2002	2
1328					
1328	C2040	Stair Finishes			
1328	C2050	Ceiling Finishes	ACT	tegular edge tile	2
1328					
1328	E20	Furnishings			
1328	E2010	Fixed Furnishings			
1328					
1328					
1328					
1328	E2050	Movable Equipment			
1328					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1328A	1328A	Office			2
1328A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1328A	C	INTERIORS			
1328A	C10	Interior Construction			
1328A	C1010.10	Interior Fixed Partitions			1
1328A	C1010.40	Interior Demountable Partitions			
1328A	C1010.50	Interior Operable Partitions			
1328A	C1020	Interior Windows			
1328A	C1030	Interior Doors			2
1328A					
1328A					
1328A	C1040	Interior Grilles & Gates			
1328A	C1060	Raised Floor Construction			
1328A	C1070	Suspended Ceiling Construction			
1328A	C1090	Interior Specialities -			
1328A	C20	Finishes			
1328A	C2010	Wall Finishes			2
1328A					
1328A	C2030	Flooring	carpet	ca. 2002	2
1328A					
1328A	C2040	Stair Finishes			
1328A	C2050	Ceiling Finishes	ACT	tegular edge tile	2
1328A					
1328A	E20	Furnishings			
1328A	E2010	Fixed Furnishings			
1328A					
1328A					
1328A					
1328A	E2050	Movable Equipment			
1328A					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1329	1329	Laboratory	Gen Chem	6548-6553	4	
1329	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1329	C	INTERIORS				
1329	C10	Interior Construction				
1329	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1	
1329						
1329	C1010.40	Interior Demountable Partitions				
1329	C1010.50	Interior Operable Partitions				
1329	C1020	Interior Windows				
1329	C1030	Interior Doors	1 Wood Door - Type F - ca. 2002		2	
1329			2 Wood Door - Type F - ca. 2002		2	
1329			3 Wood Door - type A - into adjacent space		4	
1329						
1329	C1040	Interior Grilles & Gates				
1329	C1060	Raised Floor Construction				
1329	C1070	Suspended Ceiling Construction				
1329	C1090	Interior Specialities -				
1329	C20	Finishes				
1329	C2010	Wall Finishes	Paint on CMU		3	
1329						
1329	C2030	Flooring	Concrete	No Finish		
1329						
1329	C2040	Stair Finishes				
1329	C2050	Ceiling Finishes	Paint on Structure		1	
1329						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1329	E20	Furnishings				
1329	E2010	Fixed Furnishings	4 Person Lab Bench	(3) Steel Bases, Plastic tops - South Half of Lab	6693	3
1329			Continuous Workbench	Steel base, plastic top, returns on ends for four person work station	6694	3
1329			4 Person Lab Bench	(5) Wood base, plastic tops, very small sinks	6695	3
1329			Work Counter	"L" shaped work counter w/ drawers NE corner of room. Missing vinyl on toe kick, top is black p-lam, some chipping, very dirty	6696	3
1329			Work Counter	Peninsula Counter at center of North Wall. Hold printers	6697	3
1329			Drawer Cabinet	NW Corner	6698	3
1329			Fume Hood Base	Cabinet Beneath Fume hoods	6699	4
1329			Storage Shelf		6700	5
1329			Coat Hooks	Plastic hooks	6701	4
1329			2 Chalk Boards	Small		3
1329			Coat Hooks	Metal hooks		2
1329	E2050	Movable Equipment	Fume Hoods	(2) ca 2002	6702	2
1329			Fume Hoods	(2) Older, age not available	6703	3
1329			Fume Hoods	(2) Older, age not available	6704	3

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1330	1330	Storage		6756	3
1330	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1330	C	INTERIORS			RATING
1330	C10	Interior Construction			
1330	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	2
1330			Metal Studs		2
1330	C1010.40	Interior Demountable Partitions			
1330	C1010.50	Interior Operable Partitions			
1330	C1020	Interior Windows			
1330	C1030	Interior Doors	1	Wood Door - Type A - obsolete hardware	3
1330					
1330					
1330	C1040	Interior Grilles & Gates			
1330	C1060	Raised Floor Construction			
1330	C1070	Suspended Ceiling Construction	ACT		2
1330	C1090	Interior Specialities -			
1330	C20	Finishes			
1330	C2010	Wall Finishes	Paint on CMU	covered by shelving	
1330			Paint on GWB	covered by shelving	
1330	C2030	Flooring	concrete		
1330					
1330	C2040	Stair Finishes			
1330	C2050	Ceiling Finishes	ACT	tegular acoustic tile	1
1330					
1330	E20	Furnishings			
1330	E2010	Fixed Furnishings	Wood Shelving	48' lin.	6756
1330					3
1330					
1330					
1330	E2050	Movable Equipment			
1330					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1334	1334	Stock Room	Manned stock room	6733-6752	5
1334	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1334	C	INTERIORS			
1334	C10	Interior Construction			
1334	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions	1
1334	C1010.40	Interior Demountable Partitions			
1334	C1010.50	Interior Operable Partitions			
1334	C1020	Interior Windows			
1334	C1030	Interior Doors	1 Wood Door - type A - with transfer grill, very dusty, damaged veneer at latch		3.5
1334			2 Wood Door - type A - with transfer grill, very dusty.		3
1334			3 Operable counter Doors, counterweighted	6733	4
1334	C1040	Interior Grilles & Gates			
1334	C1060	Raised Floor Construction			
1334	C1070	Suspended Ceiling Construction			
1334	C1090	Interior Specialities -			
1334	C20	Finishes			
1334	C2010	Wall Finishes	Paint on CMU	mostly covered with casework	3
1334	C2030	Flooring	Concrete		
1334	C2040	Stair Finishes			
1334	C2050	Ceiling Finishes	Paint on Structure		
1334	E20	Furnishings			
1334	E2010	Fixed Furnishings	Service Counter	A lot of wear and tear, newer p-lam top with some chipped edges on interior.	6734
1334			Wood Shelves	South wall - 21' Lin. - Poor condition	6735-6736
1334			Wood Shelves	Southwest corner - 6' Lin. Wood storage shelf missing vinyl toe kick, peeling veneer, corroded metal	6738
1334			Prep sink and Counter	12' Lin., black plastic top, black plastic sink, black asbestos shelves, very dirty, but structurally sound	6739-6740
1334			Bottle Drying Racks	qty (2)	6741
1334			Upper Shelves	wood with metal brackets, very rusty	6742
1334			Double sided wood shelves	Centrally located, 15' lin., no vinyl toe kick, all surfaces soiled stained or abraded	6743-6745
1334			Wood Shelves	36' Lin. Wall shelves on E, N, and W walls.	6745-6746

INTERIOR					
1334	E2050	Movable Equipment	Refrigerator	Apartment size - for flammable liquids	6747
1334			Steel Prep Carts	qty (4)	6748
1334			Plastic Prep carts	qty (4)	6749
1334			Wood Prep cart		6750
1334			Plastic Hood	needs to be cleaned	6751
1334			Steel Prep cart		6752
1334					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1335	1335	Laboratory	Gen Chem		5	
1335	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1335	C	INTERIORS				
1335	C10	Interior Construction				
1335	C1010.10	Interior Fixed Partitions	CMU	Cracking @ Control Joint, north wall	6705	4
1335						
1335	C1010.40	Interior Demountable Partitions				
1335	C1010.50	Interior Operable Partitions				
1335	C1020	Interior Windows				
1335	C1030	Interior Doors	1 Wood Door - Type F - Newer, but heavily used	6706-6707	4	
1335			2 Wood Door - Type F - Newer, but heavily used		3	
1335						
1335	C1040	Interior Grilles & Gates				
1335	C1060	Raised Floor Construction				
1335	C1070	Suspended Ceiling Construction				
1335	C1090	Interior Specialities -				
1335	C20	Finishes				
1335	C2010	Wall Finishes	Paint on CMU		4	
1335			VWB	Missig in a lot of places	6	
1335	C2030	Flooring	Concrete	no finish		
1335						
1335	C2040	Stair Finishes				
1335	C2050	Ceiling Finishes	Painted Structure		4	
1335						
1335	E20	Furnishings				
1335	E2010	Fixed Furnishings	8 Lab Benches	Asbestos tops, mini sinks and mini hoods along bench, heavy veneer damage, sun damage at windows, damaged toe kicks, leaky sinks, peeling paint	6713-6717	6
1335			Wall Hung Shelves	Polycarbonate plastic, like new	6718	2
1335			Plastic Full Ht Shelf	Acid storage, dirty but in good shape, no vinyl wall base - Has plastic Hood above	6712	2
1335			Fixed Tables	(2) 8' linear, glass tops	6712	4
1335			Wood Full Ht Shelf			4
1335			Coat Hooks	(2) 8' lin each, plastic hooks		4
1335						
1335						
1335						
1335	E2050	Movable Equipment	Fume Hood	New	6719	1
1335						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1338	1338	Stock Room	Unmanned Stock Rm	Sign outside says 1387, plan says 1338	6723-6728	5
1338	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1338	C	INTERIORS				
1338	C10	Interior Construction				
1338	C1010.10	Interior Fixed Partitions	CMU	does not account for proper location of partitions		1
1338						
1338	C1010.40	Interior Demountable Partitions				
1338	C1010.50	Interior Operable Partitions				
1338	C1020	Interior Windows				
1338	C1030	Interior Doors	1	Wood Door - Type A - Heavily corroded frame, has no transfer grill, but air is drawing through frame, dust on wall	6724, 6725, 6729	4
1338						
1338						
1338	C1040	Interior Grilles & Gates				
1338	C1060	Raised Floor Construction				
1338	C1070	Suspended Ceiling Construction				
1338	C1090	Interior Specialities -				
1338	C20	Finishes				
1338	C2010	Wall Finishes	Paint on CMU			4
1338			VWB			4
1338	C2030	Flooring	Concrete			
1338						
1338	C2040	Stair Finishes				
1338	C2050	Ceiling Finishes	Paint on Structure			4
1338						
1338	E20	Furnishings				
1338	E2010	Fixed Furnishings	Prep Work Bench	With shelves above	6730-32	5
1338			Wood Shelves	18' Lin. - Corroded and pitted metal brackets, dirty worn finish		4
1338						
1338						
1338	E2050	Movable Equipment	Fume Hood	New 4' Unit		1
1338			Flammable Cabinets	(2) vented cabinets, very rusty	6727	4

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1341	1341	Laboratory		6554-6560	5	
1341	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1341	C	INTERIORS				
1341	C10	Interior Construction				
1341	C1010.10	Interior Fixed Partitions	CMU	Holes in partitions added as secondary egress between labs, other holes and cracks present	3	
1341						
1341	C1010.40	Interior Demountable Partitions				
1341	C1010.50	Interior Operable Partitions				
1341	C1020	Interior Windows				
1341	C1030	Interior Doors	1 Wood door - type F - new door, frame needs painting		3	
1341			2 Wood door - type F - new door, frame needs painting		1	
1341						
1341	C1040	Interior Grilles & Gates				
1341	C1060	Raised Floor Construction				
1341	C1070	Suspended Ceiling Construction				
1341	C1090	Interior Specialities -				
1341	C20	Finishes				
1341	C2010	Wall Finishes	Paint on CMU	Very bad shape	6	
1341			VWB	extensive damage, many pieces missing	4	
1341	C2030	Flooring	Concrete			
1341						
1341	C2040	Stair Finishes				
1341	C2050	Ceiling Finishes	Paint on Structure	water damage and discoloration prevalent	6561	4
1341						
1341	E20	Furnishings				
1341	E2010	Fixed Furnishings	Lab Benches	wood veneer, black asbestos type tops, mini hoods on continuous wood supply rails, veneer heavily damaged, vinyl toe kick missing or loose, paint peeling on supply rails, sinks at ends with troughed side panels leaking with water/chemical damage down sides. Top surfaces degraded	6562-6564	6
1341			Plastic Shelves	(8) wall mounted shelves for balances - like new	6566	1
1341			Coat Racks	(2) 8' coat racks - newer	6567	1
1341			Fixed Wood Shelf	7'X4'W	6568	4
1341			Plastic Shelf	for storage of acid, with hood above, missing vinyl base	6569	2
1341			Glass Top Tables	qty(2)	6570	4
1341			Chalk Board	qty(2)		3
1341	E2050	Movable Equipment	Fume Hood	Like new	6471	1
1341						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1361	1361	Lecture Hall	Large Lecture hall	6572-6579	5	
1361	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1361	C	INTERIORS				
1361	C10	Interior Construction				
1361	C1010.10	Interior Fixed Partitions	CMU		1	
1361						
1361	C1010.40	Interior Demountable Partitions				
1361	C1010.50	Interior Operable Partitions				
1361	C1020	Interior Windows				
1361	C1030	Interior Doors	1 (pair) East side top of stairs - wood door - type A - Paint wear, hardware disfunctional		4	
1361			2 (pair) West side bottom of lecture hall - wood door - type A		3	
1361			3 (pair) East side bottom of lecture hall - wood door - type A		3	
1361						
1361	C1040	Interior Grilles & Gates				
1361	C1060	Raised Floor Construction	Concrete		1	
1361	C1070	Suspended Ceiling Construction	Suspended plaster		2	
1361	C1090	Interior Specialities -	Acoustic Panels	12X12 panels		
1361	C20	Finishes				
1361	C2010	Wall Finishes	Wood trim		2	
1361			Plaster		3	
1361			Masonry	brown brick	2	
1361			VWB		3	
1361	C2030	Flooring	9" tile -	Could be asbestos	5	
1361			bare concrete	seating area		
1361	C2040	Stair Finishes		Aluminum stair nosings with texturized treads over 9" tile	3	
1361	C2050	Ceiling Finishes	Paint on Plaster		2	
1361						
1361	E20	Furnishings				
1361	E2010	Fixed Furnishings	Laminated wood seats	Approximately 260 seats - chipping and cracking of veneer outer layer, especially on seating surface, rampant graffiti	6572-6576	5
1361			Projection console	no longer used	6574	7
1361			Demonstration table	wood veneer, black top, with lab sink on end - abraised top, chalk dust storm, years of neglect	6577-6578	4
1361						
1361	E2050	Movable Equipment	Mechanical Chalk board	3 tier, telescoping mechanical chalk board, 3 panels	6579	2
1361			projector and control console	like new	6578	1

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
1371A	1371A	Miscellaneous	1371A,B,C,D study rooms		2	
1371A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
1371A	C	INTERIORS				
1371A	C10	Interior Construction				
1371A	C1010.10	Interior Fixed Partitions				
1371A						
1371A	C1010.40	Interior Demountable Partitions				
1371A	C1010.50	Interior Operable Partitions				
1371A	C1020	Interior Windows				
1371A	C1030	Interior Doors	1 Wood door - type F -		1	
1371A						
1371A						
1371A	C1040	Interior Grilles & Gates				
1371A	C1060	Raised Floor Construction				
1371A	C1070	Suspended Ceiling Construction	ACT		1	
1371A	C1090	Interior Specialities -				
1371A	C20	Finishes				
1371A	C2010	Wall Finishes	Paint on GWB		2	
1371A			VWB		2	
1371A	C2030	Flooring	carpet	ca. 2002	2	
1371A						
1371A	C2040	Stair Finishes				
1371A	C2050	Ceiling Finishes	ACT	tegular edge tile	2	
1371A						
1371A	E20	Furnishings				
1371A	E2010	Fixed Furnishings				
1371A						
1371A						
1371A						
1371A	E2050	Movable Equipment				
1371A						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
1381	1381	Computer Lab	Computer classroom	6720-6722	2
1381	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
1381	C	INTERIORS			RATING
1381	C10	Interior Construction			
1381	C1010.10	Interior Fixed Partitions	Metal Studs		1
1381			CMU	does not account for proper location of partitions	1
1381	C1010.40	Interior Demountable Partitions			
1381	C1010.50	Interior Operable Partitions			
1381	C1020	Interior Windows		(3) HM borrowed lights	1
1381	C1030	Interior Doors		1 wood door - type F - Like new	1
1381				2 wood door - type F - Like new	1
1381				3 wood door - type A - Like new	1
1381	C1040	Interior Grilles & Gates			
1381	C1060	Raised Floor Construction			
1381	C1070	Suspended Ceiling Construction	ACT		1
1381	C1090	Interior Specialities -			
1381	C20	Finishes			
1381	C2010	Wall Finishes	Paint on GWB		2
1381			VWB		1
1381	C2030	Flooring	carpet	ca. 2002	2
1381	C2040	Stair Finishes			
1381	C2050	Ceiling Finishes	ACT	tegular edge tile	2
1381	E20	Furnishings			
1381	E2010	Fixed Furnishings	2 Dry erase boards		1
1381			Coat Rack	10' linear with p-lam shelf	1
1381			Computer Stations	(20) systems furniture type	1
1381					
1381					
1381	E2050	Movable Equipment	Projector Screen		2
1381			Projector		1

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2300M	2300M	Corridor	South Corridor		3
2300M	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2300M	C	INTERIORS			
2300M	C10	Interior Construction			
2300M	C1010.10	Interior Fixed Partitions	CMU		
2300M					
2300M	C1010.40	Interior Demountable Partitions			
2300M	C1010.50	Interior Operable Partitions			
2300M	C1020	Interior Windows			
2300M	C1030	Interior Doors			
2300M					
2300M					
2300M	C1040	Interior Grilles & Gates			
2300M	C1060	Raised Floor Construction			
2300M	C1070	Suspended Ceiling Construction	ACT	Old and Discolored	4
2300M	C1090	Interior Specialities -			
2300M	C20	Finishes			
2300M	C2010	Wall Finishes	Paint on Plaster		3
2300M			VWB		4
2300M	C2030	Flooring	Terrazzo		2
2300M					
2300M	C2040	Stair Finishes			
2300M	C2050	Ceiling Finishes	ACT	tile damage 30%	4
2300M					
2300M	E20	Furnishings			
2300M	E2010	Fixed Furnishings			
2300M					
2300M					
2300M					
2300M	E2050	Movable Equipment			
2300M					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2300P					
2300P	2300P	Corridor	Corridor North		4
2300P	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2300P	C	INTERIORS			
2300P	C10	Interior Construction			
2300P	C1010.10	Interior Fixed Partitions			
2300P					
2300P	C1010.40	Interior Demountable Partitions			
2300P	C1010.50	Interior Operable Partitions			
2300P	C1020	Interior Windows			
2300P	C1030	Interior Doors	1 Door into Stair #2 - Rated Door, Original to building, Surface Mounted Hinges, non latching, heavily worn finishes, wood filler		4
2300P			2 Same as #1		4
2300P					
2300P	C1040	Interior Grilles & Gates			
2300P	C1060	Raised Floor Construction			
2300P	C1070	Suspended Ceiling Construction	ACT		4
2300P	C1090	Interior Specialities -			
2300P	C20	Finishes			
2300P	C2010	Wall Finishes			
2300P					
2300P	C2030	Flooring	Terrazzo		2
2300P					
2300P	C2040	Stair Finishes	ACT	Damaged tiles 10%	4
2300P	C2050	Ceiling Finishes			
2300P					
2300P	E20	Furnishings			
2300P	E2010	Fixed Furnishings	Bulletin Boards	Qty (2)	2
2300P					
2300P					
2300P					
2300P	E2050	Movable Equipment	FEC		2
2300P					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2300S	2300S	Corridor	Corridor East	6460-6461	3
2300S	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2300S	C	INTERIORS			
2300S	C10	Interior Construction			
2300S	C1010.10	Interior Fixed Partitions	CMU		2
2300S					
2300S	C1010.40	Interior Demountable Partitions			
2300S	C1010.50	Interior Operable Partitions			
2300S	C1020	Interior Windows			
2300S	C1030	Interior Doors			
2300S					
2300S					
2300S	C1040	Interior Grilles & Gates			
2300S	C1060	Raised Floor Construction			
2300S	C1070	Suspended Ceiling Construction	ACT	1" Track	3
2300S	C1090	Interior Specialities -	Vinyl Corner Guards		3
2300S	C20	Finishes			
2300S	C2010	Wall Finishes	Paint on CMU	Extensive Marks, Dents, Graffiti	4
2300S					
2300S	C2030	Flooring	Terrazzo	with zinc divider strip - good shape	2
2300S			VWB	Peeling, evident patch jobs	4
2300S	C2040	Stair Finishes			
2300S	C2050	Ceiling Finishes	ACT	Monolithic Surface tiles - staining and damage to 5%	4
2300S					
2300S	E20	Furnishings			
2300S	E2010	Fixed Furnishings	Synchronized Clocks	Old	3
2300S			Bulletin Boards		2
2300S			Display cases	Not Used	
2300S					
2300S	E2050	Movable Equipment			
2300S					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2300T					
2300T	2300T	Corridor	West Corridor	6462-6463	4
2300T	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2300T	C	INTERIORS			
2300T	C10	Interior Construction			
2300T	C1010.10	Interior Fixed Partitions	CMU		2
2300T					
2300T	C1010.40	Interior Demountable Partitions			
2300T	C1010.50	Interior Operable Partitions			
2300T	C1020	Interior Windows			
2300T	C1030	Interior Doors			
2300T					
2300T					
2300T					
2300T	C1040	Interior Grilles & Gates			
2300T	C1060	Raised Floor Construction			
2300T	C1070	Suspended Ceiling Construction	ACT	track is old and discolored	6462
2300T	C1090	Interior Specialities -	Corner Guard		4
2300T	C1090	Interior Specialities -	Corner Guard		3
2300T	C20	Finishes			
2300T	C2010	Wall Finishes	Paint on Plaster	Significant marking and marring	4
2300T			VWB		4
2300T	C2030	Flooring	Terrazzo		
2300T					
2300T	C2040	Stair Finishes			
2300T	C2050	Ceiling Finishes	ACT	Tiles 50% damaged	5
2300T					
2300T	E20	Furnishings			
2300T	E2010	Fixed Furnishings	Display Cases	Empty	
2300T			Synchronized Clocks		
2300T					
2300T					
2300T	E2050	Movable Equipment			
2300T					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2303	2303	Office	TA Office		2	
2303	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2303	C	INTERIORS				
2303	C10	Interior Construction				
2303	C1010.10	Interior Fixed Partitions	CMU		2	
2303	C1010.40	Interior Demountable Partitions	System Furniture	Qty (13) Workspaces - good condition	2	
2303	C1010.50	Interior Operable Partitions				
2303	C1020	Interior Windows				
2303	C1030	Interior Doors	1 Wood Door - Type E -		3	
2303						
2303						
2303	C1040	Interior Grilles & Gates				
2303	C1060	Raised Floor Construction				
2303	C1070	Suspended Ceiling Construction	ACT		2	
2303	C1090	Interior Specialities -				
2303	C20	Finishes				
2303	C2010	Wall Finishes	Paint on Plaster		3	
2303						
2303	C2030	Flooring	Carpet	ca 2002	3	
2303						
2303	C2040	Stair Finishes				
2303	C2050	Ceiling Finishes	ACT	Tegular edge tile	2	
2303						
2303	E20	Furnishings				
2303	E2010	Fixed Furnishings	Coat Hooks	For Lab Coats	2	
2303						
2303						
2303						
2303	E2050	Movable Equipment				
2303						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2303A	2303A	Office			2
2303A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2303A	C	INTERIORS			
2303A	C10	Interior Construction			
2303A	C1010.10	Interior Fixed Partitions	CMU		2
2303A	C1010.40	Interior Demountable Partitions			
2303A	C1010.50	Interior Operable Partitions			
2303A	C1020	Interior Windows			
2303A	C1030	Interior Doors	1 Wood Door - Type E - Cosmetic Damage, obsolete hardware		3
2303A					
2303A					
2303A	C1040	Interior Grilles & Gates			
2303A	C1060	Raised Floor Construction			
2303A	C1070	Suspended Ceiling Construction	ACT		
2303A	C1090	Interior Specialities -			
2303A	C20	Finishes			
2303A	C2010	Wall Finishes	Paint on Plaster		2
2303A	C2030	Flooring	CPT	ca 2002	3
2303A	C2040	Stair Finishes			
2303A	C2050	Ceiling Finishes			
2303A	E20	Furnishings			
2303A	E2010	Fixed Furnishings			
2303A					
2303A					
2303A	E2050	Movable Equipment			
2303A					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2307	2307	Classroom		6362-6365	4	
2307	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2307	C	INTERIORS				
2307	C10	Interior Construction				
2307	C1010.10	Interior Fixed Partitions	CMU		2	
2307						
2307	C1010.40	Interior Demountable Partitions				
2307	C1010.50	Interior Operable Partitions				
2307	C1020	Interior Windows				
2307	C1030	Interior Doors	1 Wood Door - Type B - Cosmetic damage, obsolete hardware		3	
2307						
2307						
2307	C1040	Interior Grilles & Gates				
2307	C1060	Raised Floor Construction				
2307	C1070	Suspended Ceiling Construction	ACT	track OK	2	
2307	C1090	Interior Specialities -				
2307	C20	Finishes				
2307	C2010	Wall Finishes	N - Plaster on CMU		2	
2307			E - Wood Veneer		5	
2307			S - Plaster on Exterior		2	
2307			W - Wood Veneer		5	
2307			VWB		6	
2307	C2030	Flooring	9" Tile	Could be asbestos	6	
2307						
2307	C2040	Stair Finishes				
2307	C2050	Ceiling Finishes	ACT	Old, Saggy	6	
2307						
2307	E20	Furnishings				
2307	E2010	Fixed Furnishings	Sink and Counter	Missing drawer pulls, cosmetic damage, not ADA compliant	5	
2307			Chalk Board		2	
2307			Projection Screen		4	
2307			Periodic Table		4	
2307	E2050	Movable Equipment				
2307						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2308	2308	Restroom	Men's Restroom		2
2308	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2308	C	INTERIORS			
2308	C10	Interior Construction			
2308	C1010.10	Interior Fixed Partitions	CMU		2
2308	C1010.40	Interior Demountable Partitions	Toilet Partitions	Solid Plastic	1
2308	C1010.50	Interior Operable Partitions			
2308	C1020	Interior Windows			
2308	C1030	Interior Doors	1 Wood Doors - Type A -		3
2308					
2308					
2308	C1040	Interior Grilles & Gates			
2308	C1060	Raised Floor Construction			
2308	C1070	Suspended Ceiling Construction	Suspended GWB		1
2308	C1090	Interior Specialities -			
2308	C20	Finishes			
2308	C2010	Wall Finishes	Tile	Ceramic	1
2308					
2308	C2030	Flooring	Tile	Ceramic, cove base, some mismatched tiles	1
2308					
2308	C2040	Stair Finishes			
2308	C2050	Ceiling Finishes	Paint on GWB		2
2308					
2308	E20	Furnishings			
2308	E2010	Fixed Furnishings	Hand Dryers	ca 1980's	3
2308					
2308					
2308					
2308	E2050	Movable Equipment			
2308					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2311	2311	Classroom		6418-6421	3
2311	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2311	C	INTERIORS			RATING
2311	C10	Interior Construction			
2311	C1010.10	Interior Fixed Partitions	CMU		2
2311					
2311	C1010.40	Interior Demountable Partitions			
2311	C1010.50	Interior Operable Partitions			
2311	C1020	Interior Windows			
2311	C1030	Interior Doors	1 Wood Door - Type C - Dirty transfer grills, obsolete hardware, abraded surface - Frame needs paint and silencers.		3
2311					
2311					
2311	C1040	Interior Grilles & Gates			
2311	C1060	Raised Floor Construction			
2311	C1070	Suspended Ceiling Construction	ACT	Track is discolored	3
2311	C1090	Interior Specialities -			
2311	C20	Finishes			
2311	C2010	Wall Finishes	Paint		3
2311			VWB		2
2311	C2030	Flooring	12" VCT		2
2311					
2311	C2040	Stair Finishes			
2311	C2050	Ceiling Finishes	ACT	Saggy - Mismatched	4
2311					
2311	E20	Furnishings			
2311	E2010	Fixed Furnishings	Chalkboards	Qty (3) - bulging - missing tack strips.	4
2311					
2311					
2311	E2050	Movable Equipment	Projection Screen		4
2311			Periodic Table		3

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2317					
2317	Laboratory	Analytical	See Room 2331		5
2325					
2325	Laboratory	Analytical	See Room 2331		5
2330					
2330	Laboratory	Instrument Lab		6440-6449	4
2330	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2330	C	INTERIORS			RATING
2330	C10	Interior Construction			
2330	C1010.10	Interior Fixed Partitions	CMU		2
2330					
2330	C1010.40	Interior Demountable Partitions	1 Partial height Glass wall with aluminum frame		4
2330	C1010.50	Interior Operable Partitions			
2330	C1020	Interior Windows	1 Into Office 2330B		3
2330	C1030	Interior Doors	1 Wood Door - Type B		3
2330			2 Wood Door - Type B - broken closer		4
2330			3 Wood Door - Type C -		3
2330			4 Wood Door - Type C -		3
2330	C1040	Interior Grilles & Gates			
2330	C1060	Raised Floor Construction			
2330	C1070	Suspended Ceiling Construction	ACT part of room only		4
2330	C1090	Interior Specialities -			
2330	C20	Finishes			
2330	C2010	Wall Finishes	Paint on CMU		3
2330					
2330	C2030	Flooring	Seald Concrete		
2330					
2330	C2040	Stair Finishes			
2330	C2050	Ceiling Finishes	Painted Structure		2
2330			ACT Mismatched, Stained, Saggy		3
2330	E20	Furnishings			
2330	E2010	Fixed Furnishings	Work Surface with Sink	North Wall - New - maple veneer, plastic top, vinyl toe kick, 2 tier shelf above on old brackets	6447
2330			Base Cabinet/Counter	New -	6448
2330			Equipment Cabinet	West Wall - wood, or wood veneer, missing some flipper doors,	6446
2330					
2330	E2050	Movable Equipment	Fume Hood	New	6449
2330			Rolling Work Benches	Qty (8) - Like New	6450
2330			Misc Furniture	Average Condition	3

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2330A					
2330A	2330A	Laboratory	Dark Room	6451-6453	4
2330A	CODE	ITEM	DESCRIPTION	CONDITION	
2330A	C	INTERIORS		PHOTOS	RATING
2330A	C10	Interior Construction			
2330A	C1010.10	Interior Fixed Partitions	CMU		2
2330A					
2330A	C1010.40	Interior Demountable Partitions			
2330A	C1010.50	Interior Operable Partitions			
2330A	C1020	Interior Windows			
2330A	C1030	Interior Doors	1 Wood Door - Type A		
2330A					
2330A					
2330A	C1040	Interior Grilles & Gates			
2330A	C1060	Raised Floor Construction			
2330A	C1070	Suspended Ceiling Construction	Suspended Plaster		6
2330A	C1090	Interior Specialities -			
2330A	C20	Finishes			
2330A	C2010	Wall Finishes	Paint on Plaster		4
2330A					
2330A	C2030	Flooring	9" Tiles	Possibly asbestos	6
2330A					
2330A	C2040	Stair Finishes			
2330A	C2050	Ceiling Finishes	Plaster		2
2330A					
2330A	E20	Furnishings			
2330A	E2010	Fixed Furnishings	Base Cabinet/Counter	Damaged Veneer, Stainless Steel corroded	4
2330A			Base Cabinet/Counter	Black Top, checking in veneer, chipped top, soiling	4
2330A			Upper Cabinets	No Doors	4
2330A					
2330A	E2050	Movable Equipment			
2330A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2330B	2330B	Office	Lab Director		2
2330B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2330B	C	INTERIORS			RATING
2330B	C10	Interior Construction			
2330B	C1010.10	Interior Fixed Partitions	CMU		2
2330B					
2330B	C1010.40	Interior Demountable Partitions			
2330B	C1010.50	Interior Operable Partitions			
2330B	C1020	Interior Windows			
2330B	C1030	Interior Doors	1 See Door #3 from 2330		
2330B					
2330B					
2330B	C1040	Interior Grilles & Gates			
2330B	C1060	Raised Floor Construction			
2330B	C1070	Suspended Ceiling Construction			
2330B	C1090	Interior Specialities -			
2330B	C20	Finishes			
2330B	C2010	Wall Finishes	Paint on Plaster		2
2330B			VWB	ca 2002	3
2330B	C2030	Flooring			
2330B					
2330B	C2040	Stair Finishes			
2330B	C2050	Ceiling Finishes	ACT	tegular edge tile	1
2330B					
2330B	E20	Furnishings			
2330B	E2010	Fixed Furnishings			
2330B					
2330B					
2330B					
2330B	E2050	Movable Equipment			
2330B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2331	2331	Laboratory	Analytical	6388-6396, 6414-6417	5
2331	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2331	C	INTERIORS			RATING
2331	C10	Interior Construction			
2331	C1010.10	Interior Fixed Partitions	CMU		
2331					
2331	C1010.40	Interior Demountable Partitions			
2331	C1010.50	Interior Operable Partitions			
2331	C1020	Interior Windows			
2331	C1030	Interior Doors	1 Wood Door - Type B - Heavy abrasion, obsolete hardware		4
2331			2 Wood Door - Type B - Heavy abrasion, obsolete hardware		4
2331					
2331	C1040	Interior Grilles & Gates	Egress Doors	(4) Small opening in Wall at end of Workbenches	6
2331	C1060	Raised Floor Construction			
2331	C1070	Suspended Ceiling Construction			
2331	C1090	Interior Specialities -			
2331	C20	Finishes			
2331	C2010	Wall Finishes	Paint on CMU		5
2331					
2331	C2030	Flooring	Sealed Concrete		
2331					
2331	C2040	Stair Finishes			
2331	C2050	Ceiling Finishes	Paint on Structure	Water Damage	5
2331					
2331	E20	Furnishings			
2331	E2010	Fixed Furnishings	Buret Cabinets		2
2331			chipped, cracked drawer fronts, delaminated veneers, delaminated and missing toe kicks, Asbestos Tops - Missing drawer bottoms (5%), All surfaces heavily abraded, Sink Fixture "tombstones" are deteriorated	6414-6417	6
2331					
2331					
2331	E2050	Movable Equipment	Fume Hoods	Qty (4) - New	1
2331			Fume Hood	Acid Storage hood - extensive corrosion, no maintenance drain, damaged casework base	6388, 6389

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2341	2341	Laboratory	Analytical	6397, 6422-6427	5	
2341	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2341	C	INTERIORS				
2341	C10	Interior Construction				
2341	C1010.10	Interior Fixed Partitions	CMU		2	
2341						
2341	C1010.40	Interior Demountable Partitions				
2341	C1010.50	Interior Operable Partitions				
2341	C1020	Interior Windows				
2341	C1030	Interior Doors	1 Wood Door - Type B - Heavy veneer damage and cracked core at Mortise		5	
2341			2 Wood Door - Type B - Corroded Frame - dismantled overhead stop		5	
2341						
2341						
2341	C1040	Interior Grilles & Gates	1 Qty (4) Missing egress (into adjacent lab) panel doors		5	
2341	C1060	Raised Floor Construction				
2341	C1070	Suspended Ceiling Construction				
2341	C1090	Interior Specialities -				
2341	C20	Finishes				
2341	C2010	Wall Finishes	Paint on CMU		5	
2341						
2341	C2030	Flooring	Sealed Concrete			
2341						
2341	C2040	Stair Finishes				
2341	C2050	Ceiling Finishes	Paint on Structure	Water Damage	5	
2341						
2341	E20	Furnishings				
2341	E2010	Fixed Furnishings	Lab Benches	Deteriorated work surfacees, Delaminated veneers, missing drawer bottoms, missing toe kicks, asbestos tops, deteriorated faucet mounts	6428-6431	6
2341			Buret Cabinets	Good condition		2
2341			Storage Cabinet	West Wall - all wood, chipped veneer, very soiled		4
2341						
2341	E2050	Movable Equipment	Chalkboard	On Wheels		4
2341			Rolling Cabinet	Asbestos Top - Veneer Damage		6

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2361A	2361A	Library	Library Copy room		1
2361A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2361A	C	INTERIORS			
2361A	C10	Interior Construction			
2361A	C1010.10	Interior Fixed Partitions	GWB on Metal Studs		
2361A	C1010.40	Interior Demountable Partitions			
2361A	C1010.50	Interior Operable Partitions			
2361A	C1020	Interior Windows	Borrowed Lights	Hollow Metal	1
2361A	C1030	Interior Doors	1 Wood Door		1
2361A					
2361A					
2361A	C1040	Interior Grilles & Gates			
2361A	C1060	Raised Floor Construction			
2361A	C1070	Suspended Ceiling Construction			
2361A	C1090	Interior Specialities -			
2361A	C20	Finishes			
2361A	C2010	Wall Finishes	Paint on GWB		1
2361A			VWB		1
2361A	C2030	Flooring	Carpet		1
2361A					
2361A	C2040	Stair Finishes			
2361A	C2050	Ceiling Finishes	ACT	tegular edge	1
2361A					
2361A	E20	Furnishings			
2361A	E2010	Fixed Furnishings	Casework	Upper and Lower Cabinets	1
2361A					
2361A					
2361A	E2050	Movable Equipment			
2361A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2361B	2361B	Library	Study rooms 2361B-F		1
2361B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2361B	C	INTERIORS			
2361B	C10	Interior Construction			
2361B	C1010.10	Interior Fixed Partitions	GWB on Metal Studs		1
2361B					
2361B	C1010.40	Interior Demountable Partitions			
2361B	C1010.50	Interior Operable Partitions			
2361B	C1020	Interior Windows	Borrowed Lights	in rooms B, E, and F - hollow metal borrowed lights	1
2361B	C1030	Interior Doors		into each room - Wood Doors - type F -	1
2361B					
2361B					
2361B	C1040	Interior Grilles & Gates			
2361B	C1060	Raised Floor Construction			
2361B	C1070	Suspended Ceiling Construction	ACT		1
2361B	C1090	Interior Specialities -			
2361B	C20	Finishes			
2361B	C2010	Wall Finishes	Paint on GWB		1
2361B					
2361B	C2030	Flooring	Carpet		1
2361B					
2361B	C2040	Stair Finishes			
2361B	C2050	Ceiling Finishes	ACT		1
2361B					
2361B	E20	Furnishings			
2361B	E2010	Fixed Furnishings	System Furniture		
2361B					
2361B					
2361B					
2361B	E2050	Movable Equipment			
2361B					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2361G	2361G	Library	Library Commons		1
2361G	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2361G	C	INTERIORS			
2361G	C10	Interior Construction			
2361G	C1010.10	Interior Fixed Partitions	GWB on Metal Studs		1
2361G	C1010.40	Interior Demountable Partitions			
2361G	C1010.50	Interior Operable Partitions			
2361G	C1020	Interior Windows			
2361G	C1030	Interior Doors	1		3
2361G			2		3
2361G	C1040	Interior Grilles & Gates			
2361G	C1060	Raised Floor Construction			
2361G	C1070	Suspended Ceiling Construction	GWB soffit		1
2361G	C1090	Interior Specialities -	ACT		1
2361G	C20	Finishes			
2361G	C2010	Wall Finishes	Paint on GWB		1
2361G	C2030	Flooring	Carpet	ca 2002	2
2361G	C2040	Stair Finishes			
2361G	C2050	Ceiling Finishes	ACT	Tegular Edge Tile	1
2361G			GWB		1
2361G	E20	Furnishings			
2361G	E2010	Fixed Furnishings	Circulation Desk	Wood veneer panels, stainless steel trim, black p-lam top.	1
2361G					
2361G					
2361G	E2050	Movable Equipment	Access Control	Library Access Control System	1
2361G					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2361H					
2361H	2361H	Library	Stacks		3
2361H	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2361H	C	INTERIORS			
2361H	C10	Interior Construction			
2361H	C1010.10	Interior Fixed Partitions			
2361H					
2361H	C1010.40	Interior Demountable Partitions			
2361H	C1010.50	Interior Operable Partitions			
2361H	C1020	Interior Windows			
2361H	C1030	Interior Doors			
2361H					
2361H					
2361H					
2361H	C1040	Interior Grilles & Gates			
2361H	C1060	Raised Floor Construction			
2361H	C1070	Suspended Ceiling Construction	Suspended Panels		
2361H	C1090	Interior Specialities -			
2361H	C20	Finishes			
2361H	C2010	Wall Finishes	Paint on GWB	Mostly Covered with shelving	
2361H					
2361H	C2030	Flooring	9x9 tile	Could be asbestos	3
2361H					
2361H	C2040	Stair Finishes			
2361H	C2050	Ceiling Finishes	Panels	4x4 concave panels - some soiling	2
2361H					
2361H	E20	Furnishings			
2361H	E2010	Fixed Furnishings	2 sided bookshelf	Approximately 400 linear feet	3
2361H			1 sided bookshelf	Approximately 100 linear feet	3
2361H					
2361H					
2361H	E2050	Movable Equipment	flat storage	24 linear feet	3
2361H					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2365	2365	Laboratory	Analytical	6432-6438	1
2365	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2365	C	INTERIORS			
2365	C10	Interior Construction			
2365	C1010.10	Interior Fixed Partitions	CMU		2
2365					
2365	C1010.40	Interior Demountable Partitions			
2365	C1010.50	Interior Operable Partitions			
2365	C1020	Interior Windows			
2365	C1030	Interior Doors	1 Wood Door - Type B - Obsolete Hardware		3
2365					
2365					
2365	C1040	Interior Grilles & Gates	1 Access Panel		1
2365	C1060	Raised Floor Construction			
2365	C1070	Suspended Ceiling Construction			
2365	C1090	Interior Specialities -			
2365	C20	Finishes			
2365	C2010	Wall Finishes	Paint on CMU		1
2365			VWB		2
2365	C2030	Flooring	Sealed Concrete		2
2365					
2365	C2040	Stair Finishes			
2365	C2050	Ceiling Finishes	Painted Structure		1
2365					
2365	E20	Furnishings			
2365	E2010	Fixed Furnishings	Lab Benches	Like New	1
2365			Buret Cabinets	Older, but satisfactory	2
2365					
2365					
2365	E2050	Movable Equipment	Fume Hood	Somewhat old - has been refinished	6439
2365			Fume Hood	New	6436
2365			Fume Hood	For Acid Storage - drained catch basin, refinished with corrosion resistant coating	6433

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2369A	2369A	Laboratory	Computer/Instrument	6377-6382	5
2369A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2369A	C	INTERIORS			
2369A	C10	Interior Construction			
2369A	C1010.10	Interior Fixed Partitions	CMU		2
2369A	C1010.40	Interior Demountable Partitions	Sliding WD panel	Obselete	7
2369A	C1010.50	Interior Operable Partitions			
2369A	C1020	Interior Windows			
2369A	C1030	Interior Doors	1 Wood Door - Type B - not suited for use of room, freame needs paint and silencers		5
2369A					
2369A					
2369A	C1040	Interior Grilles & Gates	1 Wood access panel without frame, held in place with duct tape		6
2369A			1 HVAC grill on east wall		5
2369A	C1060	Raised Floor Construction			
2369A	C1070	Suspended Ceiling Construction			
2369A	C1090	Interior Specialities -			
2369A	C20	Finishes			
2369A	C2010	Wall Finishes	Paint on CMU		5
2369A					
2369A	C2030	Flooring	Sealed Concrete		6
2369A					
2369A	C2040	Stair Finishes			
2369A	C2050	Ceiling Finishes	Paint on Structure		4
2369A					
2369A	E20	Furnishings			
2369A	E2010	Fixed Furnishings	Lab Benches	Obselete benches - 15 linear feet - not used	7
2369A					
2369A					
2369A	E2050	Movable Equipment	Computer Stations	Qty (13)	
2369A			Analysis Machines	Qty (3) chromatography processors	

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2369B	2369B	Storage	Prep/storage	6383-6387	5
2369B	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2369B	C	INTERIORS			
2369B	C10	Interior Construction			
2369B	C1010.10	Interior Fixed Partitions	CMU		2
2369B					
2369B	C1010.40	Interior Demountable Partitions			
2369B	C1010.50	Interior Operable Partitions			
2369B	C1020	Interior Windows			
2369B	C1030	Interior Doors			
2369B					
2369B					
2369B	C1040	Interior Grilles & Gates			
2369B	C1060	Raised Floor Construction			
2369B	C1070	Suspended Ceiling Construction			
2369B	C1090	Interior Specialities -			
2369B	C20	Finishes			
2369B	C2010	Wall Finishes	Paint on CMU		6
2369B					
2369B	C2030	Flooring	Sealed Concrete		6
2369B					
2369B	C2040	Stair Finishes			
2369B	C2050	Ceiling Finishes	Painted Structure		5
2369B					
2369B	E20	Furnishings			
2369B	E2010	Fixed Furnishings	Lab Benches	(35 linear feet) - Asbestos counter tops	6
2369B			Storage Shelves		6
2369B					
2369B					
2369B	E2050	Movable Equipment	Ice Machine	Very Old	4
2369B					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2370	2370	Stock Room	manned stock room	6398-6405	5	
2370	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2370	C	INTERIORS				
2370	C10	Interior Construction				
2370	C1010.10	Interior Fixed Partitions	CMU			
2370						
2370	C1010.40	Interior Demountable Partitions				
2370	C1010.50	Interior Operable Partitions				
2370	C1020	Interior Windows				
2370	C1030	Interior Doors	1 Wood Door - Type A		4	
2370			2 Wood Door - Type D - Dutch Door - Not Very Secure		4	
2370			3 Wood Door - Type A		4	
2370			4 Wood Door - Type A - Blocked By Desk		4	
2370	C1040	Interior Grilles & Gates				
2370	C1060	Raised Floor Construction				
2370	C1070	Suspended Ceiling Construction	ACT	Track		
2370	C1090	Interior Specialities -	Counter Doors	Wood, Not very secure, counterweight	5	
2370	C20	Finishes				
2370	C2010	Wall Finishes	Paint on CMU			
2370						
2370	C2030	Flooring	Terrazzo	Floor is partially terrazzo	5	
2370			Sealed Concrete	Heavy chemical staining	5	
2370	C2040	Stair Finishes				
2370	C2050	Ceiling Finishes	ACT	Mismatched Tiles	4	
2370						
2370	E20	Furnishings				
2370	E2010	Fixed Furnishings	Vented Cabinet	NW Corner - Horiz. Glass sliding doors, top vented, panels are seperating	6408	6
2370			Prep Sink	West Wall - Delaminating wood veneer, asbestos top, heavily corroded fixtures, shlef brackets above highly corroded and holding heavy liquids	6406, 6407	6
2370			Storage Shelving	Center of Room - Wood with metal brackets - heavily corroded brackets, toe kicks completely disintegrated	6410, 6411	6
2370			Coat Closet	East Wall - Not suitable, can't close door		6
2370			Service Counter	East Wall - Plam top is cracked, delaminating - counter is heavily worn	6409	6
2370			Counter Doors	Hollow Core Wood - counterweighted, chipped and abraised, Not all locking mechanisms work	6409	6
2370			Vented Cabinet	SW corner - Racking, doors don't completely close - broken glass sliding panels (20%) broken	6398	6
2370			Shelves	Wood shelf with metal brackets - Delaminating, shelves are deteriorated from chemicals, random nails used to hang items		6
2370						
2370						
2370	E2050	Movable Equipment				
2370						

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2372	2372	Miscellaneous	Conference Room	6454-6455	3	
2372	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2372	C	INTERIORS				
2372	C10	Interior Construction				
2372	C1010.10	Interior Fixed Partitions	CMU		2	
2372						
2372	C1010.40	Interior Demountable Partitions				
2372	C1010.50	Interior Operable Partitions				
2372	C1020	Interior Windows				
2372	C1030	Interior Doors	1 Wood Door - Type A - Broken Closer		3	
2372						
2372						
2372	C1040	Interior Grilles & Gates				
2372	C1060	Raised Floor Construction				
2372	C1070	Suspended Ceiling Construction	ACT		4	
2372	C1090	Interior Specialities -				
2372	C20	Finishes				
2372	C2010	Wall Finishes	Paint on CMU		3	
2372						
2372	C2030	Flooring	12" VCT		3	
2372						
2372	C2040	Stair Finishes				
2372	C2050	Ceiling Finishes	ACT	Dirty, Stained	4	
2372						
2372	E20	Furnishings				
2372	E2010	Fixed Furnishings	Chalk Boards	Qty (2)	3	
2372			Tack Board		2	
2372						
2372						
2372	E2050	Movable Equipment				
2372						

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2372A					
2372A	2372A	Stock Room	Unmanned Stock room	6456-6458	5
2372A	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2372A	C	INTERIORS			
2372A	C10	Interior Construction			
2372A	C1010.10	Interior Fixed Partitions	CMU		2
2372A					
2372A	C1010.40	Interior Demountable Partitions			
2372A	C1010.50	Interior Operable Partitions			
2372A	C1020	Interior Windows			
2372A	C1030	Interior Doors	1 Wood Door - Type A - heavily corroded frame due to acid in the air	6459	5
2372A			2		5
2372A					
2372A	C1040	Interior Grilles & Gates			
2372A	C1060	Raised Floor Construction			
2372A	C1070	Suspended Ceiling Construction			
2372A	C1090	Interior Specialities -			
2372A	C20	Finishes			
2372A	C2010	Wall Finishes	Paint on CMU		3
2372A					
2372A	C2030	Flooring	Sealed Concrete		
2372A					
2372A	C2040	Stair Finishes			
2372A	C2050	Ceiling Finishes	Paint on Structure		4
2372A					
2372A	E20	Furnishings			
2372A	E2010	Fixed Furnishings	Benches	Qty (2) - Granite top, wood base - heavy damage and staining, pitting on hardware	6
2372A			Shelves	Qty (3) - Corroded brackets	4
2372A			Lab Sink		5
2372A					
2372A	E2050	Movable Equipment	Cabinet	Flammable liquid cabinet	4
2372A					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2377	2377	Classroom		6372-6376	3
2377	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2377	C	INTERIORS			
2377	C10	Interior Construction			
2377	C1010.10	Interior Fixed Partitions	CMU		2
2377					
2377	C1010.40	Interior Demountable Partitions			
2377	C1010.50	Interior Operable Partitions			
2377	C1020	Interior Windows			
2377	C1030	Interior Doors	1 Wood Door - Type C - Grill needs replacement, Frame needs paint, Obsolete hardware		4
2377					
2377					
2377	C1040	Interior Grilles & Gates			
2377	C1060	Raised Floor Construction			
2377	C1070	Suspended Ceiling Construction	ACT		4
2377	C1090	Interior Specialities -			
2377	C20	Finishes			
2377	C2010	Wall Finishes	Paint on CMU		3
2377			VWB		3
2377	C2030	Flooring	12" VCT		2
2377					
2377	C2040	Stair Finishes			
2377	C2050	Ceiling Finishes			
2377					
2377	E20	Furnishings			
2377	E2010	Fixed Furnishings	Chalkboards	(5) - chalkboards are bulging out	5
2377			Screen	ok	2
2377					
2377					
2377	E2050	Movable Equipment			
2377					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2377	2377	Classroom		6372-6376	3
2377	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2377	C	INTERIORS			RATING
2377	C10	Interior Construction			
2377	C1010.10	Interior Fixed Partitions			
2377					
2377	C1010.40	Interior Demountable Partitions			
2377	C1010.50	Interior Operable Partitions			
2377	C1020	Interior Windows			
2377	C1030	Interior Doors			
2377					
2377					
2377	C1040	Interior Grilles & Gates			
2377	C1060	Raised Floor Construction			
2377	C1070	Suspended Ceiling Construction			
2377	C1090	Interior Specialities -			
2377	C20	Finishes			
2377	C2010	Wall Finishes			
2377					
2377	C2030	Flooring			
2377					
2377	C2040	Stair Finishes			
2377	C2050	Ceiling Finishes			
2377					
2377	E20	Furnishings			
2377	E2010	Fixed Furnishings			
2377					
2377					
2377					
2377	E2050	Movable Equipment			
2377					

INTERIOR					
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING
2381	2381	Classroom		6366-6371	3
2381	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS
2381	C	INTERIORS			RATING
2381	C10	Interior Construction			
2381	C1010.10	Interior Fixed Partitions	CMU		2
2381					
2381	C1010.40	Interior Demountable Partitions			
2381	C1010.50	Interior Operable Partitions			
2381	C1020	Interior Windows			
2381	C1030	Interior Doors	1 Wood Door - Type C - Cosmetic Damage		3
2381					
2381					
2381	C1040	Interior Grilles & Gates		Access panel - Wood - Without Frame	6
2381	C1060	Raised Floor Construction			
2381	C1070	Suspended Ceiling Construction	ACT		3
2381	C1090	Interior Specialities -			
2381	C20	Finishes			
2381	C2010	Wall Finishes	Paint on CMU		4
2381			VWB		2
2381	C2030	Flooring	VCT	Like New	1
2381					
2381	C2040	Stair Finishes			
2381	C2050	Ceiling Finishes	ACT	Saggy	6
2381					
2381	E20	Furnishings			
2381	E2010	Fixed Furnishings	Chalkboards	(4) - sagging and bulging out	6
2381			Chalkboards	(1) - ok condition	3
2381					
2381					
2381	E2050	Movable Equipment			
2381					

INTERIOR						
ROOM #	ROOM TYPE	ROOM DESCRIPTION	CONDITION COMMENTS	PHOTOS	OVERALL RATING	
2385	2385	Classroom			3	
2385	CODE	ITEM	DESCRIPTION	CONDITION	PHOTOS	RATING
2385	C	INTERIORS				
2385	C10	Interior Construction				
2385	C1010.10	Interior Fixed Partitions	CMU			2
2385						
2385	C1010.40	Interior Demountable Partitions				
2385	C1010.50	Interior Operable Partitions				
2385	C1020	Interior Windows				
2385	C1030	Interior Doors		1 Wood Door - Type B - Heavy wear, obsolete hardware, broken closer		4
2385				2 Wood Door - Type A - new		2
2385						
2385						
2385	C1040	Interior Grilles & Gates		1 Access Panel - wood w/o frame (has foam holding it in place)		5
2385	C1060	Raised Floor Construction				
2385	C1070	Suspended Ceiling Construction	ACT			2
2385	C1090	Interior Specialities -				
2385	C20	Finishes				
2385	C2010	Wall Finishes	Paint on Plaster	N, W, E walls		3
2385			Paint on Plaster	South Wall - damage from chairs		4
2385			VWB	Good shape		2
2385	C2030	Flooring	VCT	Like New		1
2385						
2385	C2040	Stair Finishes				
2385	C2050	Ceiling Finishes	ACT	Regular edge tile		2
2385						
2385	E20	Furnishings				
2385	E2010	Fixed Furnishings	Chalkboards	Qty (2) ok shape		3
2385						
2385						
2385						
2385	E2050	Movable Equipment				
2385						



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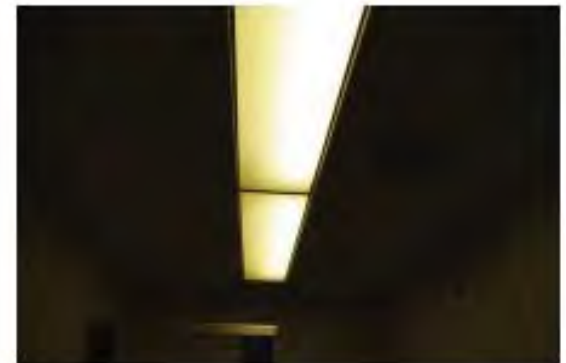
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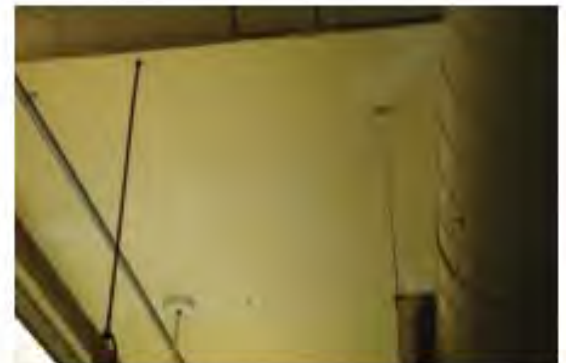
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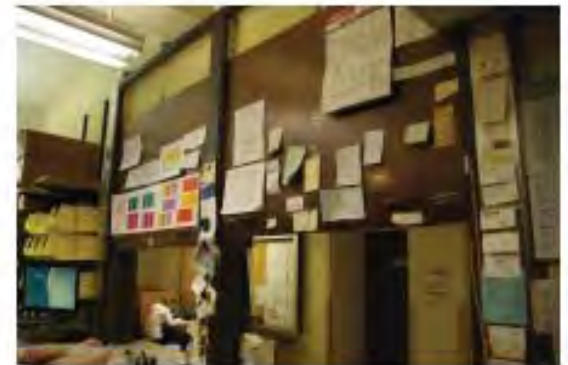
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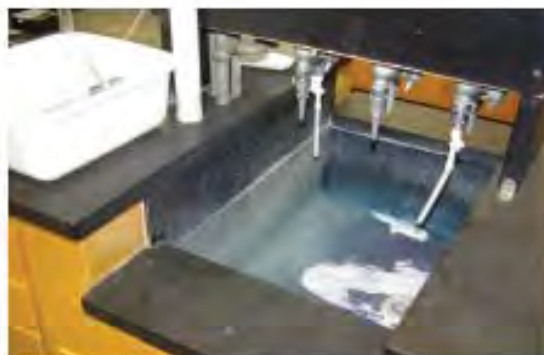
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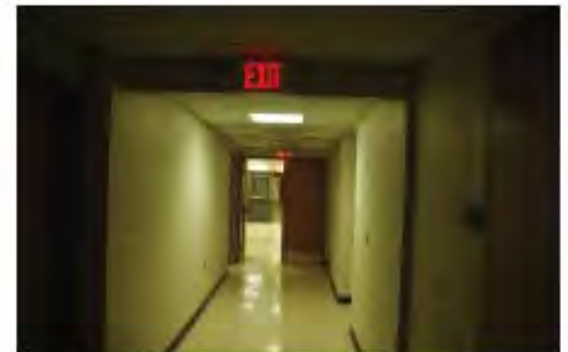
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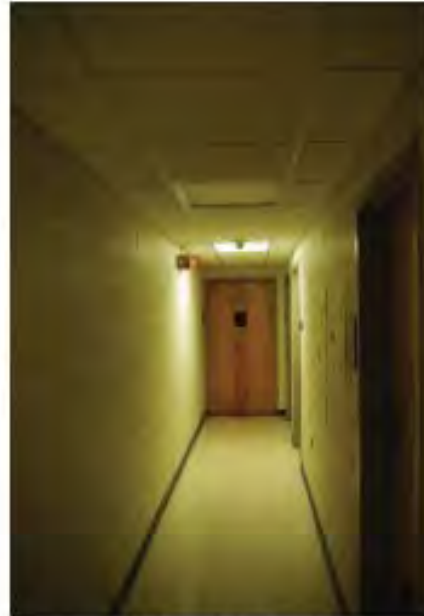
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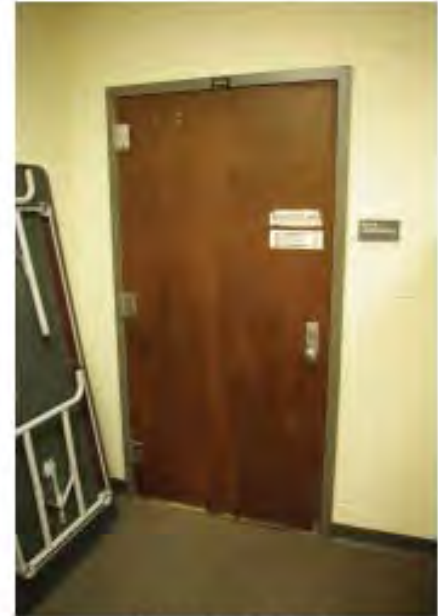
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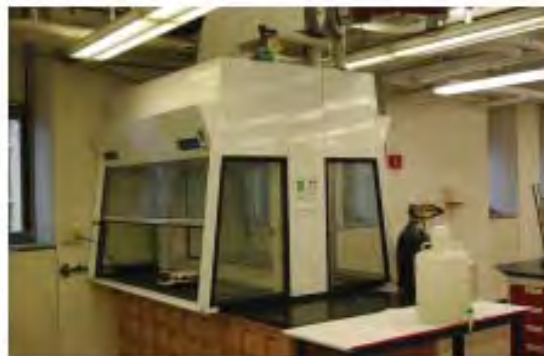
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UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

SERVICES

SERVICES

MECHANICAL / ELECTRICAL / PLUMBING SYSTEMS / CONVEYANCE

The facilities assessment looks at the Services aspect of the Chemistry Complex in a broad view. A comprehensive item by item analysis of the existing services was not what was intended to be performed. Each major component or system is described and a condition rating was assigned to it. It can generally be assumed that systems that are not mentioned, but are integral to the main components described here, would receive the same or a similar rating. We have identified the major shortcomings of the 45 year old systems and highlighted them in the main report.

CODE	RATING	ACTION REQUIRED	RATING DESCRIPTION
1	Good	No Renovation	Suitable for continued use with normal operational maintenance.
2	Satisfactory	Minimal Renovation	Minor deterioration. Requires minor repair or restoration to present acceptable conditions
3	Fair	Moderate Renovation	Moderate deterioration or partial obsolescence. Requires moderate restoration or updating.
4	Poor	Significant Renovation	Significant deterioration or obsolescence. Requires significant restoration, updating, or partial replacement of components.
5	Unsatisfactory	Major Renovation	Extensive deterioration or obsolescence. Requires extensive restoration, updating, and significant replacement of systems and components.
6	Replace	Complete Replacement	Is deteriorated beyond restoration, completely obsolete, or unsuitable for proposed use. Requires complete replacement of systems and components.
7	Abandonment	Demolition/ Removal	Not needed, not suitable for proposed use, should not be replaced. Demolition/removal required.

DANIELS BUILDING									
CODE	ITEM	ITEM #	DESCRIPTION	UNIT	QUANTITY	CONDITION	PHOTOS	RATING	
D	Services								
D10	Conveying								
D1010.10	Elevators								
	Freight Elevator	300X	In need of modernization			Poor		4	
	Passenger Elevator 1	300I	In need of modernization			Poor		4	
	Passenger Elevator 2	300I	In need of modernization			Poor		4	
D	Services								
D20	Plumbing								
D2010	Domestic Water Distribution		Piping and insulation			Satisfactory		2	
D2010.20	Domestic Water Equipment		Softeners, water heaters, circulation pumps			Satisfactory		2	
D2010.40	Domestic Water Piping		Piping and Insulation			Satisfactory		2	
D2010.60	Plumbing Fixtures					Satisfactory		2	
D2020	Sanitary Drainage		Cast iron piping			Satisfactory		2	
D2010.10	Sanitary Sewerage Equipment		Sump pumps			Satisfactory		2	
D2020.30	Sanitary Sewerage Piping		Cast iron piping			Satisfactory		2	
D2030	Building Support Plumbing Systems					Satisfactory		2	
D2030.10	Stormwater Drainage Equipment		Sump pumps			Satisfactory		2	
D2030.20	Stormwater Piping		Cast iron piping			Satisfactory		2	
D2060	Process Support Plumbing Systems		Compressed air, lab gases: house nitrogen, natural gas			Satisfactory		2	
D	Services								
D30	HVAC								
D3010	Facility Fuel Systems		N/A			N/A			
D3020	Heating Systems		heating hot water convertors and pumps			satisfactory		2	
D3020.10	Heat Generation		N/A			N/A			
D3020.70	Decentralized Heating Equipment		heat recovey system is curently not operating			abandonment		7	
D3030	Cooling Systems		chilled water pumps			satisfactory		2	
D3030.10	Central Cooling		N/A			N/A			
D3030.70	Decentralized Cooling		N/A			N/A			
D3050	Facility HVAC Distribution Systems		Ductwork distribution systems for associated air handling systems			conditional to satisfactory		3	
D3050.10	Facility Hydronic Distribution		heating hot water and chilled water			satisfactory			
D3050.30	Facility Steam Distribution		steam and condensate			satisfactory			
D3050.50	HVAC Air Disribution		Air Handling Systems						
		AC-1	Room B-371B			Poor		4	
		AC-2	Room 1351			Poor		4	
		AC-3	Room 1365			Poor		4	
		AC-4	Room 1365			Poor		4	
		F-1	9th floor mechanical room	CFM	68200	Poor		4	
		F-2	9th floor mechanical room	CFM	72200	Poor		4	
		F-3	In Sub-basement S345	CFM	97000	Poor		4	
		HV-1	In Sub-basement S345			Poor		4	
D3060	Ventilation		Existing exhaust booser fans located on roof of penthouse (exhaust fans are operating by the associated heat recovery system is not operating)			poor		4	
D3060	Ventilation		Exhaust fans on ninth floor mezzanine and exhaust fans on third floor (low roof) (low roof exhaust fans are operating by not in optimal location due to low roof next to tower)			satisfactory		2	
D3080	HVAC Instrumentation & Controls					satisfactory		2	

DANIELS BUILDING								
CODE	ITEM	ITEM #	DESCRIPTION	UNIT	QUANTITY	CONDITION	PHOTOS	RATING
D	Services							
D50	Electrical							
D5010	Facility Power Generation		Emergency generator	KVA	87.5	Poor		4
D5020	Electrical Service and Distribution							
D5020.10	Electrical Service		13.8 Primary service Switchgear	Amps	1200	Satisfactory		2
D5020.11	Electrical Service		480volt service Metering, substations, transformers	KVA	750	Good		1
D5020.12	Electrical Service		208/120volt service Metering, substations, transformers	KVA	2000	Good		1
D5020.30	Power Distribution		Switchboards, panelboards, bus assemblies, feeders installed in 1967			Poor		4
D5030	General Purpose Electrical Power		Branch wiring and devices: partial renovation in 2004			Fair		3
D5040	Lighting		partial renovation in 2004			Poor		4
D5080	Miscellaneous Electrical Systems		Lightning protection			Good		1
D5090	Electrical Instrumentation & Controls							
D70	Electronic Safety & Security							
D7050	Detection & Alarm		Fire alarm systems: major revovation 2004			Good		1
	Door Security		North Stair Tower - Electronic Latches			Satisfactory		2
			Floors B, 1, 2 Elevator Lobby - Electronic Latches			Poor		5
G40	Electrical Site Improvements							
G4010	Site Electric Distribution Systems		Underground Ductbanks, Manholes, conductors	kv	13.8	Good		1
G4050	Site Lighting					Fair		3

MATHEWS BUILDING									
CODE	ITEM	ITEM #	DESCRIPTION	UNIT	QUANTITY	CONDITION	PHOTOS	RATING	
D	Services								
D10	Conveying								
D1010.10	Elevators								
	Freight Elevator	200H	In need of modernization			Poor		4	
D	Services								
D20	Plumbing								
D2010	Domestic Water Distribution		Piping and insulation			Satisfactory		2	
D2010.20	Domestic Water Equipment		Softeners, water heaters, circulation pumps			Satisfactory		2	
D2010.40	Domestic Water Piping		Piping and Insulation			Satisfactory		2	
D2010.60	Plumbing Fixtures					Satisfactory		2	
D2020	Sanitary Drainage		Cast iron piping			Satisfactory		2	
D2010.10	Sanitary Sewerage Equipment		Sump pumps			Satisfactory		2	
D2020.30	Sanitary Sewerage Piping		Cast iron piping			Satisfactory		2	
D2030	Building Support Plumbing Systems					Satisfactory		2	
D2030.10	Stormwater Drainage Equipment		Sump pumps			Satisfactory		2	
D2030.20	Stormwater Piping		Cast iron piping			Satisfactory		2	
D2060	Process Support Plumbing Systems		Compressed air, vacuum, lab gases			Satisfactory		2	
D	Services								
D30	HVAC								
D3010	Facility Fuel Systems		N/A			N/A			
D3020	Heating Systems		heating hot water convertors and pumps			satisfactory		2	
D3020.10	Heat Generation		N/A			N/A			
D3020.70	Decentralized Heating Equipment		N/A			N/A			
D3030	Cooling Systems		chilled water pumps			satisfactory		2	
D3030.10	Central Cooling		N/A			N/A			
D3030.70	Decentralized Cooling		N/A			N/A			
D3050	Facility HVAC Distribution Systems		Ductwork distribution systems for associated air handling systems						
			Dual Duct system			Poor		5	
D3050.10	Facility Hydronic Distribution		heating hot water and chilled water			satisfactory			
D3050.30	Facility Steam Distribution		steam and condensate			satisfactory			
D3050.50	HVAC Air Disribution		Air Handling Systems						
		SF-1	Located in Mathew's Sub-basement	CFM	69985			4	
		SF-2	Located in Mathew's Sub-basement	CFM	73795			4	
D3060	Ventilation	EF-1	Existing exhaust fans on seventh floor	CFM	51675	satisfactory		2	
D3080	HVAC Instrumentation & Controls					satisfactory		2	

MATHEWS BUILDING								
CODE	ITEM	ITEM #	DESCRIPTION	UNIT	QUANTITY	CONDITION	PHOTOS	RATING
D	Services							
D50	Electrical							
D5010	Facility Power Generation		the generator that provides emergency power is located in the Daniels building					
D5020	Electrical Service and Distribution							
D5020.10	Electrical Service		13.8 Primary service Switchgear	Amps	1200	Satisfactory		2
D5020.11	Electrical Service		480volt service Metering, substations, transformers	KVA	750	Good		1
D5020.12	Electrical Service		208/120volt service Metering, substations, transformers	KVA	400	Good		1
D5020.30	Power Distribution		Switchboards, panelboards, bus assemblies, feeders installed in 1964			Poor		4
D5030	General Purpose Electrical Power		Branch wiring and devices major renovation in 2004			Good		1
D5040	Lighting		major renovation in 2004			Good		1
D5080	Miscellaneous Electrical Systems		Lightning protection			Good		1
D5090	Electrical Instrumentation & Controls							
D70	Electronic Safety & Security							
D7050	Detection & Alarm		Fire alarm systems major revovation 2004			Good		1
G40	Electrical Site Improvements							
G4010	Site Electric Distribution Systems		Underground Ductbanks, Manholes, conductors	kv	13.8	Good		1
G4050	Site Lighting					Fair		3

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX B

MSC FEASIBILITY STUDY

MSC FEASIBILITY STUDY

EXECUTIVE SUMMARY

The design team was asked to study fitting the undergraduate program, or a portion thereof, into the existing Medical Science Center (MSC) located to the northwest of the current Chemistry facility. The challenge was to determine how a portion of the MSC complex may be transformed into teaching labs and other undergraduate support space. The study primarily focused on space in the C and E wings of the MSC that is currently primarily used as research space that may be relocated in the near future. The existing floor plates were originally used as hospital patient room wings, with a double loaded corridor and patient rooms on each side of the corridor.



MSC COMPLEX

The MSC was found to be unsuitable for use as undergraduate Chemistry teaching labs. The structure was designed to meet standards of the time, and existing drawings indicate the floor live loading was designed at 60lbs/sf for patient room areas. Current criteria for laboratory spaces are a minimum 100lbs/sf. Reinforcing would be required to accommodate corridor placement as well as a new rooftop penthouse. The floors would require nearly a complete gut and remodel, with the corridor shifting outboard to form a single loaded plan with long, rectangular labs on one side that are bisected by a dense row of columns. The orientation of the labs as well as existing column locations would create

a safety hazard by limiting visibility within the lab, a condition that is currently experienced in the Daniels building due to hood placement and bench top racks. The MSC would necessarily be less efficient than current Chemistry facilities, as the long corridors and relatively narrow floor plates make for less assignable square footage (ASF).

Operationally, using the MSC for undergraduate Chemistry would split the program between two sites, thus creating redundant operations and staff necessary for the proper function of undergraduate labs. The lack of house nitrogen is a big deficit in the MSC and would have to be accommodated, also duplicating an existing service. Further the Chemistry Department, while open to the idea of relieving compression on their existing facilities by looking off the immediate site, was not in favor of splitting off portions of the program due to the strength of community within the Department by being in close proximity on the same block.

Elevators in the MSC are inadequate to move large numbers of students between floors. The MSC currently lacks shaft space for accommodating supply, return and exhaust air, and would require new shafts or utilization of stairs that are not currently required by code.

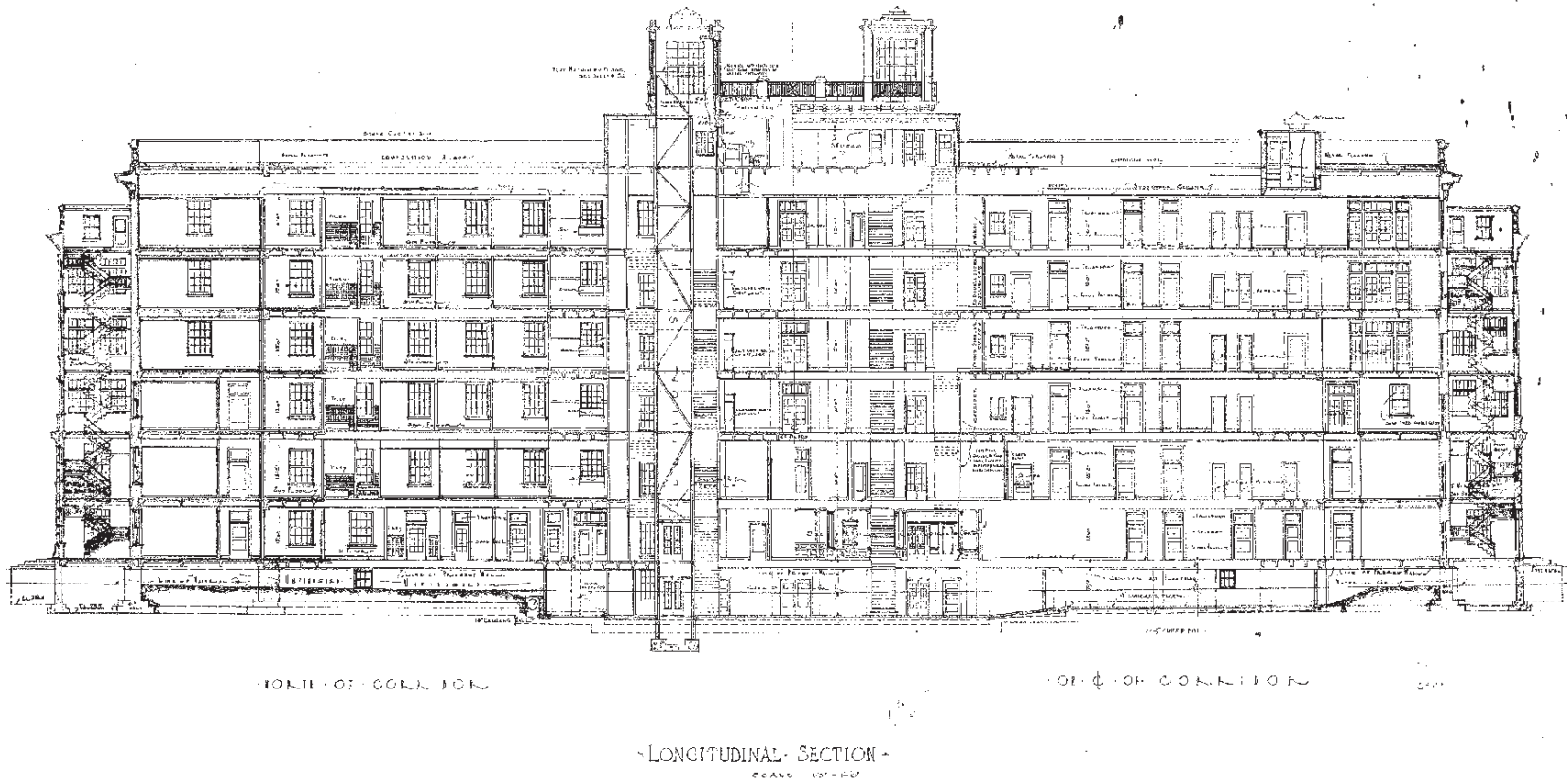
Finally, it was found that costs to remodel the MSC would approach 80-90% of replacement cost. With these factors in mind, the Core Project Team decided not to further pursue the MSC as an option for undergraduate Chemistry instructional space.

ASSESSMENT STRATEGY

- Determine location of receiving dock and capacity to serve undergraduate program.
- Assess the current state of the elevators serving the building and the ability to move 5000 or so students in and out of the building each semester.
- Test fit the proposed undergraduate space program.
- Analyze sample Lab layouts for functionality and safety.
- Analyze carrying capacity of existing structure and compare to modern laboratory code requirement standards, as well as the clear space allowed by the existing floor to floor height.
- Analyze existing mechanical infrastructure.
- Estimate construction cost of remodeling to acceptable level.

ORIGINAL LONGITUDINAL SECTION

We used drawings like these to understand the dimensions of the space we were working with. Our structural engineering consultant looked at original drawings and load calculations to understand the level to which the structure was designed



ANALYSIS

SITE ACCESS



ACCESS TO COURTYARD AND TANK STORAGE AREA

From a site analysis point of view, the MSC was limited by a number of factors. Currently, the issues that effect the day to day operations of the MSC complex aren't necessarily crippling. We knew however, that what we were proposing to do would bring an additional burden onto the various infrastructure in place serving the buildings.

Access to the tank storage area was limited to a clearance of 9'8", which is inadequate for the needs of a nitrogen delivery tanker. Currently there was no Nitrogen supply available at the MSC complex either.

The loading dock and receiving area were already functioning at maximum capacity, and without much room to expand into, there wasn't much opportunity to expand the area. Access to the Freight elevator from the receiving area was a very long and circuitous path with two ramps in the corridor to contend with.

The space we wished to utilize was on the East side of the facility. The entry at this side of the building is a single door that is not wheelchair accessible. Our best hope for bringing the 5,000 or so students through per semester would have been to add an addition to the building with new stairs and elevators more or less dedicated to the chemistry Department.

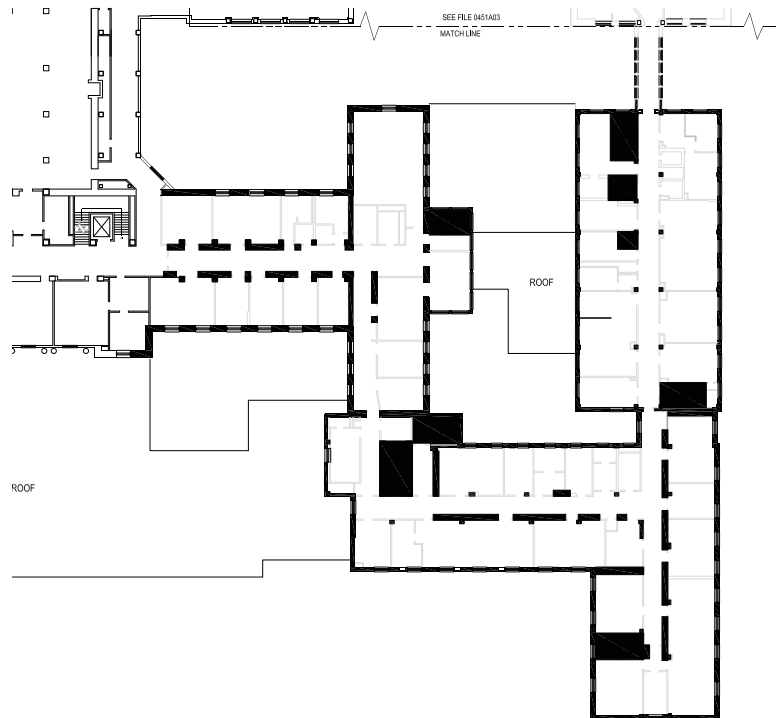
Some of the current elevators were in need of modernization with one currently out of service.



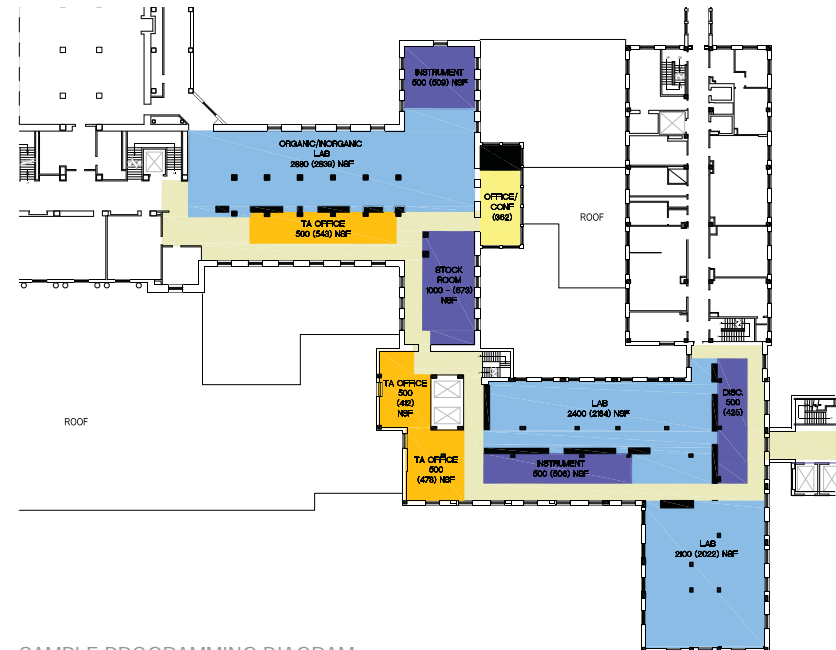
EAST BUILDING ENTRANCE

INTERIOR LAYOUT

Laying out adequate space for the Instructional Program posed many challenges. The square footages seemed ample on paper, but when looking at the serpentine arrangement of the building, you end up with disjointed spaces of varying sizes. The goal was to have each specific type of lab space (i.e. Organic Chemistry, General Chemistry, Analytical Chemistry etc) match its brethren. With the arrangement in MSC this would have required each of the Lab types to be separated on different floors to best utilize the open spaces available. In the Poche diagram below, you can also see the various physical impediments

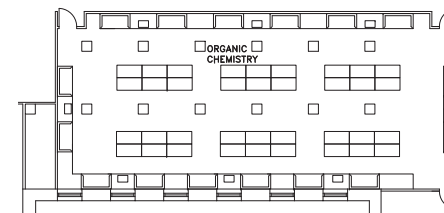


POCHE DIAGRAM



SAMPLE PROGRAMMING DIAGRAM

that the structure and ventilation shafts imposed on the plans. We were immediately concerned with the safety issues that a lab filled with thick columns presents. In the sample programming diagram above, we were able to prove that the spaces could be accommodated, but when the furniture and equipment was laid out, the functionality issues become obvious.

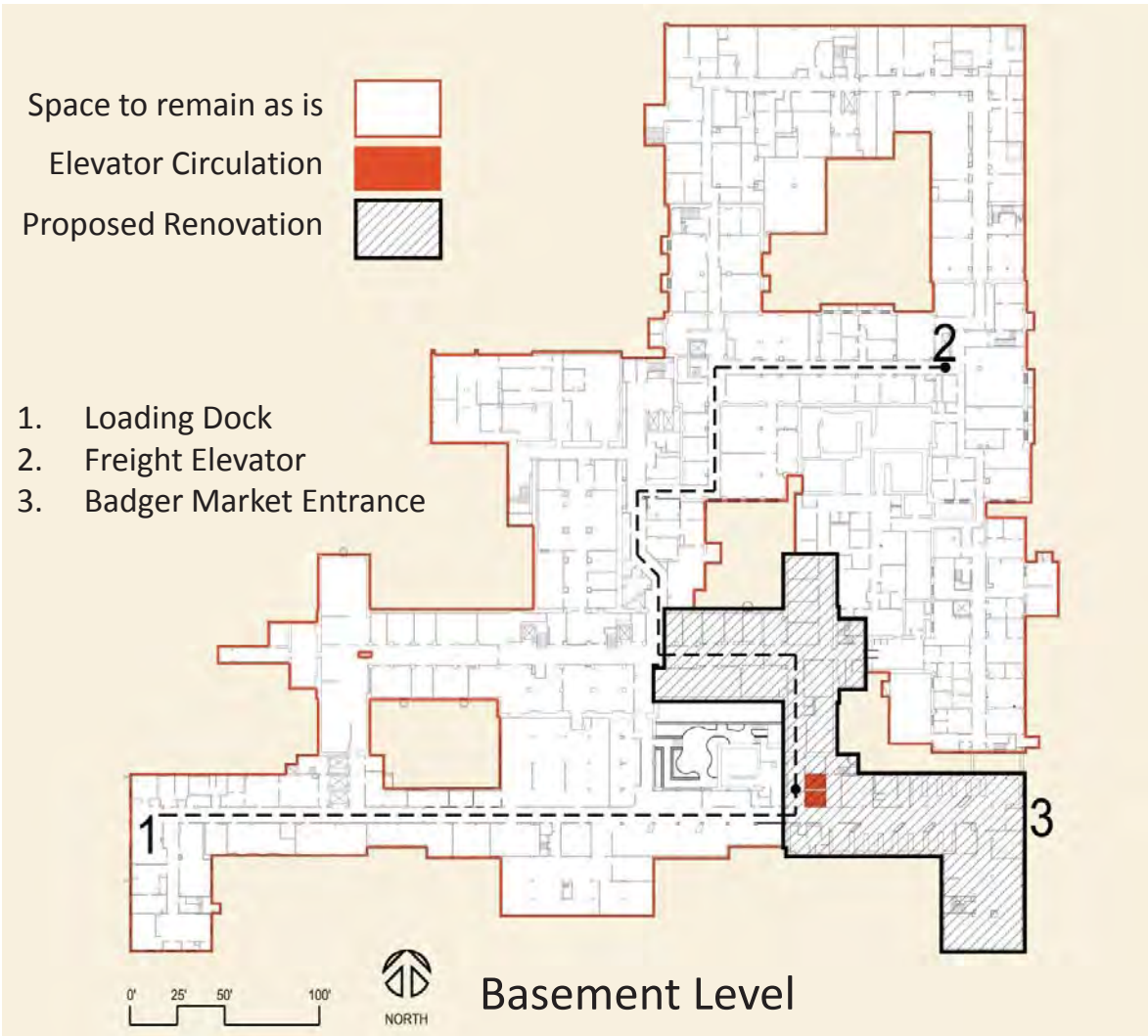


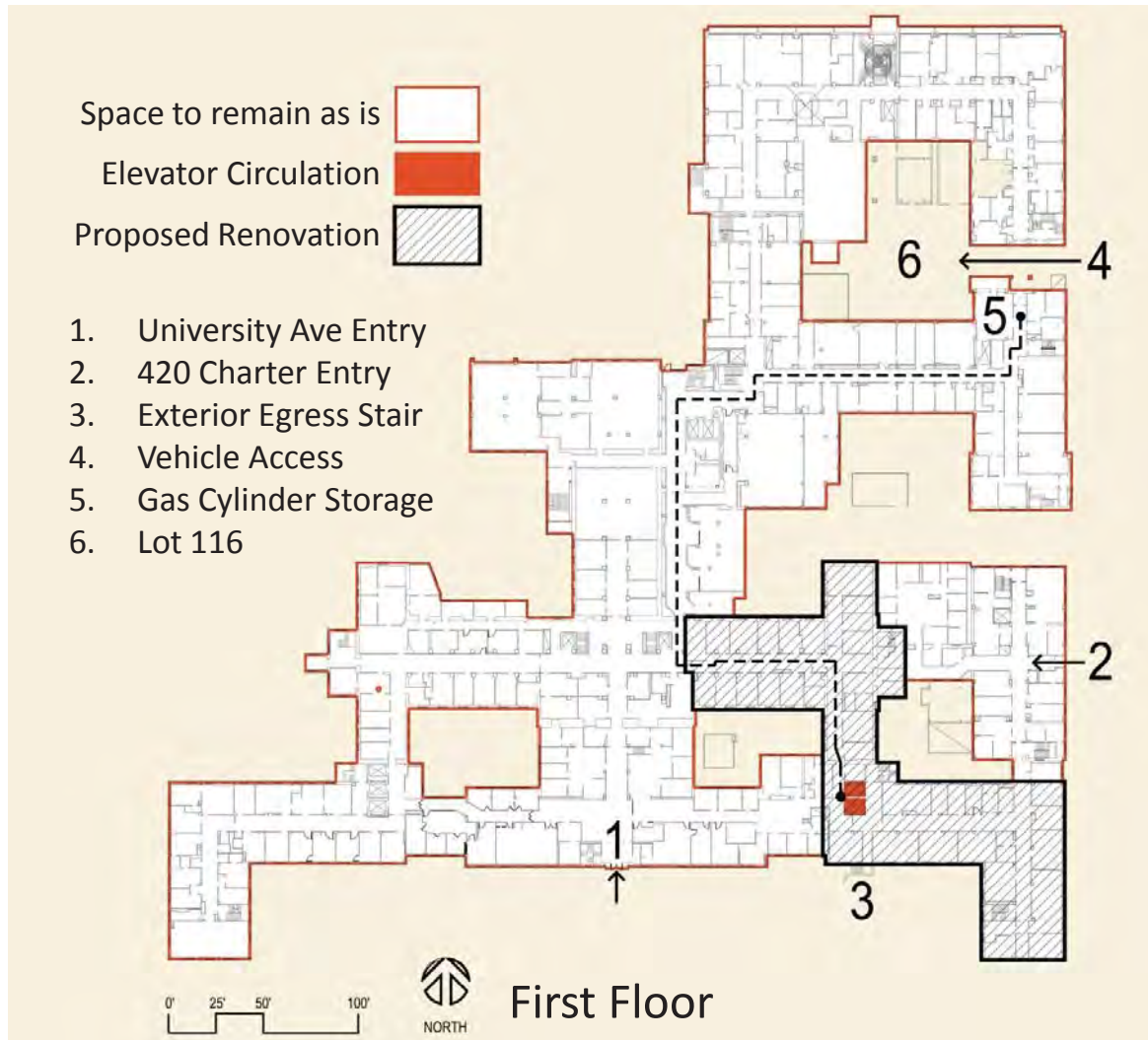
SAMPLE LAB LAYOUT

ADJACENCY DIAGRAM

This diagram shows the Basement level and the various connections that one would likely make. Access from the loading dock to the freight elevator is challenged by a long and circuitous route through corridors of various sizes with lots of intervening doors and tight turns.

The lower level entrance through the Badger Market is close to the core elevators that the chemistry program would most likely utilize, but it is not an accessible entry as it is below grade.





ADJACENCY DIAGRAM

The first floor diagram shows various connections and access points crucial to the chemistry program. Gas cylinder storage is an important consideration for the instructional laboratory space. This diagram indicates that the route from that space to the department is long and circuitous.

OPTION COMPARISON

ONSITE (MATHEWS/DANIELS ADDITION) VERSUS OFFSITE (MSC)

	MATHEWS/DANIELS	MSC
Structural system	<ul style="list-style-type: none"> • 100 psf live load design • Bay spacing adequate for remodeling 	<ul style="list-style-type: none"> • Loading: 60 psf live load vs. 100 psf current standard • Column/bay spacing inhibits good lab layout and visibility (safety issue) • Reinforcing likely needed to support new penthouses and at floors
Plan efficiency	<ul style="list-style-type: none"> • 69-70% 	<ul style="list-style-type: none"> • 56-58%
Accessibility	<ul style="list-style-type: none"> • Has accessible entries and routes • Some toilet room upgrades needed 	<ul style="list-style-type: none"> • Accessible entrances and routes inadequate • New accessible entry addition at Charter Street side at floors B and 1 • Completely new restrooms required
Vertical circulation	<ul style="list-style-type: none"> • Adequate 	<ul style="list-style-type: none"> • Located in poor positions • (2) Passenger Elevators obsolete • New entry core serving floors B-6

	MATHEWS/DANIELS	MSC
Interior conditions	<ul style="list-style-type: none"> • Many rooms and partitions can be re-used 	<ul style="list-style-type: none"> • Removal of partitions and exhaust shafts will be required for Chemistry instructional use • Complete gut and remodel
Operational and Material Handling	<ul style="list-style-type: none"> • Most efficient, least cost • Has house nitrogen • One operation 	<ul style="list-style-type: none"> • Duplication of materials handling and operational staff- additional cost • House Nitrogen service needed
HVAC	<ul style="list-style-type: none"> • Mathews/Daniels have a penthouse area that can be remodeled 	<ul style="list-style-type: none"> • New penthouse space needs to be created on roof above labs for supply • New shafts required for supply and exhaust • Existing shafts must be removed due to plan constraints

OPTION COMPARISON - CONT.

ONSITE (MATHEWS/DANIELS ADDITION) VERSUS OFFSITE (MSC)

	MATHEWS/DANIELS	MSC
Supply Air	<ul style="list-style-type: none"> • Main Air Handling Units – at end of useful life. • Air intake location issues – vehicle odors & dust associated with lower roof AHU intakes. 	<ul style="list-style-type: none"> • 96 mechanical AHU's in lab spaces - obsolete • New vertical shafts required
Exhaust Air	<ul style="list-style-type: none"> • Shaft locations ok • Ductwork material issue-plastics • Exhaust fan location issue – fans located on low roof. • Heat recovery unit on upper roof currently not functional or maintainable – obsolete. • Exhaust fans associated with heat recovery unit on upper roof difficult to maintain and operate 	<ul style="list-style-type: none"> • Recent exhaust fans installed • Exhaust shaft locations problematic for Chemistry lab layout • Individual fume hood exhaust fans on roof - obsolete

	MATHEWS/DANIELS	MSC
Plumbing	<ul style="list-style-type: none"> • Systems near end of life • Roof drainage cross connected to ground water drainage tile 	<ul style="list-style-type: none"> • Not assessed
Security / separation	<ul style="list-style-type: none"> • Single department user • Some areas secured, can be remodeled to enhance security 	<ul style="list-style-type: none"> • Multiple department users • Adjacent non-Chem research on multiple floors
Fire Protection	<ul style="list-style-type: none"> • No sprinkler system exists 	<ul style="list-style-type: none"> • No sprinkler system exists

STUDY SUMMARY

In reality, there are a lot of similarities between the MSC complex and the aging Chemistry buildings. When it comes to issues that seem to be equally concerning in either case, one must also consider the value of a consolidated program versus a divided one. Having one department duplicating services and staff in two facilities is a daunting possibility. This, in addition to the physical properties that weigh in favor of the existing Mathews/Daniels complex allow us to decide conclusively in favor of an addition on the existing chemistry block.

DECIDING FACTORS

MSC

MATHEWS/DANIELS

	MSC	MATHEWS/DANIELS
LAYOUT OF FLOOR	Two labs / floor (Partial program)	Three labs / floor with optimal adjacency (Full program)
PROGRAM FIT	Three labs are impeded and ill proportioned for teaching: >2:1 ratio	Layouts are column free and correctly proportioned for teaching
EFFICIENCY	56 & 58% per floor efficiency	69-70% per floor efficiency
TECHNICAL FACTORS	12' floor / floor 60 # / sf live load	12' floor / floor 100 # / SF live load
QUALITATIVE FACTORS	5' between windows tight layout of labs Circulation relocated and extended (320' lf / floor)	Ample daylight: East side Compact layout (170' lf / floor)
COST FACTOR	80 – 90% of replacement cost See assumptions and cost model	Replacement cost
QUESTIONS / OPEN ISSUES	Sufficient data assembled to make a recommendation (group concurred)	Need a master plan coupled with a building plan; E/W site looks most feasible
RECOMMENDATION	Not worth pursuing further	Worth testing with options for variable scope and cost

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APPENDIX C

SYSTEMS MATRIX

SYSTEMS MATRIX

INTRODUCTION

The systems Matrix is a tool used to convey the design team's assumptions about almost every aspect of the project. Architecturally speaking, you could call it a "light specification" because it gives a loose guideline on each major item considered in the design and construction of a project. It becomes especially useful if a new team picks up the design process down the road and can resume design with the same information used by the planning team, hopefully allowing for a quick start-up period.

BASIS OF DESIGN

Basis of Design (BOD) sets the expectations for the quality and scope of the work to be installed in the future project. Our systems matrix dovetails with Department of State Facilities project standards and the University of Wisconsin standards.

ORGANIZATION OF INFORMATION

The BOD information is organized using the Construction Specifications Institute's Masterformat 2004. The various categories of built work are organized using 50 divisions.

DIVISION 01 — GENERAL REQUIREMENTS

DIVISION 02 — EXISTING CONDITIONS

DIVISION 03 — CONCRETE

DIVISION 04 — MASONRY

DIVISION 05 — METALS

DIVISION 06 — WOOD, PLASTICS, AND COMPOSITES

DIVISION 07 — THERMAL AND MOISTURE PROTECTION

DIVISION 08 — OPENINGS

DIVISION 09 — FINISHES

DIVISION 10 — SPECIALTIES

DIVISION 11 — EQUIPMENT

DIVISION 12 — FURNISHINGS

DIVISION 13 — SPECIAL CONSTRUCTION

DIVISION 14 — CONVEYING EQUIPMENT

DIVISION 15 — RESERVED FOR FUTURE EXPANSION

DIVISION 16 — RESERVED FOR FUTURE EXPANSION

FACILITY SERVICES SUBGROUP:

DIVISION 20 — RESERVED FOR FUTURE EXPANSION

DIVISION 21 — FIRE SUPPRESSION

DIVISION 22 — PLUMBING

DIVISION 23 — HEATING VENTILATING AND AIR CONDITIONING

DIVISION 24 — RESERVED FOR FUTURE EXPANSION

DIVISION 25 — INTEGRATED AUTOMATION

DIVISION 26 — ELECTRICAL

DIVISION 27 — COMMUNICATIONS

DIVISION 28 — ELECTRONIC SAFETY AND SECURITY

DIVISION 29 — RESERVED FOR FUTURE EXPANSION

SITE AND INFRASTRUCTURE SUBGROUP:

DIVISION 30 — RESERVED FOR FUTURE EXPANSION

DIVISION 31 — EARTHWORK

DIVISION 32 — EXTERIOR IMPROVEMENTS

DIVISION 33 — UTILITIES

DIVISION 34 — TRANSPORTATION

DIVISION 35 — WATERWAYS AND MARINE CONSTRUCTION

DIVISION 36 — RESERVED FOR FUTURE EXPANSION

DIVISION 37 — RESERVED FOR FUTURE EXPANSION

DIVISION 38 — RESERVED FOR FUTURE EXPANSION

DIVISION 39 — RESERVED FOR FUTURE EXPANSION

PROCESS EQUIPMENT SUBGROUP:

DIVISION 40 — PROCESS INTEGRATION

DIVISION 41 — MATERIAL PROCESSING AND HANDLING EQUIPMENT

DIVISION 42 — PROCESS HEATING, COOLING, AND DRYING EQUIPMENT

DIVISION 43 — PROCESS GAS AND LIQUID HANDLING, PURIFICATION AND

STORAGE EQUIPMENT

DIVISION 44 — POLLUTION CONTROL EQUIPMENT

DIVISION 45 — INDUSTRY-SPECIFIC MANUFACTURING EQUIPMENT

DIVISION 46 — WATER AND WASTEWATER EQUIPMENT

DIVISION 47 — RESERVED FOR FUTURE EXPANSION

DIVISION 48 — ELECTRICAL POWER GENERATION

DIVISION 49 — RESERVED FOR FUTURE EXPANSION

SYSTEMS MATRIX

DIVISION 1 - GENERAL REQUIREMENTS

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
GENERAL - BASE PROJECT			
	University of Wisconsin, Madison:		
	All work to comply with University Design Criteria & Facility Standards except as approved by DSF.	The Chemistry Building New Tower will be an eight level structure with a penthouse and mechanical platform on the roof and one basement level below grade.	
		Chemistry Lab renovation in existing building floors D-Basement to D-2nd Floor. Refer to Facility Accessment Appendix A for existing conditions.	
	List applicable current codes:		Confirm dates of codes applicable at time of permit submission(s).
	Zoning:	City of Madison zoning code	
	Building Code	IBC 2009, IEBC 2009, IFC 2009	
	Electrical Code:	IEC 2009	
	Fuel Gas Code:	IFGC 2009	
	Mechanical Code:	IMC 2009	
	Plumbing Code:	WI Plumbing Code - Comm 81-87 2010	
	Fire Prevention Code:	WI Comm 14	
	Energy Conservation Code:	IECC 2009	
	References & Standards:		
	DSF Accessibility Guidelines		
	DSF Daylighting Standard		
	DSF BIM Guidelines and Standards		
	DSF CAD Standards		
	DSF Energy Guidelines		
	DSF Sustainable Facilities Guidelines		
	UW FP&M Construction & Design Guidelines		
	LEED NC Version 2.2		

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
DESCRIPTION OF PROJECT	Jurisdiction		
	Applicable Codes:	Wisconsin Commercial Building Code, Sept 2009	
	Occupancy Classifications	Group B, Educational above 12th grade	
	Construction Type	IB	
	Allowable Area	Unlimited	
	Allowable Height	12 stories, (height to match Shain tower)	
	Occupant Load Factors	see code analysis	
SHELL SPACE	Shell space definition: within areas designated on plans as "Shell Space"	Base project includes floors 7 & 8 of Addition as shell space.	
	1. General Construction:		
	a. No gypsum wallboard (GWB) on interior side of perimeter partitons, except as required for fire, smoke, and sound rated seperations. No GWB on inside face of exterior wall, include thermal insulation at exterior wall. Include interior window sills.		
	b. No floor finishes on concrete deck.		
	c. No interior partitions		
d. No finishes on perimeter partitions. GWB partitions			

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	e. No ceilings		
	f. Basis of design is CIP concrete structure. At locations where steel may be used, provide spray-on fireproofing to steel framing as required for fire ratings.		
	g. Doors into shelled space as shown on plans.		
	h. Floor penetrations framed and sealed.		
	2. HVAC:		
	a. Ductwork and pipes shall be furnished and installed in vertical shafts, sized for anticipated fit-out of all floors. Duct mains and pipes will be capped on the shell space side of shafts/perimeter partitions. No ductwork distribution within shell space.		
	b. All MEP central plant equipment shall be provided and sized for anticipated full fit-out of all floors. Lab AHU's and lab exhaust fans shall be included in the base bid.		See Target Value Budget for MEP equipment assumptions
	c. Provide unit heaters in shelled space		
	3. Plumbing:		
	a. No plumbing piping within shell space, except for plumbing piping as required to serve fitted-out floors above and below. Risers will be furnished and installed, sized for anticipated fit-out of all floors, capped on shell space side of shafts/risers.		
	4. Fire Protection:		
	a. Sprinkler system as required to meet applicable codes.		
	5. Lighting:		
	a. Industrial-type strip fluorescent fixtures will be provided in shell spaces. The space shall be designated to an illumination level of 5-10 footcandles, in order to minimize the cost of installation and operation.		
b. Emergency lighting shall be designated to provide 1 footcandle of illumination, in compliance with code minimum requirements.			

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	6. Electrical power systems:		
	a. The main busway systems which serve the "shell" floors shall be complete, and run through the shell floor electrical closets.		
	b. 480/277 volt electrical panel(s) will be provided on each floor to supply electrical power for lighting, and equipment requiring power (heaters, etc).		
	c. In the event that 208/120 volt power is needed to serve equipment on a floor, the minimum required transformer will be provided to serve a 208/120 volt panel on the floor.		
	7. Fire Alarm:		
	a. Fire alarm equipment will be specified to conform with the minimum code requirements for a fully sprinklered building. This shall include: Fire alarm initiation devices; Flow and tamper switches for sprinkler systems; Fire alarm notification devices.		
	8. Security Systems:		
	a. Access control equipment shall be specified to ensure that unauthorized persons do not have free access to the shell spaces.		
PHASING			See page 78 in the Executive Summary for Multi-phase implementation plan

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
SCHEDULE			See page 84 of the Executive Summary for the detailed project phasing schedule
PHASED OCCUPANCY	Provide MEP systems design to support full fit-out, see shell space definition. Base Project construction budget will not include fit-out costs for shell space.		
OFF-SITE WORK	Utilities: TBD. In general the project site extends to be outside face of curb. Project construction activity is anticipated to disturb adjacent streets.	Restore adjacent streets to existing condition.	
FUTURE IMPROVEMENTS/ PRE-INVESTMENT	The addition of modern, efficient mechanical equipment built as part of the new addition allow for backfeeding and replacement of problematic and disfunctional mechanical systems in Mathews and Daniels and allow flexibility in future renovations of the mechanical systems untouched by the base project.		
LEED TARGET RATING	Goal for LEED Certification: LEED Gold - Use 2012 DSF Sustainability Checklist with LEED 2009 rating system incorporated.	See Sustainability Appendix - G	
COMMISSIONING AUTHORITY			DSF/LEED EA Prerequisite 1: See Sustainable Facilities Checklist page G5
CONSTRUCTION WASTE MANAGEMENT			DSF/LEED MR Cr. 2: See Sustainable Facilities Checklist page G6
			It is critical that the waste hauler be familiar with recycling mixed materials and committed to keeping all documentation including tracking tickets to avoid points being forfeited.

DIVISION 2 - SITEWORK

DEMOLITION & SITE CLEARING	Building demolition:		
	Hazardous materials:		
EXCAVATION	Mitigation of soil contamination, etc. if required, by Owner		DSF/LEED M&R Cr. 2: Retain excavated material for UW project or supply to other local construction sites or staging locations
			DSF/LEED M&R Cr. 2: Eliminate excavated material sent to landfill sites
LANDSCAPE	Streetscape design standards: In accordance with University of Wisconsin Facilities Planning and Management and the City of Madison approval processes.		
			DSF/LEED SS Cr 6.1: See Sustainable Facilities Checklist page G3
			DSF/LEED SS Cr 6.2: See Sustainable Facilities Checklist page G3
HARDSCAPE	Pavers at entries and walkways		DSF/LEED SS Cr 7.1: See Sustainable Facilities Checklist page G3
ROADWAYS / PARKING			
SERVICE & RECEIVING			
SITE LIGHTING	Site lighting at walkways, 0.5 fc min at all footpaths		DSF/LEED SS Cr 8.0: See Sustainable Facilities Checklist page G3
	Building lighting at entries:		
	Coordinate possibilities for reducing light pollution with campus security lighting requirements		
SITE FURNISHINGS			

DIVISION 3 - CONCRETE

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	Concrete Mix: Include appropriate recycled content to achieve the goals for the Materials Resource points.		DSF/LEED M&R Cr 4: Use fly ash and reprocessed concrete aggregate. - See Sustainable Facilities Checklist Appendix - G
GEOTECHNICAL		Foundations system: Based on previous soil borings and geotechnical reports for adjacent buildings, a foundation system of conventional spread footings can be used to support the building.	
VIBRATION		CIP concrete foundation walls with waterproofing.	See structural Systems narrative in Executive Summary
	Seismic Resistance : Seismic Category B	Sheet waterproof membrane, butyl or modified bitumen on below-grade walls.	
	Vibration design criteria :The floor vibration characteristics can be designed to limit the vibratory accelerations due to walking and is capable of meeting the VC-A criterion recommended in the laboratory velocity of 2,000 micro-inch per second.	Wall drainage, connected to underslab drainage system.	
		CIP concrete superstructure columns, girders, beams.	
NEW CHEMISTRY TOWER	Design Floor Loadings:	Floor framing system: structural concrete frame system. Proposed system is a one way concrete joist and beam system supported by concrete columns.	At the fourth and ground floor, six columns need to be transferred to create open areas for three lecture halls, three columns at the fourth floor and three columns at the ground floor. Proposed transfer beams will be 72" wide and 96" deep and reinforced with rebar and post-tensioning cables.
	Superimposed dead load = 30psf	Typical bay spacing of 21'-0" by 31'-6"	
	Live Load = 150 psf		
	Design Roof Loadings:	Lateral resistance wind loading: Shear walls	The proposed lateral bracing system is to utilize the concrete beams and columns as a frame. This system allows for openness and future flexibility proposed in the architectural plan.
	Superimposed dead load =	Penthouse Roof Structure: structural steel framing	
	Live Load = 30psf plus snow drifting	Floor-to-floor height: Preliminary Pending design:	
	Live Load = 30psf	Floors 4-10: 16'-0" @ 7 floors = 112'-0"	This includes penthouse levels.
		2nd Floor: 20'-0"	
	Ground Floor: 12'-0"		

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
		Total Height Above Grade: 144'-0"	(from Ground Street datum)
			Refer to Facilities Assessment for more information of existing conditions.
		Lower Level: 25'-0"	
		Total Height Below Grade: 25'-0"	
EXISTING BUILDING	Refer to Facility Assessment for structural framing of existing structural framing system.		

DIVISION 4 - MASONRY

EXTERIOR		Base Design: Precast concrete panels with cast-in key-back ceramic tile in modular brick pattern, backed by metal stud framing, thermal insulation, GWB interior finish.	
		For existing building exterior masonry information refer to Facilities Assessment.	
		Exterior masonry walls to have continuous air and vapor barrier system.	
		Exterior soffits: Precast Concrete	
INTERIOR		Ground Floor public circulation areas: Terrazzo	
		Interior partitions in mechanical rooms, storage areas, trash holding, to be concrete masonry units, floor to underside of floor above. Insulated cores at partitions between heated and un-heated areas.	
		CMU partitions to be painted with acrylic epoxy paint over block filler.	
		For existing building interior masonry information refer to Facilities Assessment.	

DIVISION 5 - METALS

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
WINDOWS	Window condition of existing building refer to facilities assessment.	Windows sills shall be metal to match the window frames.	
STAIRS		Egress stairs: Stairs shall be concrete cast-in-place with steel nosing.	
		Ornamental Stairs: Steel / Concrete - self supporting	

DIVISION 6 - WOOD AND PLASTICS

	Countertops in restrooms and wet areas shall be solid surface material.	Toilet room vanities:TBD. All adhesives must comply with VOC limits set forth in South Coast Air Quality Management District (SCAQMD) Rule#1168	
	Architectural Millwork, core material, and substrate under plastic laminate or melamine to be FSC-certified and formaldehyde-free; budget permitting.	Typical wood species: TBD	
		Millwork: AWI premium grade, flush overlay design. Brushed aluminum finish hardware.	
		Wall Mounted Panels in Lecture Halls	

DIVISION 7 - MOISTURE PROTECTION

ROOFING	Roof design must comply with DSF/UW FP&M requirements	Fully adhered, white EPDM roofing system	
	Provide davits for window washing equipment..	Miscellaneous roof items include walkway pads, curbs, stainless steel counterflashings and roof access hatches.	
		Traffic pads: 2'-0" x 2'-0" precast concrete pavers at roof equipment access walkways. Rooftop equipment set on a curb, pad or stand.	
WATERPROOFING		07100 Below grade foundation walls: Sheet waterproofing membrane, butyl or modified bitumen on below-grade walls.	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
		Below grade horizontal water-proofing system: Fully Adhered, Fiberglass reinforced single membrane waterproofing system with heat welded seams.	
		Metal-oxide waterproofing at interior surfaces or elevator pits.	
		07800 Cementitious spray-on-fire resistive material: TBD based on structural system.	
		07800 Through-penetration firestop systems: TBD	

DIVISION 8 - DOORS AND WINDOWS

EXTERIOR GLASS & GLAZING	08800-Low-e, insulated, high performance glazing systems are required. The Design Standards for this specialty is being developed. The LSG (Ratio of Visible light transmission to Solar Heat Gain Coefficient) shall be 1.9 or higher, maximizing visible transmittance of light but minimize solar heat gain to interior spaces in order to reduce required cooling loads.	008800 Low-E1" insulating glass units, clear, complying with ASTM E774 Class CBA, with framing mfrs standard glazing method. Tempered glass where safety glazing is required.	DSF/LEED EA Cr 1: Optimize Energy Performance. DSF/LEED IEQ Cr 8.1 & 8.2: Daylighting of spaces - see Sustainable Facilities Checklist Appendix - G
		Window sills and window frames: See Div. 5 Metals	
		Window units and entrances: Aluminum, Thermally Broken, Insulated Glazing Units with Low-E Glass	
		Existing Window sills and frames in General Chemistry Labs: TBD	Refer to Facilities Accessment for existing window sills and frames.
		Main entrance doors: Aluminum Doors inset in Aluminum Glazing system with insulated glazing units to match window units	
		Automatic door openers at north building entry	
		Window trim and shading devices: TBD	
INTERIOR GLASS & GLAZING		08800 Interior glass 1/4" clear, tempered safety glass, 1/4" wired glass where required by code. Fire rated glass where required by code.	
		Interior glazing: Pending design	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
		Laminate clear glass at glazing or door lites at secured areas.	
		Write-up Space glazing: Min 3/8" Tempered Where required	
		Ground Floor Classroom Movable Glass Walls	
DOORS	NAAM Standard HMMA 861	08100 Metal doors & Frames: Typical door frames painted hollow metal, 16ga interior, 14ga exterior, welded units. Doors: Interior 18ga face sheets, exterior insulated w 16ga face sheets.	
		Welded HM door frames typical, fire rated where required	
		Doors at mechanical and electrical rooms, exterior egress stair doors, cylinder storage, service rooms, plumbing chases, janitor closets, and access doors to shafts to be painted hollow metal in HM frames.	
	NFPA 80, 252 ASTM E- 152, AWI 1300	08200 Wood doors: 1-3/4" thick premium grade solid core wood, maple veneer, plain sliced, factory stained with minimum two coats of shop-applied polyurethane finish. Upper vision lites at labs typical.	
		For painted wood doors, solid birch is acceptable, primed and painted in the shop	
		Tempered glass at all areas requiring safety glazing. Clear fully tempered float glass in non-fire rated doors.	
		All fire rated doors shall be metal.	
		Doors at service rooms, corridors to have kickplate	Kickplates on egress side of all wood doors
		Sidelights integral with door frames at offices, Labs, conference rooms, public and shared spaces (lounges, etc.)	
		Fire stair doors shall include vision panels.	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
		Typical borrowed lights: Painted hollow metal frames with 1/4" clear glass. Fire rated clear ceramic glass at fire rated partitions.	
		Service access doors to be painted hollow metal and painted hollow metal frames.	
HARDWARE 08700	UW FP&M Technical Guidelines	Mortise Locksets: Must be able to be rehanded in field without removing cover; must meet ada requirements; escutcheon trim.	
		Hardware Finish: Standard: US26D (626) or US10 (612); US632D (630) for high moisture areas.	
	Provide all locksets with lever per ADA	Locksets and Keying: Keying my UW FPM, installation by contractor	
		Panic exit devices: at assembly floors and where required by code	
		Standard security hinges and latch guards (where appropriate) on all exterior doors.	
	Entry door hardware shall be self-closing	Aluminum doors to have continuous hinges	
	Provide one barrier-free entry at the front door with an assistive door opener per ADA.	Low-energy door operators, LCN 4041, at entrance doors and locations required by ADA.	
		Access control to be campus standard:- - Contractor shall purchase and install all card readers and/or rough-ins for future card readers.	
	Access control devices on interior doors per UW	Card Readers: TBD	

DIVISION 9 - FINISHES

CEILING	UW FP&M Technical Guidelines	Typical Labs: TBD	
		Some labs will have sealed concrete floors and no suspended ceilings or grids.	Refer to Facilities Assessment for information on existing floor systems information.
		Ceiling height at labs in New Tower: Per Structural / Mechanical Systems	
		Ceiling height at labs in Existing Building: Per Structural / Mechanical Systems	
		Write-up Space: ACT	
		Lab support area: ACT	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS	
		Equipment Rooms: TBD		
		Instrument Areas: TBD		
		Ground Floor Entrance: GWB/Acoustic Plank		
		Ground Floor Lobby: GWB/Acoustic Plank		
		Ground Floor Circulation Areas: ACT		
		Circulation Areas in Existing Building:	Refer to Facilities Accessment for informaton on existing ceiling conditions.	
		Basement Lobby and Circulation Area: ACT/GWB		
		Circulation Areas in New Addition Lab Floors: ACT		
		Offices: ACT		
		Lecture Halls: ACT / Acoustic Panels		
		Teaching Labs: No Ceiling		
		General Classrooms: ACT		
		09510 Acoustical Panel Ceiling General Requirements:		
		Suspension System Requirements: Standard Neutral Color		
		Acoustic Ceiling Panels: 2x2, humidity resistant		
FLOORING				
		Toilet Rooms: porcelain ceramic tile		
		Elevator Lobbies: terazzo		
		Lab Floors: VCT		
		Lab Floors in Existing Building: VCT	Refer to Facilities Accessment for existing floor system.	
		Circulation Areas: sheet vinyl	terazzo on public floors	
		Circulation Areas in Existing Building: Sheet vinyl	Refer to Facilities Accessment for existing floor system.	
		Ground Floor Lobby	terazzo on public floors	
		Basement Lobby and Circulation Area:	terazzo on public floors	
		Write-up Space	VCT	
		09680 Carpet: Carpet shall be CRI Green Label Plus Certified. Carpet shall be No/low-VOC and comply with SCAQMD Rule#1168 (VOC Limits).	09680 Carpet:	classrooms
		Carpet shall be PVC-free. Recycled PVC is acceptable .		
	Mechanical Room Floors	sealed concrete		

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
PARTITIONS		Interior Partitions: typical 5/8" gypsum wallboard 09200 on metal studs, 16 ga. 16"o.c., as follows:	
		Between offices: to structure above with sound insulation.	
		Between offices and corridors: to structure above with sound insulation.	
		Between labs and corridors: to structure above with sound insulation.	Conditions differ between existing Daniels Building and North Addition.
		Between classrooms:	
		Between classrooms and corridors:	
		Between Lecture Halls and Circulation Areas	
		Toilet rooms: perimeter partitions to structure above with sound insulation, STC 45. Internal partitions to 6" above ceiling. Partitions with ceramic tile finish to be moisture resistant BWB minimum 20 ga. Studs.	
		Electric closets, communication closets: to structure above. Shared partitions to have foil faced wallboard on one side for shielding of telephone closet. All partitions shall have a layer of fire-resistant plywood, painted white, 8'high.	
		Mechanical/electrical equipment rooms (typical): Sealed concrete floor, rubber base, painted CMU walls to 8'-0", no ceiling (exposed construction).	
		Electric transformer rooms: to structure above, 1 hr. rated, or as required by code	
		Basement Service Areas: 8" cmu walls	
		Storage Rooms: VCT tile floor. Approved products are: TBD. Rubber base, painted walls, 2x2 suspended acoustic ceiling (tegular tile/grid).	

DIVISION 10 - SPECIALTIES

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
		Lockers in Chem labs:	
		Building Entrance: building entrance permanent floor mat system: TBD	Replace Walk-off mat at existing building entrances
		Projection Screen: Recessed in ceiling; Operated by low voltage motor; Washable surface; Flame and mildew resistance. Mfr: TBD.	
		Audio/Visual: TBD	
		Tackboards: TBD	
		Chalkboards in Lecture Halls:	
		White boards in Write-Up Space:	
		White boards in Gen Chem lab:	Refer to Facilities Assessment for the existing wall condition at Daniels exterior wall.
		Toilet Partitions & Urinal Screens:	
		Toilet Room Accessories:	
		Full width mirrors. Air dryers, soap, paper towel, and toilet paper dispensers, sanitary napkin disposal receptacle and dispenser per UW FP&M standards. All toilet accessories and trim finish: TBD	
		Paper towel dispenser and soap dispenser to be touch-free.	
		Stainless steel grab bars, 18 gauge minimum; Satin Stainless Steel. Mfr: TBD.	Existing bathrooms to be updated to meet new code requirements
		Louver Assemblies: TBD	
	Portable fire extinguishers: TBD		
	Wall and corner guards: Corner guards at high traffic areas.		

DIVISION 11 - EQUIPMENT

LAB CASEWORK	Wet/dry lab ratio: pending design	Lab casework: pending design, assume 50% fixed, 50% mobile/adaptable with overhead utilities.	
	Formaldehyde-free and FSC-certified products are preferred for lab casework, budget permitting.	Lab Casework Base Design:	Adaptable - Can be modified without demolition for different uses on a long term basis.
			Mobile - can be moved easily to a new location

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	All casework must comply with VOC limits set by South Coast Air Quality Management District (SCAQMD) Rule # 1168	Overhead service carriers	
	Potential for FSC certified wood products. Flexible casework systems can be considered for research lab spaces.	Fixed wood casework (50%): Wood base cabinets, wall cases, floor cases, and closure assemblies. Base cabinets to have 80/20 mix of units with doors and adjustable shelves/units with drawers. Wall cases with glazed hinged doors and adjustable shelves. All units to have flush overlay doors and drawers per American Woodworking Institute standards. Stained polyurethane finish. Drawer interiors to be melamine laminate. Hardware: Stainless steel concealed hinges, "wire" pull handles. All doors and drawers to have keyed locks. Mfr:	DSF/ LEED E&A 1.0; IEQ 4.2 Metal casework: Use recycled steel with low VOC paint finish. DSF / LEED IEQ 4.2; IEQ 4.4 Wood Casework: Use urea-formaldehyde free substrate. Wood veneer and solid stock to be from regional certified sustainably managed sources. Low VOC finish. - See Sustainable Facilities Checklist Appendix G
	Provide storage room dedicated to storing spare components.		
		Laboratory worksurfaces:	
		Stainless steel worksurfaces where required, ASTM A666 Type 316 or Epoxy Resin	
		Sinks:	
		Sink equipment:	
		Flammable/solvent storage cabinets (fume hood base cabinets):	
		Corrosive storage cabinets:	
		Closure assemblies as required above or below freestanding tables or island benches to enclose utility services from floor to ceiling.	
		Reagent Shelving	
		Specialty gases in cylinders. Gas cylinder restraint devices as required at labs, lab support rooms, tissue culture rooms, and gas cylinder storage room. Wall and bench mounted types.	
		Laboratory service fittings:	
	Plumbing fixtures at bench tops to be:		

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
HOODS	ANSI Z358.1, ADA.	Laboratory emergency plumbing fixtures: Safety shower and water tempering system see Div.15 Plumbing. Emergency eyewash deck mounted 90 degree swivel type, automatic flow when moved to operating position, Water Saver Model EW805 or equivalent.	
	60 fpm average face velocity at 18" sash height opening	Chemical fume hoods:	
		General Chemistry Desktop Hood Units:	
		Desktop Fume Hoods:	
LAB EQUIPMENT	Each type and size of fume hood to be factory tested to meet ASHRAE 110-95		
	Lab equipment: Includes major fixed (built-in/hard-connected)- environmental rooms, chemical fume hood, biological safety cabinets. Excludes moveable equipment.		
FOOD SERVICE EQUIPMENT	TBD	Café at Ground Floor Lobby:	
LOADING DOCK			Not in base project

DIVISION 12 - FURNISHINGS

SIGNAGE	Comply with ADA, ADAAG, UW Requirements.	Interior Signage:	Replace Interior Signage on Levels: Basement, Level1 and 2
		Exterior Signage:	Replace Existing Exterior signage at entrances
WINDOW TREATMENT		Window Treatment:	
		Existing Windows at Gen Chem Lab	
		Curtain Wall System at North Addition	
		Ground Floor Lobby:	
		Fire extinguisher cabinets:	Replace non-compliant FECs

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
FURNITURE		Movable Furniture:	
		Write-up Space Seating	
		Write-up Space Tables	
		Ground Floor Lobby: Lobby chairs, tables, ect.	
		North Addition Basement Floor Lobby: Lobby chairs, tables, ect.	
		Classroom Seating	
		Classroom Tables	
		Conference Tables	
		Fixed Furniture:	
		Lecture Hall Seating	
		Lecture Hall Tables	
		Lecture Hall Demonstration Table	

DIVISION 13 - SPECIAL CONSTRUCTION

Not applicable at this design stage

DIVISION 14 - CONVEYING SYSTEMS

DIVISION 21 - FIRE SUPPRESSION SYSTEMS

FIRE PROTECTION	Division of Safety and Buildings Administration Code Comm 14, NFPA 24	8" water service to the building	
	NFPA 13	Wet sprinkler system w/ standpipes	
	NFPA 14	Sprinkler heads to be located in center of ceiling tiles.	
		Sprinkler heads to be activated by a fusible link, quick response, recessed type or protected by cover where heads are exposed type.	
	NFPA 20	1000 gpm fire pump	

DIVISION 22 - PLUMBING

SANITARY	Wisconsin Plumbing Code	Cast iron piping	
STORM	Wisconsin Plumbing Code	Cast iron piping	
		Provide foundation drain tile system and sub-slab drainage system.	
		Provide overflow drainage system. Provide clearwater waste system.	
DOMESTIC WATER	Wisconsin Plumbing Code	Type L hard copper pipe	
		UW spec on Valves	
		Triplex Booster Pumps	
		Reduced Pressure Backflow Preventer for Non-potable water system.	
		8" water service to the building	
DOMESTIC HOT WATER	Wisconsin Plumbing Code	Type L hard copper pipe	
		Water Softeners	
		UW spec on Valves	
		Duplex steam heat exchangers w/ storage	
TEMPERED WATER	ANSI Z358.1	Floor tempering valves	To eyewash and emergency showers
	DSF	Type L hard copper pipe	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	NFPA 54, Comm 40		
SPECIALTY GASES	CGA	Type L cleaned and capped hard copper pipe	Existing nitrogen system will be extended. All other specialty gases will be provided by users.
PURE WATER		ASTM Class III Type B Schedule 80 unpigmented polypropylene pipe and heat fusion fittings	PVDF piping with heat fusion fittings
RO/DI			Same as pure water
LABORATORY AIR	CGA	Type L cleaned and capped copper pipe and fittings Provide tank and desiccant dryer.	Existing laboratory compressed air system will be extended.
LABORATORY VACUUM			Point-of-use vacuum pumps by users.
LABORATORY WASTE	Wisconsin Plumbing Code	Interior acid dilution basin w/ remote monitoring Schedule 40 polypropylene piping w/ fusion joints Polypropylene mechanical joints at fixtures, fume hoods, etc. Note equipment discharge temperature cannot exceed 160 degrees F.	
EYEWASH & EMERGENCY SHOWER	ANSI Z358.1-2009	Safety shower and water tempering system by Div.22 Plumbing. Emergency eyewash deck mounted by Div.11 lab casework.	

DIVISION 23 - HVAC

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
DIV.23 - HVAC			
Chilled Water		(4) Chilled water pumps. (3) horizontal split case type with VFD's, each sized for 50% of total building load , 1 standby. (1) end suction pump,, with VFD, sized for building winter cooling load.	Chilled water served by Campus Chilled Water distribution.
PROCESS COOLING WATER		(3) Process cooling water pumps. End Suction Type with VFDs to serve process cooling loads, 1 standby	
		Process cooling water to be served from campus chilled water system via (2) plate and frame heat exchangers. Each heat exchanger to be sized for 100% of the process cooling load.	
		Process cooling water system to be backed-up by city water.	
STEAM		HPS steam from campus will be reduced in pressure to 12 psig for distribution to pre-heat coils, heating hot water heat exchangers, hot water heaters and for humidification. PRV's will be provided in a station, (1) sized for 1/3 of total building load and (1) sized for 2/3 of the total building load. Required safety valves will be provided on system.	
		HPS steam from campus will be reduced in pressure to 80 psig to serve the laboratory equipment. PRV's will be provided in a station, (1) sized for 1/3 of total building load and (1) sized for 2/3 of the total building load. Required safety valves will be provided on system.	
HEATING HOT WATER		(3) Hot water pumps. End suction type with VFDs, each sized for 50% of the total buidling heating load, 1 standby.	
		Heating hot water to be provided from steam to hot water converters.	
		Mechanical Spaces and stairwells to be heated by unit heaters and cabinet unit heaters.	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
<p><i>AIR HANDLING- LABORATORY FLOORS</i></p>	<p>Summer: 72 F +/- 2 F, 50% RH max</p>	<p>(3) air handling units with a combined discharge operating as a single system, variable volume, factory fabricated custom units. Double wall, outdoor air intake, 30/95% filtration, draw-through, face and bypass steam preheat coil, steam humidification, chilled water coil, VFDs on supply and return fans. Separate return fan. Office and non-laboratory spaces to be returned, laboratory spaces will not be returned.</p>	
	<p>Winter: 72 F +/- 2 F, 25% +/- 5%</p>	<p>Galvanized supply and return ductwork.</p>	
		<p>VAV system with hot water reheat, perimeter hot water radiation.</p>	
<p><i>BASEMENT AND GROUND FLOOR - AUDITORIUMS AND LIBRARY</i></p>	<p>Summer: 76 F +/- 2 F, 50% RH max</p>	<p>(3) individual return air handling units - each serving individual space. Variable volume, modular units. Double wall, outdoor air intake (from laboratory supply air system), 30/95% filtration, draw-through, hot water reheat coil, steam humidification, chilled water coil, VFDs on supply and return fans. Separate return fan.</p>	
	<p>Winter: 68 F +/- 2 F, 25% +/- 5%</p>	<p>Galvanized supply and return ductwork.</p>	
<p>COMBINED LABORATORY EXHAUST</p>		<p>(3) single width single inlet centrifugal fans with two associated heat recovery plenums. Variable speed drive for each fan/variable volume exhaust system. System will also have an outside air bypass to allow system to operate at minimum setpoint while maintaining required exhaust velocity.</p>	
		<p>Exhaust duct mains will be PVC coated galvanized steel.</p>	
		<p>Heat recovery units will contain 30% filters, heat recovery coils, and face and bypass dampers.</p>	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
STAIRWELL PRESSURIZATION		Provide (1) dedicated stairwell pressurization unit with associated steam heating coil for each stairwell in the building.	
		Entire pressurization system located within stair enclosure.	
ENERGY RECOVERY		Glycol run-around loop between supply and exhaust airflows.	
BAS		The Building Automation System (BAS) will integrate with the existing campus' Building Automation System or Direct Digital Control system.	

DIVISION 26 - ELECTRICAL

NORMAL POWER	Main service entry to be provided at utility main voltage of 13.8 kV.	Medium voltage service from two separate campus feeders shall be supplied to primary selective medium-voltage switchgear. Feeders shall be provided to serve one low-voltage substation which will serve electrical power throughout the new addition.	Switchgear must be rated for the available short circuit current.
	Unit substation shall consist of dry type transformer with drawout power circuit breaker main and group mounted molded case circuit breakers All breakers shall be provided with electronic trip units.	Provide a 1500/2000 kVA 80/150C AA/AA substations with VPI-type transformers to supply power for building mechanical loads, lighting, and power loads.	Substation shall be constructed in accordance with the requirements of UL 1558, and applicable NEMA standards for switchgear.
		The unit substations will contain digital customer metering and transient voltage surge suppression (TVSS).	
		Secondary distribution equipment shall consist of transformers (for derivation of 120/208V systems), motor control centers, lighting and receptacle panelboards	
		A complete grounding system shall be provided.	
		Motors larger than 1/2 HP - 480V, 3 phase, 3 wire	
		General Lighting - 277V, 1 phase, 3 wire	
		Lab Support Equipment - 120V, 1 phase, 3 wire	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
EMERGENCY POWER		Specialty Equipment - 208Y/120V, 3 phase, 4 wire	
		Receptacles, Motors smaller than 1/2 HP - 120V, 1 phase, 3 wire	
		Specialty Lighting - 120V, 1 phase, 3 wire	
		(1) 1000 kW, 480V standby diesel generator shall be provided to serve the emergency and standby loads for this system.	
		Fuel storage system capacity and configuration to be determined, minimum of 90 minutes is required per NEC for Article 700 loads.	Fuel run time shall be to be 8 hours, at 100% rated load.
	Life Safety per NEC Article 700.	Life safety loads (emergency egress lighting, fire alarm system, fire pump, partial elevators (emergency power to all elevators, selected to operate in smaller groups under generator power), etc.) shall be served from the generator system.	Loads shall be arranged such that all life-safety loads are engaged within 10 seconds, as required by code.
	Legally Required Standby Power per NEC Article 701.	Generator to stairwell pressurization fans, sump pumps.	
CENTRAL UPS SYSTEM	Optional Standby per NEC Article 702.	Optional standby loads partial exhaust and partial supply systems shall be served from the generator system.	
	None.	None.	
LIGHTING	LEED and ASHRAE 90.1 energy compliant.	Lighting Control System, occupancy sensors.	Lighting and light control strategies should pursue LEED IEQ Cr. 6.1 Controllability of Systems - Lighting and LEED IEQ 8.1 Daylight and Views - Daylight.
	Illumination Levels per IES and Labs 21	Labs: Direct/indirect at labs.	
	Daylighting to be investigated.	Offices: Direct/Indirect will be preferred in offices.	
		Classroom lighting shall have lighting and controls for three zones: general lighting, front row lighting, and board lighting.	
		Special accent lighting at high profile public areas, with the approval of GWU Project Management.	
	Lighting Fixtures	Fluorescent ballasts will be high-frequency electronic type with less than 10% total harmonic distortion.	

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
	Lamps	Lamps to be combination of T8, & T5. Compact fluorescent, ceramic metal halide and LED lighting will be used for accent lighting.	
		Lamps shall be energy-efficient, low-mercury, and 4100K color-temperature, in conformance with the University's requirements.	
		17W shall be T8, CRI 80-85, rated life 24k hours, 24", 2-pin	
		28W shall be T8, CRI 80-85, rated life 24k hours, 48", 2-pin	
		40W shall be T5 twin (Biax), CRI 80-85, rated life 24k hours, 22.5", 2G11 base.	
		13W shall be compact fluorescent, CRI 78-85, rated life 10k hours, 4-pin	
		26W shall be compact fluorescent, CRI 78-85, rated life 10k hours, 4pin.	
		LED exit signs.	
	Occupancy Sensors	Occupancy Sensors to be deployed to reduce lighting costs and to comply with the requirements of ASHRAE 90.1	
		Occupancy sensors to be dual-technology - body heat (PassiveInfraRed) motion (Ultrasonic),	
		Public Access to lighting control panels shall not be provided for public spaces.	
		Ceiling-mounted units to be supplied in large, high traffic areas (classrooms, etc.), wall-mounted switch units for small offices. All classrooms shall have a local override switch or switches for use by the instructor.	
		For classroom locations, provide a manual override switch on a wall accessible by the instructor.	

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS	
FIRE ALARM	The fire alarm system will comply with requirements of NFPA 72 for a protected premises signaling system.			
SECURITY	Audio/visual devices will be installed in all areas of the building in accordance with the NFPA and the ADA guidelines.	The fire alarm system will be a stand-alone, fully addressable system with Class B wiring.		
		The fire alarm system will be comprised of smoke detectors, heat detectors, duct detectors, manual pull stations, and audio/visual signaling devices.		
	Fire alarm control panels must be located in a room that is protected by a smoke detector	Fire alarm system shall be provide with relay outputs to the University Police Department. The UPD system will report alarm and trouble conditions to the main & remote supervisory locations.		
	A security system will be provided based on specific site requirements .	The security system will consist of card readers, door contacts, passive infrared motion detectors, dual technology motion detectors, power supply, and additional devices as required.		
		Equipment locations and specific access control schemes to be determined		
	All exterior doors should have door contact installed, including roof hatches			
	CENTRAL CLOCK SYSTEM	Central clock system not in project	None.	
	CENTRAL PAGING SYSTEM	None.	None.	

DIVISION 31 - EARTHWORK

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS
CHILLED WATER		45 degF chilled water will be supplied to the UW Chemistry building by UW Campus Distribution	
STEAM / CONDENSATE		High Pressure Steam will be supplied to the UW Chemistry building by UW Physical Plant	
SANITARY SEWER	To comply with City of Madison standards and specifications and plumbing code.	For bathrooms, kitchens, and other liquid waste materials.	
STORM SEWER	To comply with City of Madison standards and specifications and plumbing code.	For storm runoff drainage	

DIVISION 32 - EXTERIOR IMPROVEMENTS

DOMESTIC WATER	To comply with City of Madison standards and specifications and plumbing code. Size and location to be determined by the project.	For potable water use	
FIRE SERVICE	To comply with City of Madison and Madison Fire Department standards and specifications and plumbing code. Size and location to be determined by the project.	For fire sprinkler system	
NATURAL GAS			

DIVISION 33 - UTILITIES

SYSTEM	CRITERIA	BASIS OF DESIGN	OPTIONS/ REMARKS

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX D

SYSTEMS REPAIR MATRIX

SYSTEMS REPAIR



DANIELS MECHANICAL ROOM - 9TH FLOOR

EXECUTIVE SUMMARY

The main report presents a grand vision for a new building addition and elaborate renovations to the existing space. It also relies on the continued use of some rather old buildings. The Mathews Building was completed 1962 and the Daniels Building was completed in 1967. In order for these buildings to continue to complement the new addition, certain infrastructure and systems improvements must be made in the coming years. Some of the major issues are addressed in the “base project” presented in the report, however some rather significant ones are not. The purpose of this appendix is to identify issues currently effecting the existing buildings, and identify possible solutions.

This document does not indicate a particular sequence or priority for each project. Certain projects present opportunities to do other projects on the list in a more efficient manner, but they don't necessarily have to be done together if the funds can't be acquired. Unfortunately, the addition of these individual items to the base project adds increased financial burden that puts its cost out of range. Each project on the list is itemized in the Cost Estimate Appendix G so that they can be considered on an individual basis as Small Projects.

REPAIR IDENTIFICATION

Many people were instrumental in identifying the issues plaguing the existing chemistry buildings. An engineering kick-off meeting was held with many members of University Physical Plant, Department of State Facilities, and UW System to identify the known problems with The Chemistry Department's Buildings. Following that, members of the design team went on a walk-through with Building Manager, Kyle Roux. The rest of the items were identified by the inspection of the interior and exterior parts of the facility.

SYSTEMS REPAIR LIST

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		Jan 21st Meeting with DSF	
		Feb 7th Kyle Roux Walkthrough	
		Facility Assessment / Inspection	
DIV.1 - GENERAL			
DIV.2 - SITE UTILITIES			
DIV.2 - SITEWORK			
DIV.3 - CONCRETE			
STRUCTURAL	DANIELS	Repairs to Floor below RO/DI plant (9th Floor slab)	Phase 1 vacates the space in Daniels 9th floor, north end where new equipment is proposed to be located. AEI to verify which phase the new equipment is currently being provided/installed.
VIBRATION		See div.15 - AIR HANDLING	
DIV.4 - MASONRY			
EXTERIOR	MATHEWS/DANIELS	Precast needs cleaning / caulking	Clean Precast using DSF approved exterior cleaning methods and replace caulking in precast joints.
DIV.5 - METALS			
DIV.6 - WOOD & PLASTICS			
DIV.7 - MOISTURE PROTECTION			
ROOFING	MATHEWS/DANIELS	Roofing on Mathews and Daniels is EPDM rubber with 2" ballast or ribbed metal panel. EPDM roof is getting close to the end of its life. Felt slip sheet between ballast and roof membrane is disintegrating	Replace ballast roof on Mathews to match addition
DIV.8 - DOORS & WINDOWS			
EXTERIOR GLASS & GLAZING	MATHEWS	Existing windows and storm windows (uninsulated 1/4" glazing) has issues with condensation, drafts, and peeling films. Condensation causing headers to rust.	Replace existing windows with thermally broken glazing system and IGU's
	DANIELS	Daniels windows are currently 1/4" uninsulated. No significant issues now, but in the future when window units are removed, condensation problems will likely arise.	Replace existing windows with thermally broken glazing system and IGU's
DOORS	MATHEWS/DANIELS	Doors facility-wide are in poor condition, except for those replaced in 2000 renovation; Rated doors have asbestos cores.	Consider replacing original doors and hardware
HARDWARE 087000	MATHEWS/DANIELS	Door hardware throughout building no longer meets ADA standards for levers	See Doors

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		Jan 21st Meeting with DSF	
		Feb 7th Kyle Roux Walkthrough	
		Facility Assessment / Inspection	
ACCESS CONTROL	MATHEWS/DANIELS	Security in Mathew's (floors 3-6) and Daniel's (floors 3-9) is an ongoing problem.	Incorporate Access control into elevators to secure research floors. Install card readers and electronic hardware at new stair doors (floors 3-9) Daniels - (floors 3-6 Mathews)
DIV.9 - FINISHES			
FLOORING		Abatement on any stairs with flooring still containing asbestos, abatement of other flooring throughout the building that still contain asbestos	Survey scope of abatement work, remove asbestos tiles, replace with new VCT
DIV.10 - SPECIALTIES			
DIV.11 - EQUIPMENT			
LAB EQUIPMENT	MATHEWS	Autoclave on 5th floor creates a humidity issue. New autoclave being installed in Sub-basement. Consider moving to a more convenient location in phase of project	Add adequate exhaust system - reconfigure ceiling w/ bulkheads / relocate new Autoclave
LOADING DOCK	MATHEWS	Receiving area and loading dock have functionality issues - consider renovating receiving area and adding 3rd bay to dock	
DIV.12 - FURNISHINGS			
DIV.13 - SPECIAL CONSTRUCTION			
DIV.14 - CONVEYING SYSTEMS			
	DANIELS	Daniel's freight elevator needs modernization (currently on list for modernization)	scope to be evaluated
	DANIELS	Daniel's (2) passenger elevators need modernization (in 2020)	scope to be evaluated
	MATHEWS	Mathew's Freight elevator needs modernization (in 2020)	scope to be evaluated
DIV.22 - PLUMBING			
STORM	DANIELS	See Division 2 - Storm	
DOMESTIC WATER		Plumbing – Issue with MIC in domestic water system. System still has many dead legs. Filters have been added back since renovation in 2002.	Convert on an individual basis as needed
TEMPERED WATER		Existing Eyewash units are not connected to a tempered water system	Convert on an individual basis as needed

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		Jan 21st Meeting with DSF	
		Feb 7th Kyle Roux Walkthrough	
		Facility Assessment / Inspection	
SPECIALTY GASES		Kyle Roux asked that consideration be given to the liquid nitrogen filling station which is used every hour of every day. Basically what exists now is a hose bib. Venting is very minimal. In the event this function move on the block, there is opportunity for improvement.	
RO/DI		On the piping side, the Shain RO water system has 2 independent systems. Shain has 4 separate loops (to the various lab floors) that are not cross connected. When 1 goes down it can't be resupplied from another loop. - Need to cross connect system	
		In Matthews the RO and DI systems are combined, but is not cross connectable. If 1 side goes down they lose RO water. They just lost the external pump and the system is currently down.	
		Mike Broge asked about water quality differences. It was indicated that research water is polished to a higher level. Water on the instructional floors is unpolished. It was requested that the standard being utilized in the Shain tower be used for the existing buildings. It was also noted that the piping in the existing buildings is aluminum.	all new systems to match quality of Shain - polishing done at source
		RO/DI Plant has leaks in certain areas and is causing the degradation of the structure below, and leaking into the lab space below	See Concrete section above.
FIRE PROTECTION		The existing Matthews and Daniels buildings are not sprinklered and were not required to be upgraded as part of the previous project. Another renovation project would most likely trigger the requirement to make this improvement.	Add sprinklers to floors 3-6 of Mathews, 3-9 of Daniels - not necessarily a code requirement
Div.23 - HVAC			
CHILLED WATER	DANIELS	There are no bypass valves @ the Chilled Water Pumps	Install isolation valves and reconfigure CWS at the entrance in the main pump room S345 to provide bypass of CW pump. Second CWS entrance is located in the Shain Tower. Possible utility expansion shall be considered as part of the study.

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		<p>Jan 21st Meeting with DSF</p> <p>Feb 7th Kyle Roux Walkthrough</p> <p>Facility Assessment / Inspection</p>	
STEAM	MATHEWS	Addressing the pneumatically controlled hot deck steam heating coils serving each floor of the Matthews wing was requested. Coils are currently located at the shafts on each floor. Conversion of steam to hot water was mentioned as an option. The static pressure on the hot side is currently too high causing balancing issues. This is being reduced as part of the current energy project where air flow is being reduced. There are temperature control issues causing torn and ripped gaskets at the units. The current energy project looked at replacing these units. Dampers are currently being added on the hot side. It was requested that the project look at moving the coil to the basement.	Remove all distribution ductwork and associated coils. Replace with new VAV service with associated air handling revisions
AIR HANDLING			
AC 1, 2, & 4 - Auditorium AHUs	DANIELS	Replacement of AC units - 1, 2 and 4 was requested to be reviewed. If this area will be demolished or this function relocated to a new addition then these unit shall be demolished.	Being demolished as part of Phase 1
MEZZANINE		Insufficient isolation at equipment causing mechanical noise in spaces below mezzanine (some equipment on rubber feet in lieu of metal spring isolators)	Phase 3
AHU F1 AND F2	DANIELS	AHU's F1 and F2 (located in the 9th floor) were requested to be assessed for renovation/repair. These are original to the 1967 building. At a minimum, outside air dampers need to be replaced. Coils have previously been replaced on these units and it was requested that the team determine what items have been upgraded.	Being reworked as part of Phase 1 and 2 work.

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		Jan 21st Meeting with DSF	
		Feb 7th Kyle Roux Walkthrough	
		Facility Assessment / Inspection	
AHU F3	DANIELS	<p>The air intakes for the AHU's serving the instructional wing have high velocity intakes and are currently located on grade. Each fall they plug with leaves and are an ongoing maintenance issue. Relocating the grade level outside air intake for air handling unit F-3 is desired. Assessment of AHU's F-3 is requested. Replacement shall be considered or renovation of items, but not limited to:</p> <ul style="list-style-type: none"> a. steam coil replacement b. cooling coil replacement c. outside air damper replacement 	Being reworked as part of Phase 1 and 2 work.
AHU'S 21 AND S2	MATHEWS	<p>1. AHU's S1 and S2 are currently located in the Mathews basement and serve the hot/cold decks. The air intake for these units is located behind the liquid nitrogen tank at the loading dock. There has been some rework of the louver already as this area was inaccessible and unmaintainable. Air flow is being decreased as part of current project. Dan Motl indicated that they looked at converting the system and incorporating some return air from non lab areas. He indicated that they crunched the numbers and could not get the budget/energy saving ratio to work. The renovation needs for these units include but are not limited to:</p> <ul style="list-style-type: none"> a. outside air intake louver rework b. steam coil replacement c. heat reclaim coil replacement d. fan replacement e. coil drying system installation f. AHU housing renovation g. Assess door upgrade h. Outside air damper replacement i. Filter upgrades 	AHU's S1 and S2 should be replaced with VAV air handling units. As part of replacement, all associated distribution and controls shall be removed and replaced with a new VAV system. New AHU's should be placed on the roof of Mathews to alleviate outside air intake issues.

SYSTEM	BUILDING	ISSUE ORIGIN	ACTION
		<p>Jan 21st Meeting with DSF</p> <p>Feb 7th Kyle Roux Walkthrough</p> <p>Facility Assessment / Inspection</p>	
DUAL DUCT DAMPERS	MATHEWS	Replacement of hot deck dampers in dual duct terminals was also requested for review throughout the entire Mathews building.	Replace existing system with new VAV system as part of AHU ans system renovation
DUCTWORK		Black particles from Ductwork lining or coal particles continue to be an issue in the Mathews building. Ductwork cleaning is a possibility.	ductwork should be be opened up and spot checked.
		In Daniels, the plastic exterior ductwork was indicated as needing to be replaced. There are a number of spare ducts in those chases that serve the exhaust side. 25/50 flame/smoke spread was thought to be current code requirements, but should be investigated. These shafts were created and ductwork installed as part of the 1983 project that created the heat reclaim on the Daniels roof.	Remove and replace all plastic ductwork
DIV.26 - ELECTRICAL			
NORMAL POWER		Rick Cibulka indicated the Daniels building was originally served by the 41-60 system that was later converted to 13-8. No secondary equipment has been changed in the buildings. Only core and coils have been changed. 15KV equipment existed. Consider consolidating equipment in the basement.	Consolidate Electrical equipment
		Replacement of Daniels vertical buss duct with dedicated risers	requires shutdown on Floor by Floor Basis (Daniels floors 3-9)
EMERGENCY POWER		Is Daniels Emergency Generator undersized for future Emergency loads (elevators, exhaust, etc.)	
DIV.28 - ELECTRONIC SAFETY AND SECURITY			
SECURITY		Add card readers to elevators - does head end system have capacity for expansion? - see access control	
ACCESS CONTROL (REPEATED FROM DOORS)	MATHEWS/DANIELS	Security in Mathew's (floors 3-6) and Daniel's (floors 3-9) is an ongoing problem.	Incorporate Access control into elevators to secure research floors. Install card readers and electronic hardware at new stair doors (floors 3-9) Daniels - (floors 3-6 Mathews)



DANIELS EXTERIOR



MATHEWS EXTERIOR

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX E

CODE ANALYSIS

CODE ANALYSIS

INTRODUCTION

The design team engaged in a discovery of the major code considerations for the resulting recommended project. The following sheets list code considerations for the new and existing UW-Madison Chemistry buildings based on the numerical sequence of Wisconsin Commercial Code adopted in 2011. The following is excerpted from the executive summary:

BUILDING CLASSIFICATION

The new tower will be a separated building and could be classified minimally as a Type 1B structure under the International Building Code (IBC 2009), which would allow unlimited area and up to 12 stories of noncombustible construction. The new tower consists of six (6) occupied floors above grade plus an enclosed penthouse, with one floor below grade. The new tower would require a 3 hour fire wall at the interface with the remaining portions of the Daniels building following demolition of the north portion. The tower will be fully sprinklered, and quantities of hazardous and flammable materials typically used in Chemistry experiments are limited based on the floor (see chart on page E15), with higher floors having less allowable flammable and hazardous materials. The new tower will house space for Mechanical equipment that will serve the existing Daniels tower, and crossovers of supply, return and exhaust will have to navigate around the 3 hour fire wall which extends a short length beyond the roof and facades of the Daniels tower, and provide appropriately rated dampers where applicable. The new tower is considered a high-rise building and should interconnect to the fire department command center that is currently located in the Mathews building. The Fire Command Center was established in Mathews as part of an agreement reached with the Madison Fire Department as part of the 1998 project. At that time, the Fire Department indicated they would enter through the loading dock area to access the fire command center. The lower three floors of the new tower have floor openings between them, with rated glass proposed at the 2nd floor to provide adequate separation while maintaining visual connectivity.

BUILDING SEPARATION

The existing Mathews and Daniels (MD) buildings are interconnected and constitute a single building for this study. The Shain tower is completely separated by a fire wall from Mathews and is not considered in this analysis. The existing construction type of MD is best classified at 1B with protected moment frame steel columns and beams with concrete

floors. The building is not sprinklered currently, but standpipes and hose cabinets exist at each exit stair. It is understood that hoses were removed from the hose cabinets at some point, but the hose connections remain. The entire remodeling remains under 50% of the aggregate floor area of MD. The remodeling scope exceeds 50% on floors B, 1, and 2 and thus a sprinkler system is required to be installed on those floors entirely. The penthouse in Daniels is undergoing substantial demolition and remodeling, and depending on the A/E design sprinklering on the 9th floor/penthouse in Daniels may be required. Work on intermediate floors in Daniels is anticipated to be less than 10% of the areas of those floors at the north end interface with the new tower.

FLOOR OPENINGS

New openings in the floors between B, 1, and 2 in Daniels constitute small atria, and opening protectives and separations are required as appropriate to the condition. The use of rated glass is suggested for the openings to maintain the visual connections and to attenuate sound transfer.

EXIT STAIRS

Exit stairs for Mathews and Daniels will require the creation of rated exit enclosures to discharge at grade or exit horizontally through the new tower. The north Daniels exit stair will exit through the first floor via remodeled exit enclosure. The south Daniels exit stair will connect to discharge at grade via a rated remodeled vestibule on the basement level. The existing Mathews stairs will continue to function without alteration.

RESTROOMS

Restroom facilities in MD are not currently accessible. Restrooms would be completely remodeled on floors B, 1, and 2 to meet accessibility standards. Door hardware in MD does not meet accessibility standards and is recommended for replacement throughout the building. Existing elevator controls, signage and signal require evaluation for replacement to meet accessibility standards.

OCCUPANCY CALCULATIONS

FLOOR	ROOM	SQUARE FEET	OCCUPANT LOAD	ACTUAL LOAD	LOAD BY SQUARE FEET	FUNCTION OCCUPANCY
BASEMENT		22,621 SF			227	Business: 100 gross
	LARGE LECTURE HALL		350 Seats	350		Number of Seats
	MEDIUM LECTURE HALL		250 Seats	250		Number of Seats
	LOBBY	5,548 SF	class/lecture load	600		Actual
	MECHANICAL SPACE	4,241 SF		15		Accessory: 300 gross
	LANDING	473 SF		32		Assembly: 15 net
	WORK ROOM	946 SF		4		Accessory: 300 gross
	OFFICE	104 SF		2		Business:100 net
					1253	227
GROUND FLOOR		10,977 SF			110	Business: 100 gross
	SMALL LECTURE HALL		150 Seats	150		Number of Seats
	LOBBY	6,339 SF	class/lecture load	200		Actual
	CLASSROOM	1,225.5 SF	50 Seats	50		Number of Seats
					400	110
SECOND FLOOR		5,922 SF			60	Business: 100 gross
	LIBRARY	4,972 SF				
	STACK AREA	670 SF				
	READING AREA	4,302 SF		287		Assembly: 15 net
	COMPUTER ROOM	255 SF		17		Assembly: 15 net
	LIBRARY RESERVE	255 SF		3		Business: 100 net
	COPY ROOM	156 SF		2		Business: 100 net
	OFFICE	217 SF		3		Business: 100 net
					312	60

FLOOR	ROOM	SQUARE FEET	OCCUPANT LOAD	ACTUAL LOAD	LOAD BY SQUARE FEET	FUNCTION OCCUPANCY
FOURTH FLOOR		14,021 SF			141	(Business: 100 gross) Not including mech spaces, shafts, bathrooms, accessory & corridors.
	ORGANIC CHEMISTRY LAB A	2,974 SF	36 students & (2) TAs	38		Number of seats
	ORGANIC CHEMISTRY LAB B	2,845 SF	36 students & (2) TAs	38		Number of seats
	ORGANIC CHEMISTRY LAB C	2,962 SF	36 students & (2) TAs	38		Number of seats
	INSTRUMENT SPACE A/B	262 SF		0		Included in Lab count
	INSTRUMENT SPACE B/C	262 SF		0		Included in Lab count
	OFFICE A	257 SF		3		Business: 100 net
	OFFICE B	234 SF		3		Business: 100 net
	ORGANIC TA OFFICE	842 SF		9		Business: 100 net
	ORGANIC STOCKROOM	865 SF		3		Accessory: 300 gross
	CORRIDOR	2,909 SF		0		
				132	141	
FIFTH FLOOR		14,142 SF			142	(Business: 100 gross) Not including mech spaces, shafts, bathrooms, accessory & corridors.
	ORGANIC CHEMISTRY LAB A	2,974 SF	36 students & (2) TAs	38		number of seats
	ORGANIC CHEMISTRY LAB B	2,845 SF	36 students & (2) TAs	38		number of seats
	ORGANIC CHEMISTRY LAB C	2,962 SF	36 students & (2) TAs	38		number of seats
	INSTRUMENT SPACE A/B	262 SF		0		Included in Lab Count
	INSTRUMENT SPACE B/C	262 SF		0		Included in Lab Count
	OFFICE A	257 SF		3		Business: 100 net
	OFFICE B	234 SF		3		Business: 100 net
	ORGANIC TA OFFICE	464 SF		5		Business: 100 net
	WORK ROOM	210 SF		3		Business: 100 net
	ORGANIC DIRECTOR	206 SF		3		Business: 100 net
	ORGANIC STOCKROOM	865 SF		3		Accessory: 300 gross
	CORRIDOR	2,356 SF		0		
				134	142	

FLOOR	ROOM	SQUARE FEET	OCCUPANT LOAD	ACTUAL LOAD	LOAD BY SQUARE FEET	FUNCTION OCCUPANCY
SIXTH FLOOR		14,020 SF			141	(Business: 100 gross) Not including mech spaces, shafts, bathrooms, accessory & corridors.
	ANALYTICAL CHEMISTRY LAB A		36 students & (2) TA	38		number of seats
	ANALYTICAL CHEMISTRY LAB B		36 students & (2) TA	38		number of seats
	ANALYTICAL CHEMISTRY LAB C		18 students & (1) TA	19		number of seats
	INSTRUMENT SPACE A/B	262 SF		0		Included in Lab Count
	INSTRUMENT SPACE B/C	264 SF		0		Included in Lab Count
	PHYSICAL/ANALYTICAL TA	1,528 SF		16		Business: 100 net
	TA OFFICE	397 SF		4		Business: 100 net
	WORK ROOM	206 SF		3		Business: 100 net
	DIRECTOR OFFICE	185 SF		2		Business: 100 net
	STOCK ROOM	462 SF		2		Accessory: 300 gross
	ANALYTICAL STOCK ROOM	894 SF		3		Accessory: 300 gross
	OFFICE A	258 SF		3		Business: 100 net
	OFFICE B	234 SF		3		Business: 100 net
	CORRIDOR	2,910 SF				
				131	141	
SEVENTH FLOOR		14,135 SF			142	(Business: 100 gross) Not including mech spaces, shafts, bathrooms, accessory & corridors.
	PHYSICAL CHEMISTRY LAB A	2855 SF	36 students & (2) TAs	38		number of seats
	PHYSICAL CHEMISTRY LAB B		18 students & (1) TA	19		number of seats
	ADVANCED ANALYTICAL		18 students & (1) TA	19		number of seats
	INSTRUMENT AREA A/B	262 SF		0		Included in Lab Count
	INSTRUMENT SPACE B/C	262 SF		0		Included in Lab Count
	STUDENT PROJECT	2980 SF	36 students & (2) TAs	38		number of seats
	DIRECTOR OFFICE A	180 SF		2		Business: 100 net
	DIRECTOR OFFICE B	180 SF		2		Business: 100 net
	DIRECTOR OFFICE C	180 SF		2		Business: 100 net
	WORK ROOM	206 SF		3		Business: 100 net
	STUDY A	395 SF		4		Business: 100 net
	STUDY B	397 SF		4		Business: 100 net
	OFFICE A	259 SF		3		Business: 100 net

FLOOR	ROOM	SQUARE FEET	OCCUPANT LOAD	ACTUAL LOAD	LOAD BY SQUARE FEET	FUNCTION OCCUPANCY
	OFFICE B	233 SF		3		Business: 100 net
	INSTRUMENT SPACE C/D	229 SF		0		Included in Lab Count
	INSTRUMENT ROOM A	112 SF		0		Included in Lab Count
	INSTRUMENT ROOM B	112 SF		0		Included in Lab Count
	PHYSICAL STOCK ROOM	464 SF		2		Accessory: 300 gross
	CORRIDOR	2280 SF				
					139	142
EIGHTH FLOOR	Shell Space	17,980 SF			180	Business: 100 gross. Not including mech spaces, shafts, and accessory.
					180	
PENTHOUSE 1		17,980 SF			60	Mechanical: 300 gross
					60	
PENTHOUSE 2		17,980 SF			60	Mechanical: 300 gross
					60	

MATHEWS / DANIELS CODE ANALYSIS

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
OCCUPANCY CLASSIFICATIONS	IBC (304.1)	Educational occupancies above the 12th Grade - Group-B - Business	Quantity of hazardous materials and flammable liquids to be limited to avoid H occupancies.
CONSTRUCTION TYPE	IBC (Table 601)	Type IB (rated) - Noncombustible	
ALLOWABLE AREA		Construction Type IB allows unlimited area.	Actual area per program is 124,000 gross square feet.
ALLOWABLE HEIGHT	IBC (Table 503)	Construction Type IB allows 12 stories when the building is equipped with an Automatic Sprinkler System.	Match height of Shain Tower
	IBC (403.1)	Building is over 75' and thus classified at High Rise	Existing fire command center is in Mathews for Chemistry block.
CLASSIFICATION LEVEL	IEBC (Ch. 4)	Level 2 alteration <50% aggregate area of building	Remodeling B, 1, 2 and portions of floors above in Daniels
AUTOMATIC SPRINKLER SYSTEM	IEBC (704.2.1)	High rise building, work areas serving occupant load > 30 served from standpipe in <u>work area</u> . If work area exceeds 50% of floor area, entire floor to be sprinklered.	Supervised in accordance with NFPA72 Comm. 66.0704: may exclude protectional combustible sealed spaces not accessible. Floors B, 1, 2 to be fully sprinklered, possibly 9th mezzanine.
STANDPIPES	IEBC (704.3)	Standpipes are provided in the buildings.	Stairs have valve cabinets on each floor at Mathews and Daniels. Hoses have been removed.
MEANS OF EGRESS	IBC (1025)	Horizontal Exit and 1st floor exit passage.	Horizontal exit load from new tower into Daniels North;
	IBC (1004)	(Basement/Daniels North Exit)	Review occupant load to determine if egress width is available to accommodate additional occupants.
	IEBC (705/604)		
SHAFT ENCLOSURES	IEBC (703.2)	Existing interior vertical openings connecting two or more floors shall be enclosed with fire-resistant rated assemblies.	30 minute rating (exception 5) on floors B, 1, and 2 (3 floors max)
	IBC (707)		Shafts for air supply do not have dampers at floor. To be abandoned.
PANIC HARDWARE	IEBC (705.4.4)	Group A occupancies (lecture halls, classrooms, commons) with occupant load >100	If work area exceeds 50% of floor, entire floor shall comply.
OPENINGS IN CORRIDOR WALLS, CORRIDOR DOORS	IEBC (705.5.1)	Unless sprinklered, doors in corridors in work areas shall not have louvers.	Bathrooms offer possible locations.
OTHER CORRIDOR OPENINGS	IEBC (705.5.3)	Openings to be sealed with material consistent with corridor construction.	If work area >50%, entire floor must comply.

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
DEAD END CORRIDORS	IEBC (705.6)	35' more areas allowed by IBC for Group B Occupancy	
MEANS OF EGRESS LIGHTING	IEBC (705.7)	Per IBC in work area.	If work area >50%, entire floor must comply.
GUARDS	IEBC (705.10)	Per IBC, existing stairguards okay.	At openings in corridors 1, 2 Daniels
STRUCTURAL	IEBC (707.2)	New structural elements shall comply with IBC	
GRAVITY LOADS	IEBC (707.4)	Alteration shall not reduce the capacity of existing gravity load-carrying structural elements unless demonstrated able to carry per IBC.	
LATERAL LOADS	IEBC (707.5)	No steel members are anticipated to be altered.	Daniels is moment steel frame.
MECHANICAL	IEBC (709.1)	Reconfigured converted spaces in work area per IMC.	
	IEBC (709.3)	Local exhaust required for newly introduced items, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous containments.	
		Supply shafts in exterior wall do not have dampers at floors	
PLUMBING	IEBC (710)	If occupant load of story is increased more than 20%, fixtures to meet IPC based on increased occupant load.	

NEW CHEMISTRY TOWER CODE ANALYSIS

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
OCCUPANCY CLASSIFICATIONS	IBC (304.1)	Educational occupancies above the 12th Grade - Group-B - Business	Quantity of hazardous materials and flammable liquids to be limited to avoid H occupancies.
CONSTRUCTION TYPE	IBC (Table 601)	Type IB (rated) - Noncombustible	
ALLOWABLE AREA		Construction Type IB allows unlimited area.	Actual area per program is 124,000 gross square feet.
ALLOWABLE HEIGHT	IBC (Table 503)	Construction Type IB allows 12 stories when the building is equipped with an Automatic Sprinkler System.	Match height of Shain Tower
	IBC (403.1)	Building is over 75' and thus classified at High Rise	Existing fire command center is in Mathews for Chemistry block.
BUILDING ELEMENTS - FIRE RESISTIVE REQUIREMENTS	IBC (Table 601)	Building elements throughout are to be constructed of noncombustible fire-rated materials. For Type IB construction per Table 601 as shown in remarks.	Structural frame - 2-hour
			Bearing walls (Interior & Exterior) - 2-hour
			Nonbearing walls (interior) - 0-hour
			Nonbearing walls (exterior) - (see Table 602)
			Floor construction - 2-hour
			Roof construction - 1-hour
FIRE WALLS	IBC (706.4)	Ducts and air transfer openings shall not penetrate firewalls (>30" above Daniels Roof) Note: Exhaust shaft from B,1,2 Daniels through new tower.	3 hour firewall at Daniels.
	IBC (706.8)	Openings shall not exceed 156 SF. Width of openings shall not exceed 25% of wall length at any floor.	
SHAFT ENCLOSURES	IBC (708)	Shaft Enclosures - 2-hour	Open stair not a portion means of egress per 708.2.2
		Exit Stair Enclosures - 2-hour	
		Elevator Hoistway & Equipment Room - 2-hour	
ENCLOSURE OF ATRIUMS	IBC (404.5)	Atrium spaces shall be seperated from adjacent spaces by a 1-hour fire barrier wall.	Existing fire command center is in Mathews for Chemistry block. Smoke control system.
EXTERIOR WALL AND OPENINGS	IBC (Table 602)	Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Seperation Distance.	North: 0
			East: 0
			West: 1 hour
			South: See Fire wall (3 hour)
		IBC (Table 705.8)	Maximum Area of Exterior Wall Openings Protected
AREA SEPARATION WALLS	IBC (705.4)	3-hour Fire Wall Fire Resistance Rating	
INCIDENTAL USE AREAS	IBC (508.2.5)	Smoke barriers per 711 at mechanical rooms >400,000 btus/hr and rooms with fire pumps (if applicable)	

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS																								
FIRE AND SMOKE DAMPERS	IBC (716)	Required for duct penetrations of shafts, areas separation walls, and occupancy separations.	Not required in 1-hour fire rated barriers.																								
FIRE DOORS	IBC (Table 715.4)	Doors in 3-hour walls : 3-hour rated OR (2) 1 1/2 hour doors each side of wall (not for horizontal exit) Doors in 2-hour walls : 1 1/2-hour rated Doors in 1-hour shaft and exit enclosure walls : 1-hour rated Other 1-hour fire barriers: 3/4-hour rated																									
FIRE RESISTANT RATED GLAZING	IBC (715.2) IBC (715.4.7) IBC (715.5)	As part of a fire resistance Rated wall assembly or fire door	Type and size limitations																								
CONTROL AREAS	IBC (414.2)	One control area anticipated per floor; organic labs on lower floors.	Ref. "Allowable gallons or flammable liquids per control area by floor" table at end of sections.																								
OCCUPANT LOAD FACTORS	IBC (Table 1004.1.1)	<table border="1"> <thead> <tr> <th>Area</th> <th>Occupant Load Factor</th> </tr> </thead> <tbody> <tr> <td>Assembly (unconcentrated)</td> <td>15 net</td> </tr> <tr> <td>Business Area (Office or Lab)</td> <td>100 gross</td> </tr> <tr> <td>Accessory Storage</td> <td>300 gross</td> </tr> <tr> <td>Mechanical</td> <td>300 gross</td> </tr> </tbody> </table>	Area	Occupant Load Factor	Assembly (unconcentrated)	15 net	Business Area (Office or Lab)	100 gross	Accessory Storage	300 gross	Mechanical	300 gross															
Area	Occupant Load Factor																										
Assembly (unconcentrated)	15 net																										
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OCCUPANT LOAD FOR EGRESS CALCULATIONS	IBC (1004)	<table border="1"> <thead> <tr> <th>Floor: (North Addition)</th> <th>Design Occupant Load:</th> </tr> </thead> <tbody> <tr> <td>Basement Floor</td> <td>227</td> </tr> <tr> <td>Ground Floor</td> <td>110</td> </tr> <tr> <td>Second Floor</td> <td>60</td> </tr> <tr> <td>Fourth Floor</td> <td>141</td> </tr> <tr> <td>Fifth Floor</td> <td>142</td> </tr> <tr> <td>Sixth Floor</td> <td>141</td> </tr> <tr> <td>Seventh Floor</td> <td>142</td> </tr> <tr> <td>Eighth Floor</td> <td>180</td> </tr> <tr> <td>Penthouse 1</td> <td>60</td> </tr> <tr> <td>Penthouse 2</td> <td>60</td> </tr> <tr> <td>Total:</td> <td>1225</td> </tr> </tbody> </table>	Floor: (North Addition)	Design Occupant Load:	Basement Floor	227	Ground Floor	110	Second Floor	60	Fourth Floor	141	Fifth Floor	142	Sixth Floor	141	Seventh Floor	142	Eighth Floor	180	Penthouse 1	60	Penthouse 2	60	Total:	1225	*(by four square footage)
Floor: (North Addition)	Design Occupant Load:																										
Basement Floor	227																										
Ground Floor	110																										
Second Floor	60																										
Fourth Floor	141																										
Fifth Floor	142																										
Sixth Floor	141																										
Seventh Floor	142																										
Eighth Floor	180																										
Penthouse 1	60																										
Penthouse 2	60																										
Total:	1225																										

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
ARRANGEMENTS OF EXITS	IBC (1015.2.1)	Where two exits or exit access doorways are required, from any portion of the exit access, the exit doors or exit access doorways shall be placed a distance apart to not less than one-third (with sprinkler system) of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between exit doors or exit access doorways.	
EXITS - NUMBER AND CONTINUITY	IBC (1021)	<u>Occupancies/Floor</u> <u>Number of Exits</u> <u>Floors</u>	
		1-500 2	2, 4, 5, 6, 7
		501-1,000 3	1
		1,000 + 4	B
TRAVEL DISTANCE TO EXITS	IBC (Table 1016.1)	The maximum travel distance to an exit (exterior exit, enclosed stairway, or horizontal exit), 300 feet permitted with a sprinkler system.	
	IBC (404.9)	In other than the lowest level of the atrium, where the required means of egress is through the atrium space, the portion of exit access travel distance within the atrium shall not exceed 200 feet.	
INTERVENING ROOMS	IBC (1014.2)	Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where adjoining rooms are accessory to the area served; are not a high-hazard occupancy; and provide discernible path of egress travel to an exit.	
EXIT SIGNS	IBC (1011)	No point in exit access corridor shall be more than 100' from visible exit sign or listed distance, whichever is less.	Tactile exit sign at exit stairs also
EGRESS DOOR WIDTH FACTOR	IBC (Table 1005)	0.20 inches	
MINIMUM DOOR WIDTH	IBC (1008.1.1)	32" minimum clear width	36" recommended for wheelchair use
MAXIMUM DOOR WIDTH	IBC (1008.1.1)	48" maximum single door leaf	
DOOR SWING	IBC (1008.1.1)	Doors must swing in the direction of egress when serving 50 or more occupants, or serving hazardous areas.	
DOOR PANIC HARDWARE	IBC (1003.3.1.9)	Required for an occupancy with occupant load of 50 or more. (Group A)	Lecture Halls and commons, classrooms > 49 occupants
STAIR EGRESS WIDTH FACTOR	IBC (Table 1005)	Stairs (0.03 inches)	
STAIR ENCLOSURES	IBC (1022)	Stairs are required to be enclosed with 2-hour fire-resistive construction.	
STAIR WIDTH	IBC (1009.1)	44 inches width min.	But not less than calculated per 1005
	IBC (1009.63)	Enclosure under stairs (basement)	1 Hour fire resistance rating under stairs (enclosure)

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
STAIR TO ROOF	IBC (1009.13.1)	In buildings without an occupied roof, access to the roof shall be permitted to be a roof hatch or trap door not less than 16 square feet in area and having a minimum dimension of 2 feet.	
STAIR EXTENSION TO ROOF	IBC (1009.13)	In buildings four or more stories in height above grade, one stairway shall extend to the roof surface. In buildings without an occupied roof, access to the roof from the top story shall be permitted to be an alternating tread device.	
CORRIDOR AND HALLWAY WIDTH	IBC (1018.2)	44 inches minimum	Required to meet the minimum width based upon the calculated occupant load per 1005
	IBC (1018.2 Exception 2)	May be reduced to 36 inches if serving 50 or fewer occupants.	
DEAD ENDS	IBC (1018.4)	50 feet maximum if the corridor or hallway is required to have 2 exits based upon occupant load.	Dead-end length could be extended, based on 2.5 width.
CORRIDOR AND HALLWAY CONSTRUCTION	IBC (Table 1018.1)	Fire-rated construction of corridors is not required, based upon the installation of an automatic sprinkler system throughout.	
AUTOMATIC SPRINKLERS	IBC (903.2.11.4)	Required if occupant load of 30 is located 55' above level of fire vehicle access.	
STANDPIPES	IBC (905)	Class I standpipes allowed in buildings with sprinkler system.	
FIRE ALARM SYSTEM	IBC (907.2.2)	Manual fire alarm not required.	
SMOKE DETECTORS	IMC (606)	Required for automatic shutdown of HVAC systems delivering in excess of 2000 cfm, where a "return-air system" is used.	
	IBC (3003.2)	Required for elevator recall.	
	IBC (907.2.13)	High rise buildings. Automatic smoke detection, fire department communication system, and emergency voice alarm communication system.	
SMOKE CONTROL	IBC (Section, 909)	A smoke control system shall be installed in accordance with Section 909.	Atrium area
STANDBY POWER	IBC (404.7)	Equipment required to provide smoke control (in atrium) shall be connected to a standby power system in accordance with 909.11.	

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
	IBC (909.11) and ICC Electrical Code	Power systems. The smoke control system shall be supplied with two sources of power. Primary power shall be the normal building power systems. Secondary power shall be from an approved standby source complying with <i>ICC Electrical Code</i> . The standby power source and its transfer switches shall be in a separate room from the normal power transformers and switchgear and shall be enclosed in a room of not less than 1-hour fire-resistance-rated construction ventilated directly to and from the exterior. Power distribution from two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with <i>ICC Electrical Code</i> .	To be located in sub-basement of Daniels (IECC)
	IBC (3002.4)	Standby power is required in an elevator being used to accommodate an ambulance stretcher in buildings four or more stories in height.	Standby Power is required at fume hood exhaust.
ELEVATORS	IBC (3004)	Sprinklered buildings do not require Hoistway penetrating more than three stories to be vented.	
	IBC (3002.4)	Elevator car to accommodate ambulance stretcher in buildings four stories in height or more.	Standby Power is required.
	IBC (1003.2.13.1.1)	In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with Section 1003.2.13.3.	
PLUMBING FIXTURES	IBC 2902.1		
	IPC 419.2	Male:	
		<u>Water Closets:</u> 1 per 25 for 1st 50, then 1 per 50	
		<u>Urinals:</u> not more than 50%	
		<u>Lavs:</u> 1 per 40 for 1st 80, then 1 per 80	
		Female:	Assumptions:
		<u>Water Closets:</u> 1 per 25 for 1st 50, then 1 per 50	1) 50% of occupants are male and 50% are female.
		<u>Lavs:</u> 1 per 40 for 1st 80, then 1 per 80	
		Drinking Fountains: 1 per 100	
		Service Sink: 1 per building	
		<u>Floor:</u> (North Addition) <u>Estimated Occupant Load</u> <u>Number of fixtures per plans:</u>	
			Male Female
		Basement 653	9 8
	Ground Floor 200	4 3	
	Second Floor 60	3 2	
	Fourth Floor 141	4 3	
	Fifth Floor 142	4 3	

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
		Sixth Floor 141	4 3
		Seventh Floor 142	4 3
		Eight Floor 180	4 3
		Total: 1659	36 28
LABORATORY REQUIREMENTS	NFPA 45	Laboratory Unit Classifications per Tables 2-2(a) and 3-1(a):	A variance will be required to utilize NFPA for permitted quantities of flammable solvents in lieu of Table 3-D, IBC
		Quantity of Class I Liquids permitted per laboratory unit: Maximum Lab Unit Area: Separation for areas: Separation between lab units: <u>non-lab</u>	
		Laboratory Unit Classification: Class C	
		4 gal. per 100 square feet ,300 total permitted per lab unit Unlimited gallons Non-rated Non-rated	
		*Class C unit maximum permitted I, I & IIIA Liquids is 8 gal per 400 gal total per lab unit. Class 100 sf and	
		Laboratory Unit Classification: Class B	
		10 gal. per 100 square feet , 600 total permitted per lab unit 10,000 sf gallons 1-hour 1-hour	
		* Class B unit maximum permitted I, II & IIIA Liquids is 20 gal per 800 gal total per lab unit. Class 100 sf and	
			*Quantities and Class of liquids to be stored in unknown at this point.
	NFPA 45 (3-4.1)	Number of exits from lab work area: 2 required if over 1,000 square feet.	
	NFPA 45 (7-2.2.6)	Dispensing of Class I liquids from containers less than 5-gallon capacity: Within a fume hood or in separate inside storage room.	
	NFPA 45 (7-2.2.7)	Dispensing of Class I liquids from containers from 5-gallon capacity or more: Outside of building, or in a separate inside storage room per NFPA 30.	
	NFPA 45 (8-2.4)	<u>Compressed Gases:</u> Cylinders of all gases having Health Hazard Rating of 3 or 4, and cylinders of gases having a Health Hazard of 2 with no physiological warning properties shall be kept in a continuously ventilated hood or enclosure.	
NFPA 45 (TABLE 8-2)	<u>Maximum number of Gas Cylinders in Lab work area:</u> 6 cylinders of flammable gas or oxygen, 3 cylinders of liquefied flammable gas per 500 square feet, 3 cylinders of gases with Health Hazard Rating of 3 or 4 per 500 square feet.		
NFPA 45 (10, 1-5.2)	<u>Portable Fire Extinguishers:</u>	Stockrooms, lab, computer rooms, generator room.	
	Ordinary Hazard Occupancy: Minimum 2-A extinguisher with a max. of 1,500 square feet of floor area per unit of A.	Maximum travel distance of 75 feet to an extinguisher.	

CATEGORY	APPLICABLE CODE REFERENCE	DESCRIPTION	REMARKS
		<u>Emergency Power:</u>	
		Emergency power required for fume hood exhaust systems.	
FINISHES	IBC (803.1)	Interior wall and ceiling shall be classified in accordance with ASTM E 84 or UL 723	
	IBC (Table 803.9)	<u>Flame Spread Ratings (sprinklered building):</u> Group B	
		Rooms and enclosed spaces: Class C	
		Exit access corridors and other exitways: Class B	
		Vertical exits and exit passageways: Class B	Class C interior finish materials shall be permitted for wainscoting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base and fireblocked as required by Section 803.11.1
	IBC (404.8)	Atrium Interior Finish:	
		The interior finish of walls and ceilings of the atrium shall not be less than Class B with no reduction in Class for sprinkler protection.	

FLAMMABLE LIQUIDS

Allowable Gallons of Flammable Liquids per Control Area by Floor (IBC 2006 Edition)

Business Occupancy – Education Occupancies above the 12th Grade (Section 3.04)

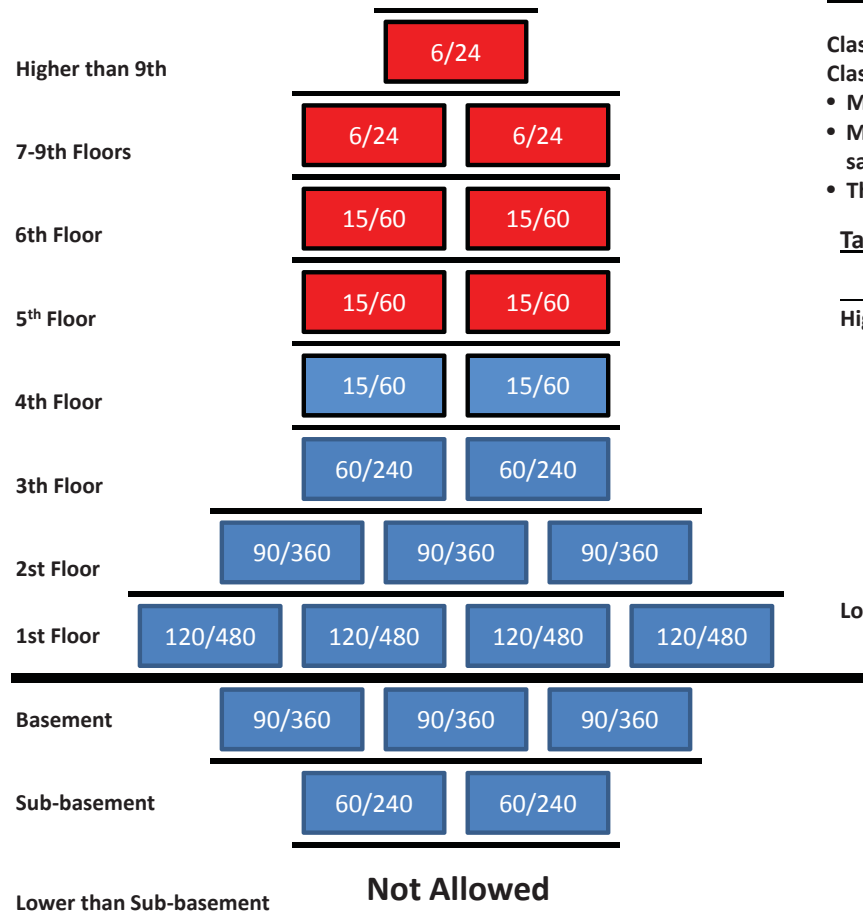


Table 307.1 (1) - Combination Flammable Liquids (Gallons)

	Storage	Use-Closed	Use-Open
Class A	30	30	10
Class A, B & C	120	120	30

- Max. quantities can be increased 100% if building fully sprinklered
- Max. quantities can be increased 100% when stored in approved safety cabinets or containers
- The above increases can be cumulative when both apply.

Table 414.2.2 (1) – Design and Number of Control Areas

	% of Max. Allowable per Control Area	No. of Control areas per Floor	Fire resistance rating for Fire Barrier in hours
Higher than 9	5	1	2
7-9	5	2	2
6	12.5	2	2
5	12.5	2	2
4	12.5	2	1
3	50	2	1
2	75	3	1
1	100	4	1
1	75	3	1
2	50	2	1
Lower than 2	Not Allowed		

LEGEND

-  2 Hour Fire-Resistance Rating for Fire Barriers
-  1 Hour Fire-Resistance Rating for Fire Barriers
-  Maximum Allowable Gallons of Flammable Liquids Per Control Area (In Use/Storage)

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX F

ROOM CRITERIA SHEETS

GENERAL CHEMISTRY - TEACHING LAB

AXONIMETRIC



TYPICAL GENERAL CHEMISTRY STUDENT STATION



SIMILAR LABORATORY IMAGE

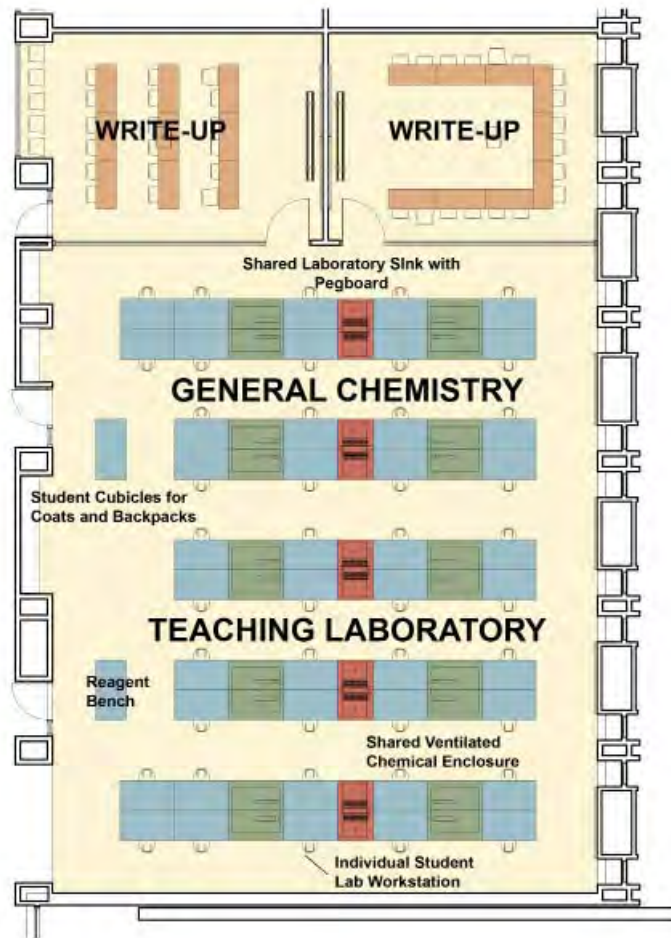


VIEW FROM WRITE-UP INTO TEACHING LABORATORY



GENERAL CHEMISTRY - TEACHING LAB

ROOM PLANNING DIAGRAM



TYPICAL GENERAL CHEMISTRY TEACHING LABORATORY 2400 ASF

ROOM DESIGN CRITERIA

Description:		Teaching Lab		Operating Hours	
Department:	General Chem.	Classes:	7:am- 10:pm		
Square Footage:	3600	HVAC:	7:am- 10:pm		
Number of Sections:	2 @ 22 students	Lighting:	7:00 am- 10:00pm		
No. of Students:	44	Equipment:	7:00 am- 10:00pm		
No. of TAs:	2				
Student Station Criteria			Architectural Finishes		
ASF per Student:	60	Floor:	sealed concrete		
Bench/Student:	30" x 60"	Base:	rubber base		
Lab Sink Ratio:	1 per 4 stations	Wall:	painted gwb		
Fume Hood Ratio:	2 per 4' Hood	Ceiling:	exposed		
Cup Sink:		Casework:	metal		
Outlets/Station:	120v Quad	Countertop:	epoxy		
Drawers/Station:	12 - lockable				
Lab Services		Specialties			
Compressed Air:	yes	Chalkboard:	no		
Nitrogen:		Markerboard:	yes		
Natural Gas:	yes	Projection Screen:	6'x 8'		
Lab Vacuum:	yes	Projector:	Ceiling Hung		
Other:		Demo Hood:	Yes		
Cylinder Gases		TA Station:	Yes		
Flammable:		Lockers:	(44) - 12"x12"		
Inert:		Other:			
Water		HVAC			
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min. - Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	1	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data		Chemical Storage			
120v:	yes	Solvent:	no		
208v:		Acids/Bases:	yes		
Data:	yes	Radiosotopes:	no		
Telephone:		Carcinogens:	no		
Paging/Intercom:		Dry Chemicals:	yes		
Other:		Chemical Waste:	yes		
		General Waste:	yes		
		Separate Waste:			

ANALYTICAL CHEMISTRY - TEACHING LAB

AXONIMETRIC



TYPICAL GENERAL CHEMISTRY STUDENT STATION



SIMILAR LABORATORY IMAGE

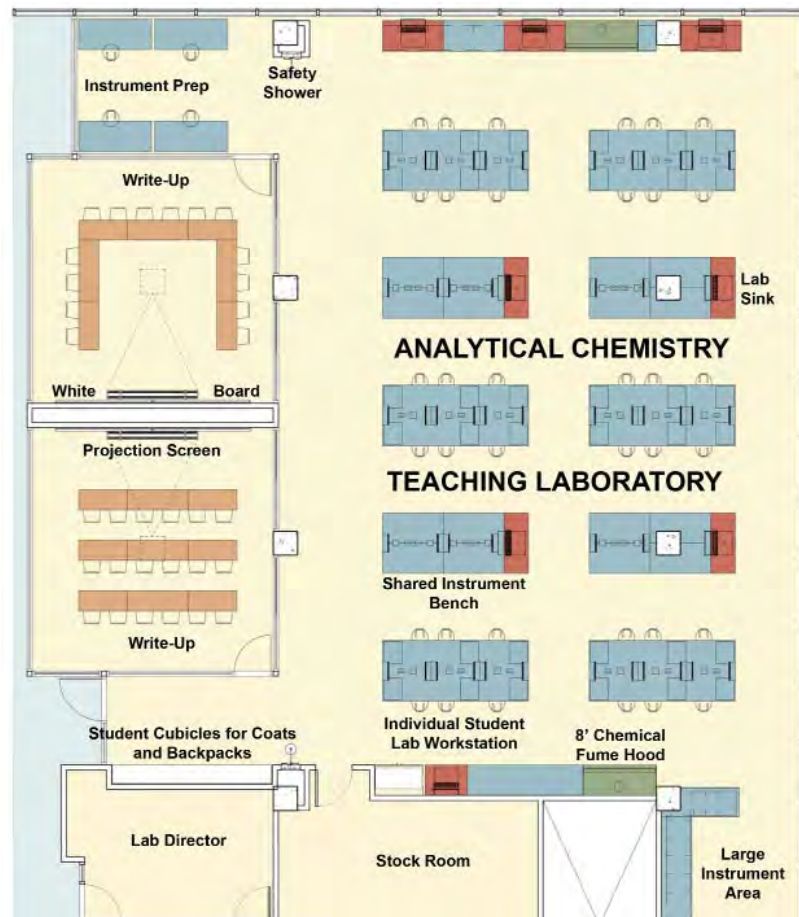


VIEW FROM LABORATORY DOWN CENTRAL AISLE



ANALYTICAL CHEMISTRY - TEACHING LAB

ROOM PLANNING DIAGRAM



TYPICAL ANALYTICAL CHEMISTRY TEACHING LABORATORY 2400 ASF

ROOM DESIGN CRITERIA

Description:		Teaching Lab		Operating Hours	
Department:	Analytical Chem.	Classes:		7:am- 10:pm	
Square Footage:	2400	HVAC:		7:am- 10:pm	
Number of Sections:	2 @ 18 students	Lighting:		7:00 am- 10:00pm	
No. of Students:	36	Equipment:		7:00 am- 10:00pm	
No. of TAs:	2				
Student Station Criteria			Architectural Finishes		
ASF per Student:	60	Floor:		sealed conc.	
Bench/Student:	30" x 60"	Base:		rubber base	
Lab Sink Ratio:	1 per 6 stations	Wall:		painted gwb	
Fume Hood Ratio:	2 - 6' Hood	Ceiling:		acoutical tile	
Cup Sink:		Casework:		metal	
Outlets/Station:	120v Quad	Countertop:		epoxy	
Drawers/Station:	12 - lockable				
Lab Services		Specialties			
Compressed Air:	yes	Chalkboard:		no	
Nitrogen:		Markerboard:		yes	
Natural Gas:	yes	Projection Screen:		6'x 8'	
Lab Vacuum:	yes	Projector:		Ceiling Hung	
Other:		Demo Hood:		Yes	
Cylinder Gases		TA Station:		Yes	
Flammable:		Lockers:		(44) - 12"x12"	
Inert:		Other:			
Water		HVAC			
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min. - Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	2	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data		Chemical Storage			
120v:	yes	Solvent:		yes	
208v:		Acids/Bases:		yes	
Data:	yes	Radionuclides:		no	
Telephone:		Carcinogens:		no	
Paging/Intercom:		Dry Chemicals:		yes	
Other:		Chemical Waste:		yes	
		General Waste:		yes	
		Separate Waste:			

ORGANIC CHEMISTRY - TEACHING LAB

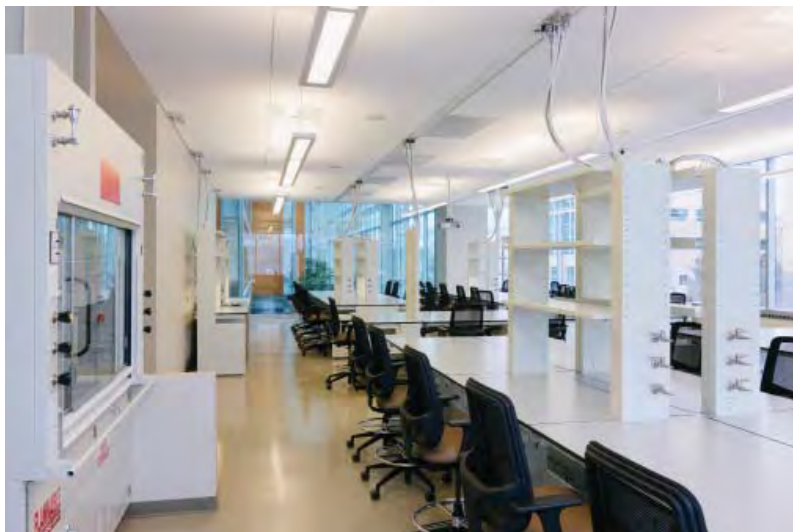
AXONIMETRIC



VIEW FROM FRONT OF LABORATORY TO THE NORTH



SIMILAR LABORATORY IMAGE

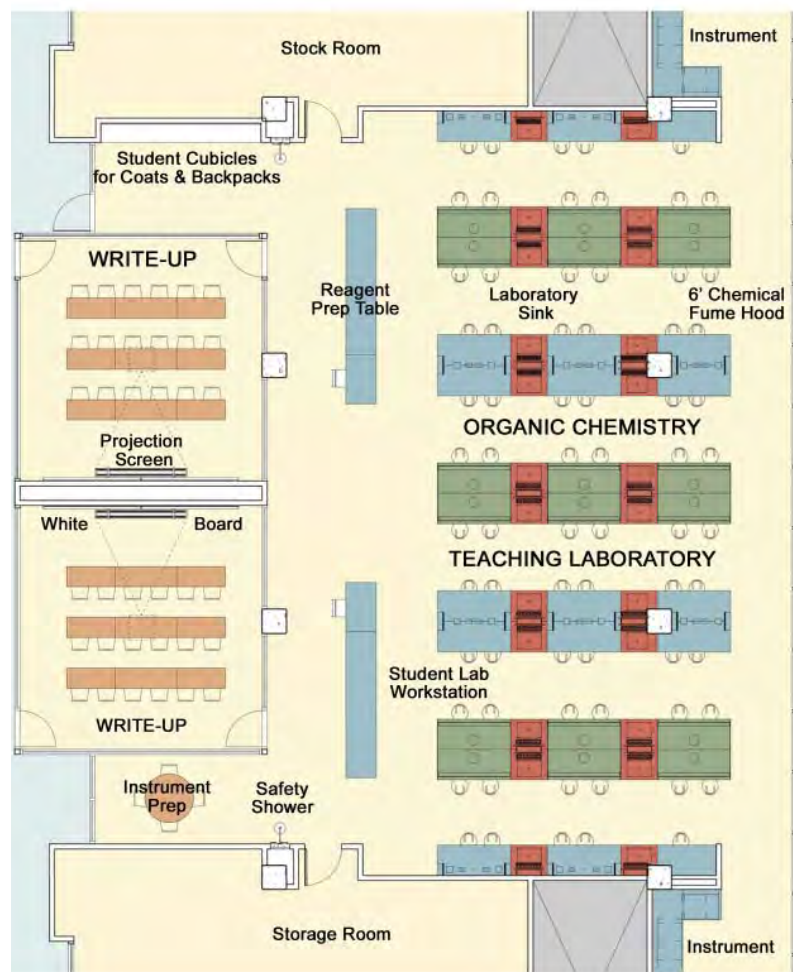


VIEW FROM NORTH WINDOWS AT STUDENT HOOD STATION



ORGANIC CHEMISTRY - TEACHING LAB

ROOM PLANNING DIAGRAM



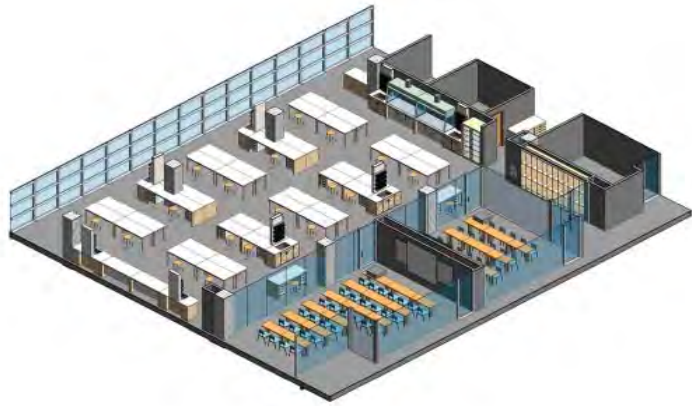
TYPICAL ORGANIC CHEMISTRY TEACHING LABORATORY - 2880 ASF

ROOM DESIGN CRITERIA

Description:		Teaching Lab		Operating Hours	
Department:	Organic Chem.	Classes:	7:am- 10:pm		
Square Footage:	2880	HVAC:	7:am- 10:pm		
Number of Sections:	2 @ 18 students	Lighting:	7:00 am- 10:00pm		
No. of Students:	44	Equipment:	7:00 am- 10:00pm		
No. of TAs:	2				
Student Station Criteria			Architectural Finishes		
ASF per Student:	80	Floor:	sealed conc.		
Bench/Student:	30" x 60"	Base:	rubber base		
Lab Sink Ratio:	1 per 2 stations	Wall:	painted gwb		
Fume Hood Ratio:	2 per 6' Hood	Ceiling:	acoustical tile		
Cup Sink:	yes	Casework:	metal		
Outlets/Station:	120v Quad	Countertop:	epoxy		
Drawers/Station:	12 - lockable				
Lab Services		Specialties			
Compressed Air:	yes	Chalkboard:	no		
Nitrogen:	yes	Markerboard:	yes		
Natural Gas:	yes	Projection Screen:	6'x 8'		
Lab Vacuum:	yes	Projector:	Ceiling Hung		
Other:		Demo Hood:	Yes		
Cylinder Gases		TA Station:	Yes		
Flammable:		Lockers:	(44) - 12"x12"		
Inert:		Other:			
Water		HVAC			
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min. - Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	2	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data		Chemical Storage			
120v:	yes	Solvent:	yes		
208v:		Acids/Bases:	yes		
Data:	yes	Radionuclides:	no		
Telephone:		Carcinogens:	no		
Paging/Intercom:		Dry Chemicals:	yes		
Other:		Chemical Waste:	yes		
		General Waste:	yes		
		Separate Waste:			

PHYSICAL CHEMISTRY - TEACHING LAB

AXONIMETRIC



VIEW FROM TA STATION OF LABORATORY TO THE WEST



EXAMPLE LABORATORY IMAGE

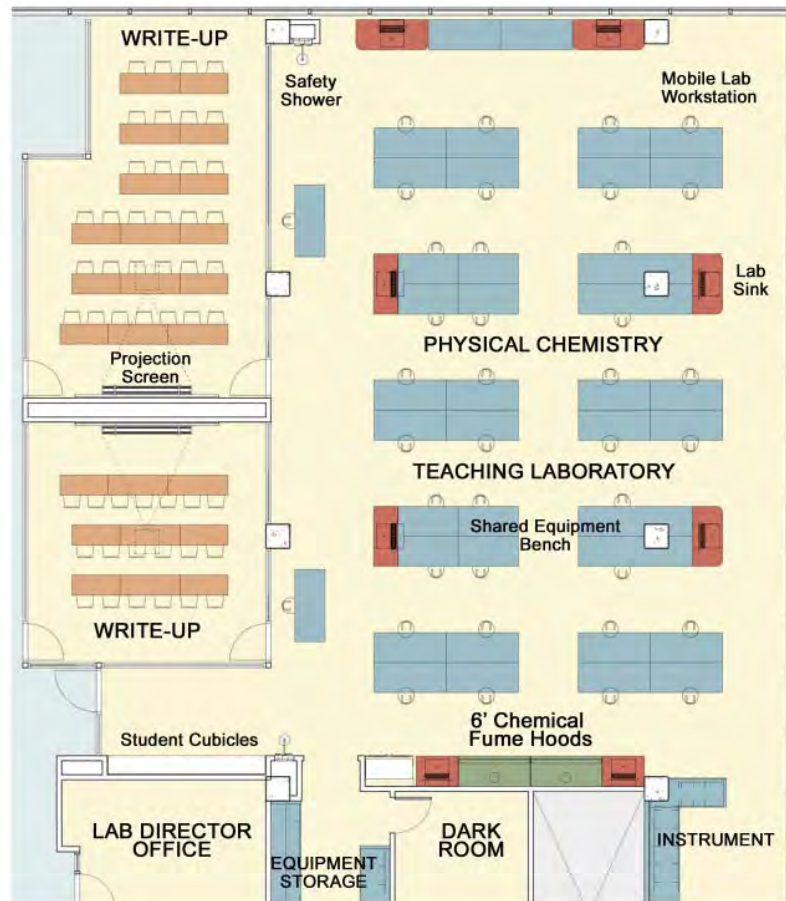


VIEW FROM NORTH WINDOWS AT STUDENT STATION



PHYSICAL CHEMISTRY - TEACHING LAB

ROOM PLANNING DIAGRAM



TYPICAL PHYSICAL CHEMISTRY TEACHING LABORATORY - 2400 ASF

ROOM DESIGN CRITERIA

Room Design Criteria			
Description:	Teaching Lab	Operating Hours	
Department:	Physical Chem.	Classes:	7:am- 10:pm
Square Footage:	2400	HVAC:	7:am- 10:pm
Number of Sections:	2 @ 18 students	Lighting:	7:00 am- 10:00pm
No. of Students:	36	Equipment:	7:00 am- 10:00pm
No. of TAs:	2		
Student Station Criteria		Architectural Finishes	
ASF per Student:	80	Floor:	sealed conc.
Bench/Student:	30" x 60"	Base:	rubber base
Lab Sink Ratio:	1 per 4 stations	Wall:	painted gwb
Fume Hood Ratio:	2 per 4' Hood	Ceiling:	acoutical tile
Cup Sink:	no	Casework:	metal
Outlets/Station:	120v Quad	Countertop:	epoxy
Drawers/Station:	12 - lockable		
Lab Services		Specialties	
Compressed Air:	yes	Chalkboard:	no
Nitrogen:	no	Markerboard:	yes
Natural Gas:	no	Projection Screen:	6'x 8'
Lab Vacuum:	yes	Projector:	Ceiling Hung
Other:		Demo Hood:	Yes
Cylinder Gases		TA Station:	Yes
Flammable:		Lockers:	(36) - 12"x12"
Inert:		Other:	
Water		HVAC	
Hot Water:	yes	Temp Max. - Summer:	
Cold Water:	yes	Temp Min. - Winter:	
RO/DI Water:	yes	RH - Max - Summer:	
Floor Drain:	no	RH - Max - Winter:	
Safety Shower:	1	Air Changes/Hr.:	
Eyewash:	at each sink	Pressurization:	
Sprinklers:	yes	Filtration - Supply:	
		Filtration - Exhaust:	
		Other:	
Electrical/Data		Chemical Storage	
120v:	yes	Solvent:	yes
208v:		Acids/Bases:	yes
Data:	yes	Radiosotopes:	no
Telephone:		Carcinogens:	no
Paging/Intercom:		Dry Chemicals:	yes
Other:		Chemical Waste:	yes
		General Waste:	yes
		Separate Waste:	

ADVANCE ANALYTICAL INSTRUMENT - TEACHING LAB

AXONOMETRIC



VIEW FROM STUDENT STATION OF INSTRUMENT AREA



SIMILAR LABORATORY IMAGE

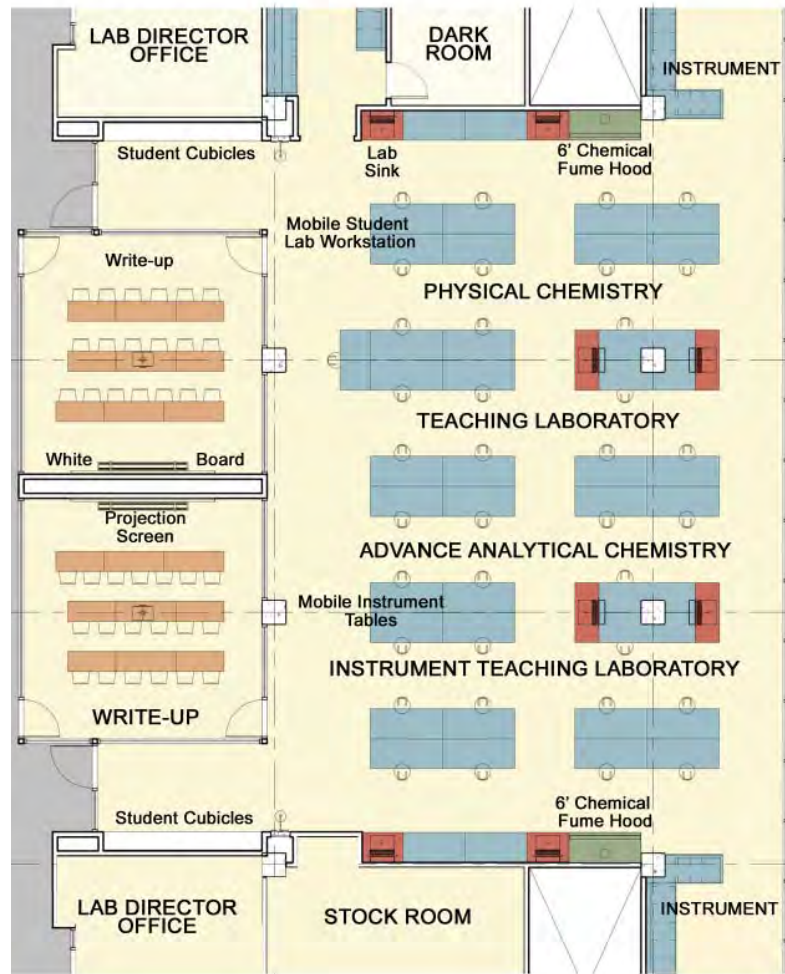


VIEW TO NORTH WINDOWS FROM TA STATION



ADVANCE ANALYTICAL INSTRUMENT - TEACHING LAB

ROOM PLANNING DIAGRAM



ADVANCE ANALYTICAL INSTRUMENT TEACHING LABORATORY - 2400 ASF

ROOM DESIGN CRITERIA

Description:		Teaching Lab		Operating Hours	
Department:	Instrument Chem.	Classes:	7:am- 10:pm		
Square Footage:	2400	HVAC:	7:am- 10:pm		
Number of Sections:	2 @ 12 students	Lighting:	7:00 am- 10:00pm		
No. of Students:	36	Equipment:	7:00 am- 10:00pm		
No. of TAs:	2				
Student Station Criteria			Architectural Finishes		
ASF per Student:	60	Floor:	sealed conc.		
Bench/Student:	30" x 60"	Base:	rubber base		
Lab Sink Ratio:	1 per 4 stations	Wall:	painted gwb		
Fume Hood Ratio:	1- 6' Hood	Ceiling:	acoutical tile		
Cup Sink:		Casework:	metal		
Outlets/Station:	120v Quad	Countertop:	epoxy		
Drawers/Station:	12 - lockable				
Lab Services		Specialties			
Compressed Air:	yes	Chalkboard:	no		
Nitrogen:	yes	Markerboard:	yes		
Natural Gas:	yes	Projection Screen:	6'x 8'		
Lab Vacuum:	yes	Projector:	Ceiling Hung		
Other:		Demo Hood:	Yes		
Cylinder Gases		TA Station:	Yes		
Flammable:		Lockers:	(44) - 12"x12"		
Inert:		Other:			
Water		HVAC			
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min. - Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	1	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data		Chemical Storage			
120v:	yes	Solvent:	yes		
208v:	yes	Acids/Bases:	yes		
Data:	yes	Radionuclides:	no		
Telephone:		Carcinogens:	no		
Paging/Intercom:		Dry Chemicals:	yes		
Other:		Chemical Waste:	yes		
		General Waste:	yes		
		Separate Waste:			

LECTURE HALLS

AUDIO / VISUAL REQUIREMENTS

AUDIO SYSTEM

1. Perform an acoustical analysis prior to design of audio system to determine final requirements.
2. Install new integrated sound system for all audio inputs: wired & wireless microphone, computer, and a VCR/ DVD/CD player. Provide 2 channels of wireless microphone capability (1 for wireless handheld microphone and one for wireless clip-on). Current campus standard is Shure UHF-R in the H4 frequency spectrum.
3. Provide two microphone connections (XLR type) in each lecture hall. One at the instructor station, one at the front wall of the room.
4. Provide assistive listening system. The campus standard for this technology is Listen Technologies.
5. Provide one 3.5mm mini-jack at the instructor's station. This will be attached to an external recorder to record the lecture.
6. Speaker wiring can be daisy chained and fed through D-rings (conduit not required). Wiring will need to be plenum rated per DSF specification.

NETWORK SERVICES (VOICE, DATA, VIDEO)

1. Provide new voice, data services to instructor station.
2. Install voice and data services in the room for closed captioning as appropriate. Provide voice/data on the wall near the accessible seating location(s). Provide a 2 outlet Cat 6 cable that is network connected. Add signage on the wall or on the jack plate, to denote jacks intended use.
3. Provide adequate electrical and telecommunications conduit infrastructure for expansion (i.e. provide a spare conduit).
4. Provide voice communication line for assistance telephone at instructor station.
5. Provide network services at instructor station and equipment rack.

6. Provide wireless network connection (WAP). Ceiling location is preferred. 1 or 2 will be required per room. DoIT will do survey for final placement and installation. A cable of coiled wire is to be provided above ceiling by the contractor.

VIDEO/DATA PROJECTION SYSTEM

1. Install multi-scan video projection system for displaying inputs from computers, VCR/ DVD/CD player, and document camera and cable signals via projector display device (RGBHV, S-video, composite and component video).
2. Install projector in appropriate location. Provide conduit/cable path for RGBHV video cable and low voltage control cable from podium to projector. Provide 1 unswitched AC outlet at projector.
3. Provide fixed projector mount due to low ceiling height. Projectors will be serviced from a ladder. Provide conduit/cable path from fixed projector mount to podium for low voltage control cable.
4. Provide an integrated video monitor in the touch screen panel at the instructor station to simultaneously view all input signals.
5. Provide laptop computer input connection (pull out) for computer-generated signals. VGA cable slides into podium. The 3' cable is replaced approximately once per year.
6. Provide double wide permanent equipment rack in lockable enclosure. Both sides are to be independently locked.
7. Provide one document camera. The campus standard for this technology is WolfVision.
8. Provide one multi format VCR/region free DVD/CD player, housed in the instructor podium.
9. Provide connection panel for audio (L&R audio) and composite video inputs at the instructor station. AMX input panel is located inside the cabinet on the user side.
10. Access to control system is password protected (two tracks-user and service/maintenance). This is part of the AMX programming.

11. Provide closed caption for VCR video. The campus standard for this type of technology is PCD 88 by Link Electronics.

CHALKBOARDS

1. Provide a vertical sliding chalkboard system (one fixed panel with 2 sliding panels in front) with a total minimum of 30 lineal feet in each room. Design for concurrent chalkboard and AV use if possible. The campus standard for this technology is Weyel column chalkboard systems.

PROJECTION SURFACES

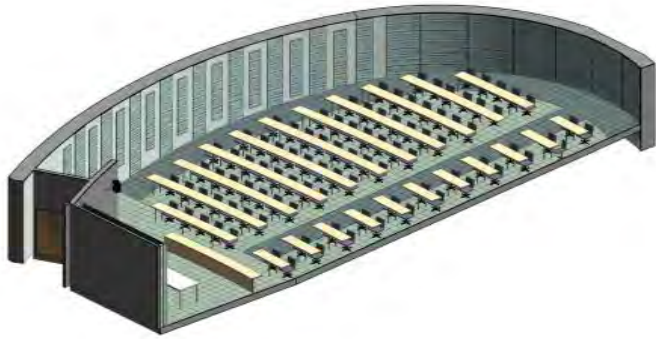
1. Provide one ceiling recessed electric screen with 16x9 aspect ratio.
2. Provide electric screen controls (up/down). Integrate into the AV control system via low voltage relays. Campus standard is Da-Lite. Draper or Stewart will not be accepted.

LIGHTING CONTROLS

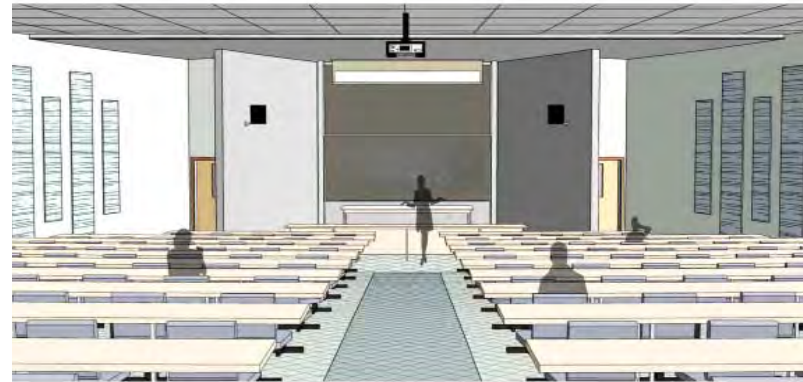
1. Provide an integrated, standardized AV/light control system (programmable and expandable) with touch panel control. The system controls the following: all lighting systems, audio system, projection screens and audio/video inputs to video/data projectors. The control system should be capable of wireless control for select functions. The campus standard for this type of technology is AMX. Provide conduit for RS-232 cable from instructor station to ETC Unison light control panel location.
2. Locate AV/light control system on the touch panel at the instructor station.
3. University staff will provide menu design and programming for the AV control systems.
4. Aisle lighting was requested. Acceptable options include Rope lights, Seat mounted aisle lights or recessed cans were

SMALL LECTURE HALL - 150 SEATS

AXONOMETRIC



VIEW TOWARD FRONT OF LECTURE HALL



SIMILAR LECTURE IMAGE

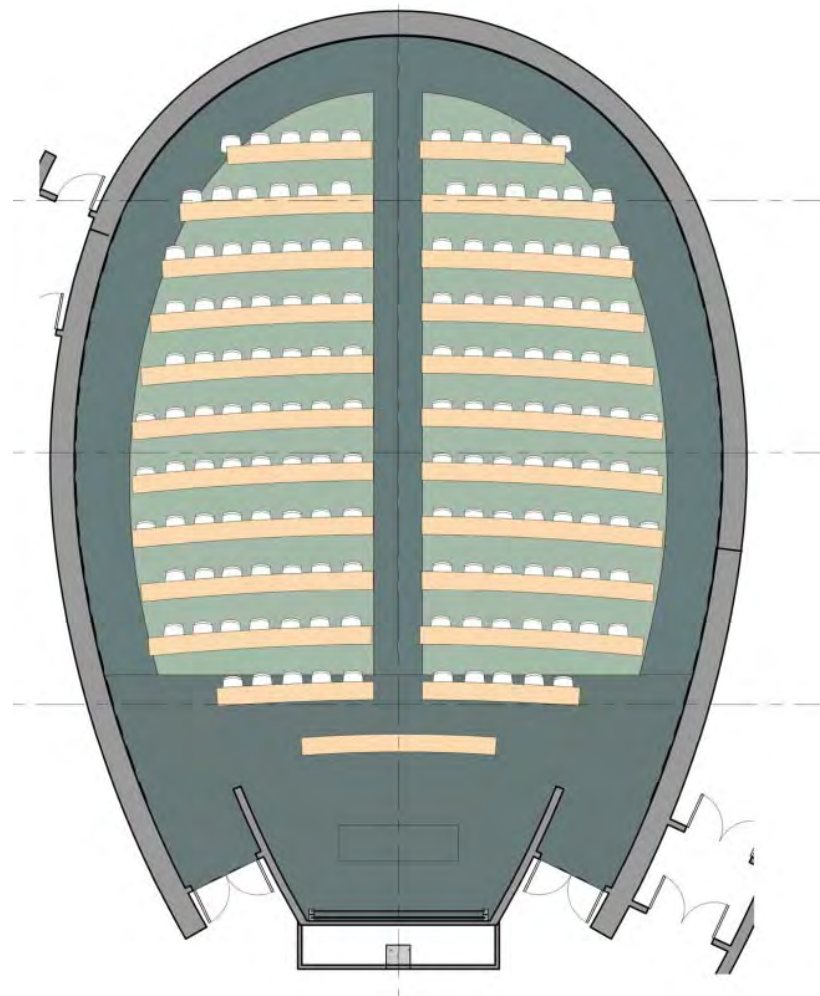


VIEW FROM LECTURE DEMONSTRATION BENCH



SMALL LECTURE HALL - 150 SEATS

ROOM PLANNING DIAGRAM



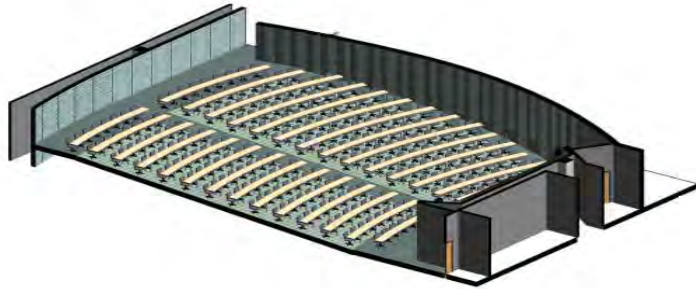
SMALL LECTURE HALL - 150 SEATS
3750 ASF

ROOM DESIGN CRITERIA

Description:		Lecture Hall	Operating Hours	
Department:	Chemistry	Classes:	7:am- 10:pm	
Square Footage:	3000	HVAC:	7:am- 10:pm	
Number of Sections:	na	Lighting:	7:00 am- 10:00pm	
No. of Students:	150	Equipment:	7:00 am- 10:00pm	
No. of TAs:	2			
Student Station Criteria		Architectural Finishes		
ASF per Student:	25	Floor:	carpet	
Bench/Student:	20" x 36"	Base:	rubber base	
Lab Sink Ratio:	NA	Wall:	painted gwb	
Fume Hood Ratio:	NA	Ceiling:	acoustical tile	
Cup Sink:		Casework:	metal	
Outlets/Station:	120v Quad	Countertop:	epoxy	
Drawers/Station:				
Lab Services		Specialties		
Compressed Air:	yes @ demo	Chalkboard:	yes	
Nitrogen:	yes @ demo	Markerboard:	no	
Natural Gas:	yes @ demo	Projection Screen:	8' x10'	
Lab Vacuum:	yes @ demo	Projector:	Ceiling Hung	
Other:		Demo Hood:	Yes	
Cylinder Gases		TA Station:		
Flammable:		Lockers:		
Inert:		Other:		
Water		HVAC		
Hot Water:	yes@ demo	Temp Max. - Summer:		
Cold Water:	yes@ demo	Temp Min. - Winter:		
RO/DI Water:	yes@ demo	RH - Max - Summer:		
Floor Drain:		RH - Max - Winter:		
Safety Shower:		Air Changes/Hr.:		
Eyewash:		Pressurization:		
Sprinklers:	yes	Filtration - Supply:		
		Filtration - Exhaust:		
		Other:		
Electrical/Data		Chemical Storage		
120v:	yes	Solvent:	no	
208v:	yes	Acids/Bases:	yes	
Data:	yes	Radiosotopes:	no	
Telephone:		Carcinogens:	no	
Paging/Intercom:		Dry Chemicals:	yes	
Other:		Chemical Waste:	yes	
		General Waste:	yes	
		Separate Waste:		

MEDIUM LECTURE HALL - 250 SEATS

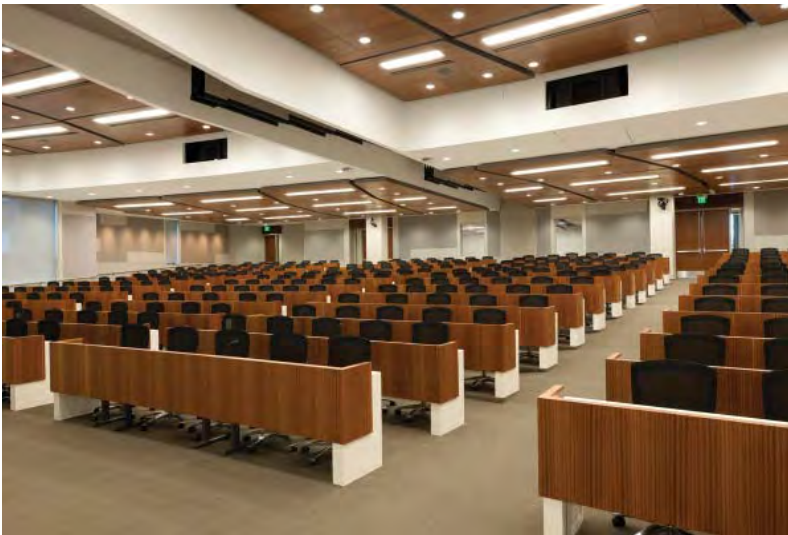
AXONOMETRIC



VIEW TOWARD FRONT OF LECTURE HALL



SIMILAR LECTURE IMAGE

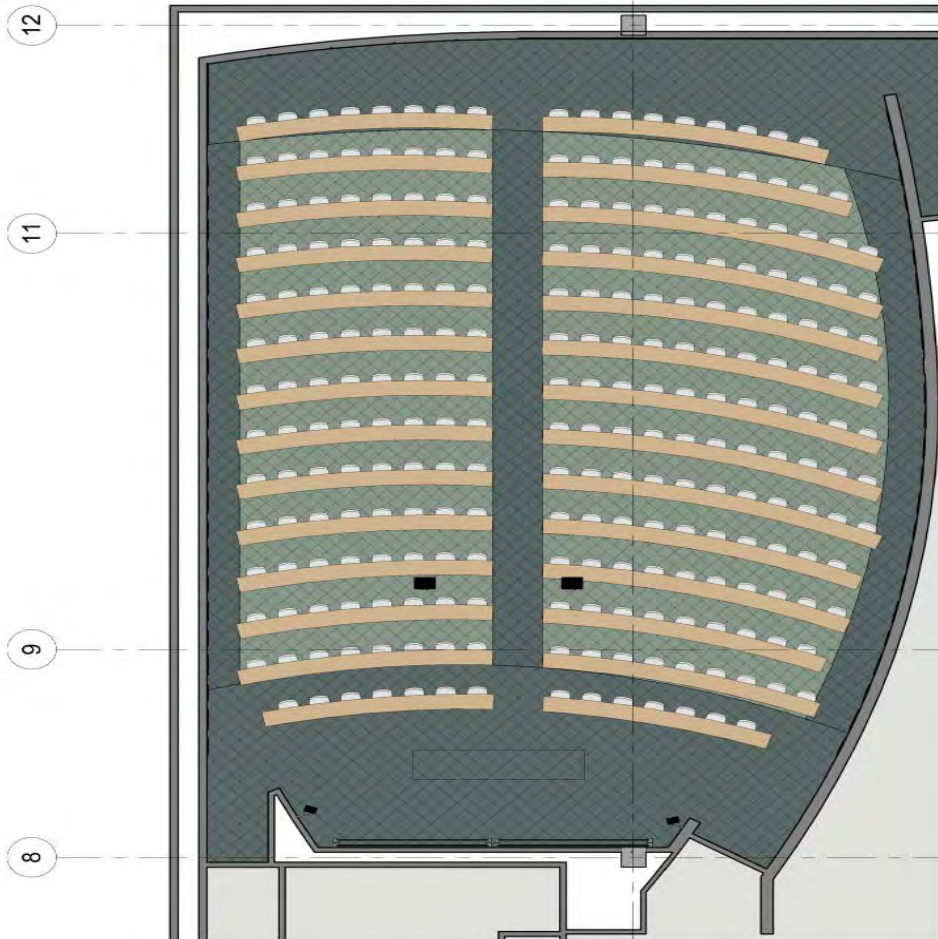


VIEW FROM LECTURE DEMONSTRATION BENCH



MEDIUM LECTURE HALL - 250 SEATS

ROOM PLANNING DIAGRAM



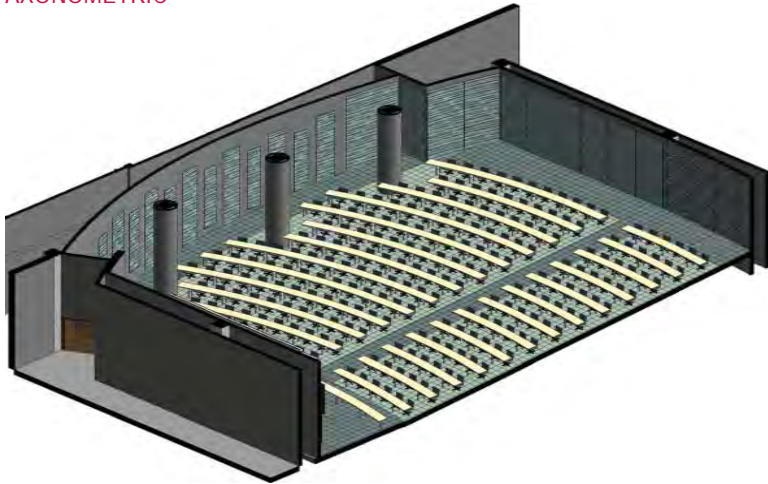
MEDIUM LECTURE HALL - 250 SEATS
6250 ASF

ROOM DESIGN CRITERIA

Description:		Lecture Hall	Operating Hours	
Department:	Chemistry	Classes:	7:am- 10:pm	
Square Footage:	5000	HVAC:	7:am- 10:pm	
Number of Sections:	na	Lighting:	7:00 am- 10:00pm	
No. of Students:	150	Equipment:	7:00 am- 10:00pm	
No. of TAs:	2			
Student Station Criteria		Architectural Finishes		
ASF per Student:	25	Floor:	carpet	
Bench/Student:	20" x 36"	Base:	rubber base	
Lab Sink Ratio:	NA	Wall:	painted gwb	
Fume Hood Ratio:	NA	Ceiling:	acoustical tile	
Cup Sink:		Casework:	metal	
Outlets/Station:	120v Quad	Countertop:	epoxy	
Drawers/Station:				
Lab Services		Specialties		
Compressed Air:	yes @ demo	Chalkboard:	yes	
Nitrogen:	yes @ demo	Markerboard:	no	
Natural Gas:	yes @ demo	Projection Screen:	8' x10'	
Lab Vacuum:	yes @ demo	Projector:	Ceiling Hung	
Other:		Demo Hood:	Yes	
Cylinder Gases		TA Station:		
Flammable:		Lockers:		
Inert:		Other:		
Water		HVAC		
Hot Water:	yes@ demo	Temp Max. - Summer:		
Cold Water:	yes@ demo	Temp Min.- Winter:		
RO/DI Water:	yes@ demo	RH - Max - Summer:		
Floor Drain:		RH - Max - Winter:		
Safety Shower:		Air Changes/Hr.:		
Eyewash:		Pressurization:		
Sprinklers:	yes	Filtration - Supply:		
		Filtration - Exhaust:		
		Other:		
Electrical/Data		Chemical Storage		
120v:	yes	Solvent:	no	
208v:	yes	Acids/Bases:	yes	
Data:	yes	Radiosotopes:	no	
Telephone:		Carcinogens:	no	
Paging/Intercom:		Dry Chemicals:	yes	
Other:		Chemical Waste:	yes	
		General Waste:	yes	
		Separate Waste:		

LARGE LECTURE HALL - 350 SEATS

AXONOMETRIC



VIEW TOWARD FRONT OF LECTURE HALL



SIMILAR LECTURE IMAGE

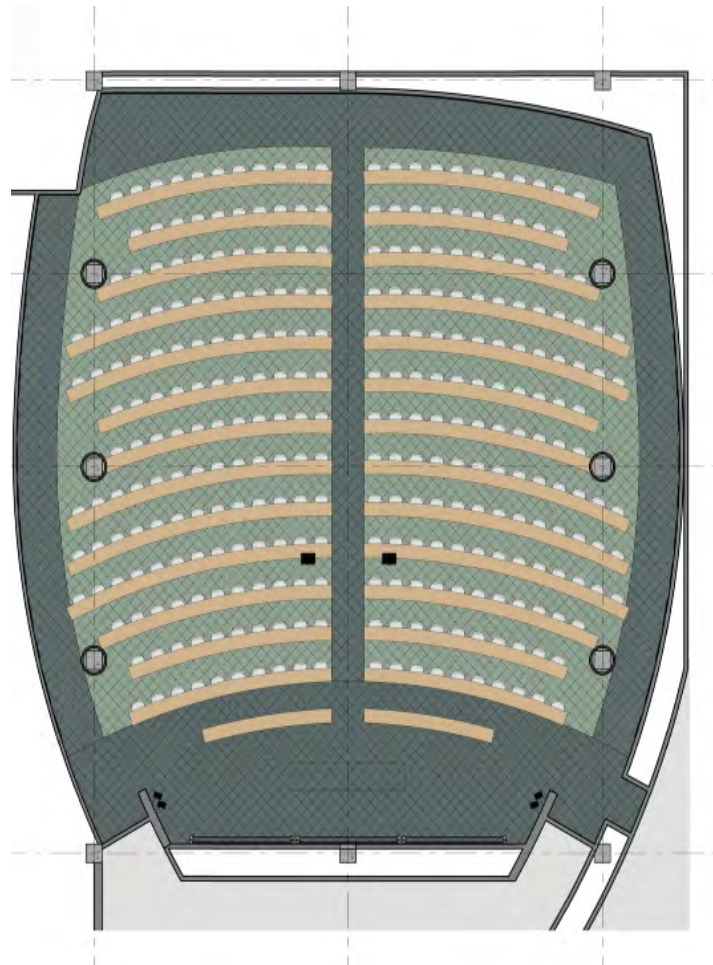


VIEW FROM LECTURE DEMONSTRATION BENCH



LARGE LECTURE HALL - 350 SEATS

ROOM PLANNING DIAGRAM



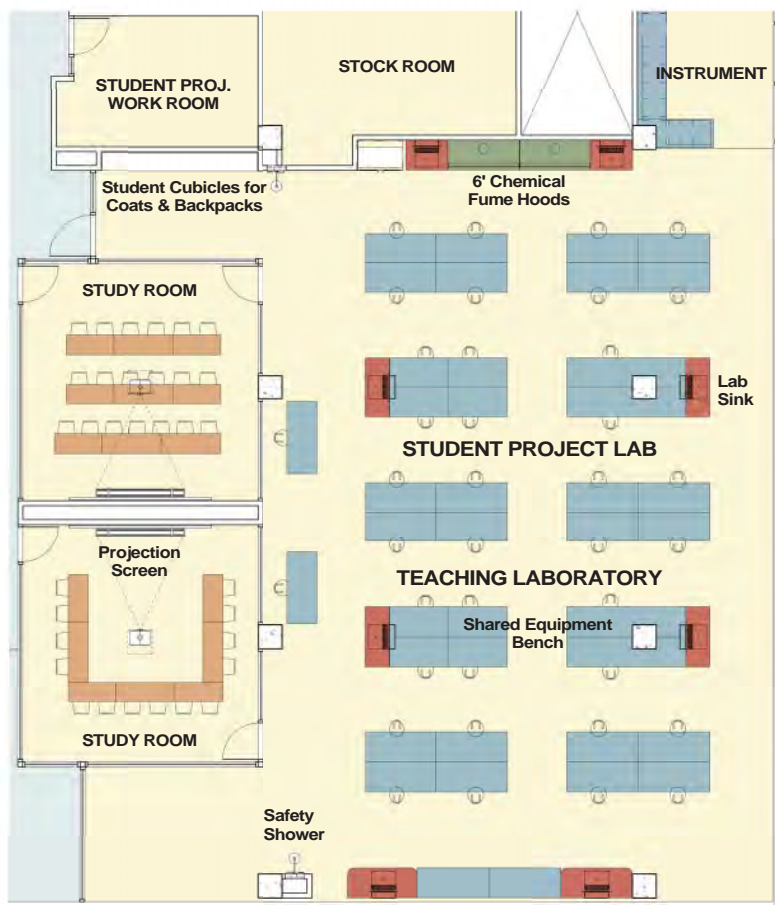
LARGE LECTURE HALL - 350 SEATS
6300 ASF

ROOM DESIGN CRITERIA

Description:			
Department:	Lecture Hall	Operating Hours	
Square Footage:	Chemistry	Classes:	7:am- 10:pm
Number of Sections:	6300	HVAC:	7:am- 10:pm
No. of Students:	na	Lighting:	7:00 am- 10:00pm
No. of TAs:	150	Equipment:	7:00 am- 10:00pm
	2		
Student Station Criteria		Architectural Finishes	
ASF per Student:	25	Floor:	carpet
Bench/Student:	20" x 36"	Base:	rubber base
Lab Sink Ratio:	NA	Wall:	painted gwb
Fume Hood Ratio:	NA	Ceiling:	acoustical tile
Cup Sink:		Casework:	metal
Outlets/Station:	120v Quad	Countertop:	epoxy
Drawers/Station:			
Lab Services		Specialties	
Compressed Air:	yes @ demo	Chalkboard:	yes
Nitrogen:	yes @ demo	Markerboard:	no
Natural Gas:	yes @ demo	Projection Screen:	8' x10'
Lab Vacuum:	yes @ demo	Projector:	Ceiling Hung
Other:		Demo Hood:	Yes
Cylinder Gases		TA Station:	
Flammable:		Lockers:	
Inert:		Other:	
Water		HVAC	
Hot Water:	yes@ demo	Temp Max. - Summer:	
Cold Water:	yes@ demo	Temp Min.- Winter:	
RO/DI Water:	yes@ demo	RH - Max - Summer:	
Floor Drain:		RH - Max - Winter:	
Safety Shower:		Air Changes/Hr.:	
Eyewash:		Pressurization:	
Sprinklers:	yes	Filtration - Supply:	
		Filtration - Exhaust:	
		Other:	
Electrical/Data		Chemical Storage	
120v:	yes	Solvent:	no
208v:	yes	Acids/Bases:	yes
Data:	yes	Radiosotopes:	no
Telephone:		Carcinogens:	no
Paging/Intercom:		Dry Chemicals:	yes
Other:		Chemical Waste:	yes
		General Waste:	yes
		Separate Waste:	

STUDENT PROJECT LAB

ROOM PLANNING DIAGRAM

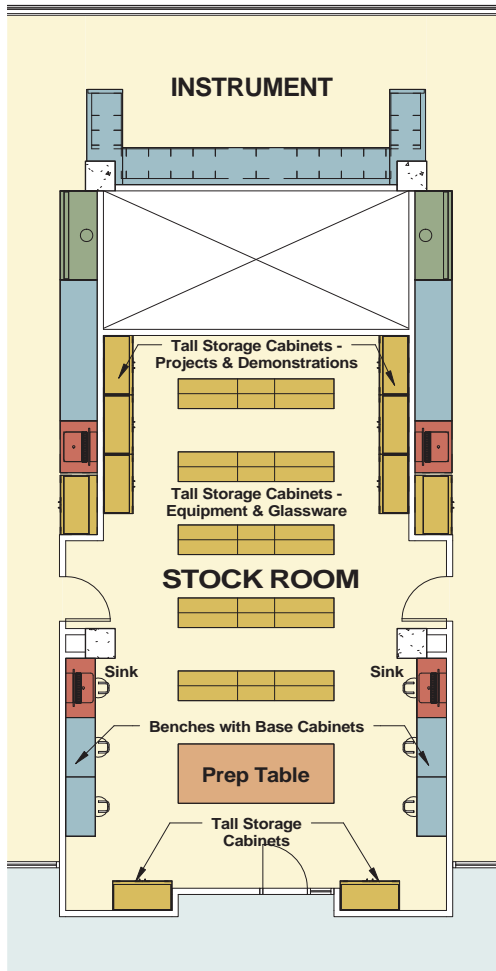


ROOM DESIGN CRITERIA

Description:		Student Proj. Lab		Operating Hours	
Department:	Chemistry.	Classes:	7:am- 10:pm		
Square Footage:	1200	HVAC:	7:am- 10:pm		
Number of Sections:	12-16 students	Lighting:	7:00 am- 10:00pm		
No. of Students:	12-16	Equipment:	7:00 am- 10:00pm		
No. of TAs:	1				
Student Station Criteria			Architectural Finishes		
ASF per Student:	60	Floor:	sealed conc.		
Bench/Student:	30" x 60"	Base:	rubber base		
Lab Sink Ratio:	1 per 4 stations	Wall:	painted gwb		
Fume Hood Ratio:	1 - 6' Hood	Ceiling:	acoutical tile		
Cup Sink:	no	Casework:	metal		
Outlets/Station:	120v Quad	Countertop:	epoxy		
Drawers/Station:	6 - lockable				
Lab Services			Specialties		
Compressed Air:	yes	Chalkboard:	no		
Nitrogen:		Markerboard:	yes		
Natural Gas:	yes	Projection Screen:	6'x 8'		
Lab Vacuum:	yes	Projector:	Ceiling Hung		
Other:		Demo Hood:	no		
Cylinder Gases			TA Station:		
Flammable:		Lockers:	12 - 12"x12"		
Inert:		Other:			
Water			HVAC		
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min.- Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	1	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data			Chemical Storage		
120v:	yes	Solvent:	yes		
208v:		Acids/Bases:	yes		
Data:	yes	Radiosotopes:	no		
Telephone:		Carcinogens:	no		
Paging/Intercom:		Dry Chemicals:	yes		
Other:		Chemical Waste:	yes		
		General Waste:	yes		
		Separate Waste:			

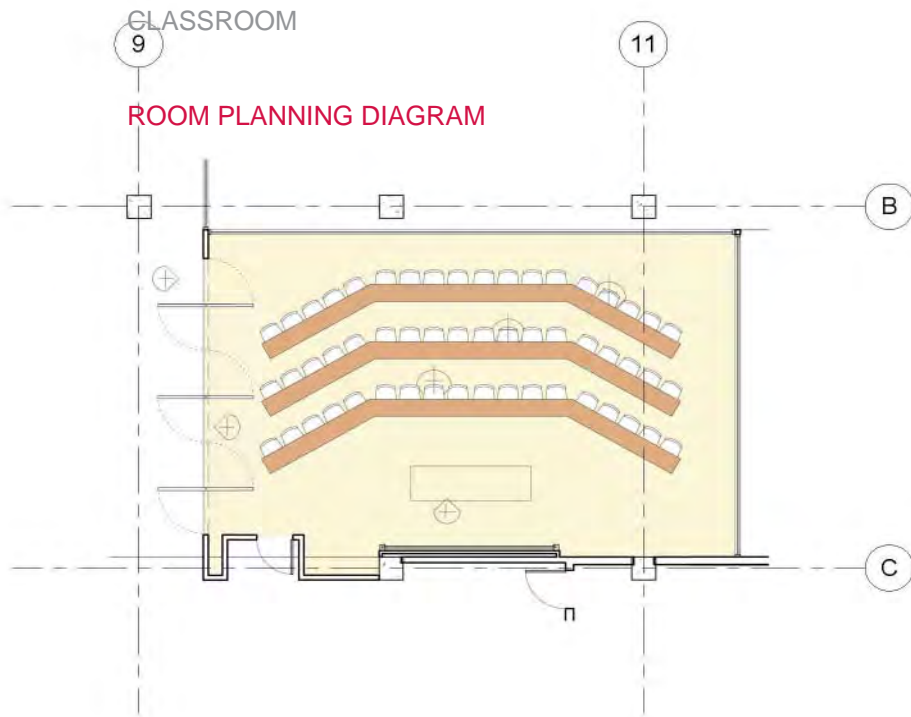
STOCK ROOM

ROOM PLANNING DIAGRAM



ROOM DESIGN CRITERIA

Description:		Stock Room		Operating Hours	
Department:	All Departments	Classes:	7:am- 10:pm		
Square Footage:	1000	HVAC:	7:am- 10:pm		
Number of Sections:	NA	Lighting:	7:00 am- 10:00pm		
No. of Students:	0	Equipment:	7:00 am- 10:00pm		
No. of TAs:	2				
Student Station Criteria			Architectural Finishes		
ASF per Student:	0	Floor:	sealed conc.		
Bench/Student:	na	Base:	rubber base		
Lab Sink Ratio:	na	Wall:	painted gwb		
Fume Hood Ratio:	1- 5' Hood	Ceiling:	acoutical tile		
Cup Sink:	no	Casework:	metal		
Outlets/Station:	120v Quad	Countertop:	epoxy		
Drawers/Station:	see plans				
Lab Services			Specialties		
Compressed Air:	yes	Chalkboard:	no		
Nitrogen:		Markerboard:	no		
Natural Gas:	yes	Projection Screen:	no		
Lab Vacuum:	yes	Projector:	no		
Other:		Demo Hood:	no		
Cylinder Gases			TA Station:		
Flammable:		Lockers:	no		
Inert:		Other:			
Water			HVAC		
Hot Water:	yes	Temp Max. - Summer:			
Cold Water:	yes	Temp Min. - Winter:			
RO/DI Water:	yes	RH - Max - Summer:			
Floor Drain:	no	RH - Max - Winter:			
Safety Shower:	1	Air Changes/Hr.:			
Eyewash:	at each sink	Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data			Chemical Storage		
120v:	yes	Solvent:	yes		
208v:		Acids/Bases:	yes		
Data:	yes	Radiosotopes:	no		
Telephone:	yes	Carcinogens:	no		
Paging/Intercom:		Dry Chemicals:	yes		
Other:		Chemical Waste:	yes		
		General Waste:	yes		
		Separate Waste:			



ROOM DESIGN CRITERIA

Description:		Classroom		Operating Hours	
Department:	Chemistry	Classes:		7:am- 10:pm	
Square Footage:	750	HVAC:		7:am- 10:pm	
Number of Sections:		Lighting:		7:00 am- 10:00pm	
No. of Students:	30	Equipment:		7:00 am- 10:00pm	
No. of TAs:	1				
Student Station Criteria			Architectural Finishes		
ASF per Student:	25	Floor:		vinyl tile	
Bench/Student:	30" x 60"	Base:		rubber base	
Lab Sink Ratio:		Wall:		painting gwb	
Fume Hood Ratio:		Ceiling:		acoustical tile	
Cup Sink:		Casework:			
Outlets/Station:		Countertop:		-	
Drawers/Station:					
Lab Services			Specialties		
Compressed Air:		Chalkboard:		yes	
Nitrogen:		Markerboard:		yes	
Natural Gas:		Projection Screen:		6'x 8'	
Lab Vacuum:		Projector:		Ceiling Hung	
Other:		Demo Hood:		no	
Cylinder Gases			TA Station:		
Flammable:				no	
Inert:		Lockers:		no	
		Other:			
Water			HVAC		
Hot Water:		Temp Max. - Summer:			
Cold Water:		Temp Min. - Winter:			
RO/DI Water:		RH - Max - Summer:			
Floor Drain:		RH - Max - Winter:			
Safety Shower:		Air Changes/Hr.:			
Eyewash:		Pressurization:			
Sprinklers:	yes	Filtration - Supply:			
		Filtration - Exhaust:			
		Other:			
Electrical/Data			Chemical Storage		
120v:	yes	Solvent:		yes	
208v:		Acids/Bases:		yes	
Data:	yes	Radiosotopes:		no	
Telephone:		Carcinogens:		no	
Paging/Intercom:		Dry Chemicals:		yes	
Other:		Chemical Waste:		yes	
		General Waste:		yes	
		Separate Waste:			

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX G

SUSTAINABILITY
CHECKLIST

SUSTAINABILITY SUMMARY

OVERVIEW


The Design team worked together to set goals for sustainable design to guidelines for the Chemistry Instructional Space Addition and Renovation. The basic case we have made for the justification of certain strategies we have chosen can be summarized by the following priorities:

- Solve the obsolete HVAC system issues on the Daniels Building to extend the useful life of the building for an additional 30 to 40 years
- Repurpose the base of the Mathews and Daniels buildings (Basement Level through Level Two) by shifting intensive chemistry teaching to the new addition and reusing the 50 year old chassis for classrooms, General Chemistry, and General Chemistry support spaces.
- Design the new addition to a standard of system performance that:
 - Exceeds standard space utilization efficiency (Net S.F. to Gross S.F. ratio) of 57 percent by five percent, with a net to gross efficiency rating of 62 percent.
 - Reduces energy use below the benchmark of 350,000 to 400,000 BTU/S.F./Year by 30 to 40 percent, to 210,000 to 280,000 BTU/S.F./Year.
 - Reduces water use by 40-50 percent
 - Diverts 80 percent of construction waste through reuse or recycling waste streams.
- Achieve gold standard of space utilization (scheduled hours versus available hours) of 60% or greater for teaching labs and lecture spaces while transforming the student/teacher environment with daylight and transparency.
- LEED Gold or better rating


SUSTAINABILITY CHECKLIST OBJECTIVES

The DSF sustainability checklist on the following pages indicates which sustainable strategies we believe should be employed on this project and why we believe they should be employed.


The checklist captures the conversation had in the Sustainability Charrette held September 8th, 2011, which indicated the unique interests of the Chemistry department. It also considers the DSF and University of Wisconsin standards for sustainable design.

 <h2 style="margin: 0;">DSF Sustainable Facilities Checklist</h2> <p style="margin: 5px 0 0 40px;">Projects >10,000 GSF or \$2.5 M total budget shall achieve 50 credits including DSF Required Credits</p> <p style="margin: 0 0 0 40px;">2012 Draft DSF Sustainability Checklist with LEED 2009 Rating System Incorporated</p>	Project: Chemistry Instructional Addition and Renovation		AE
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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	Intent/Strategy/Comments
Sustainable Sites						
Prereq 1	Required	P			Construction	<p>Intent: Minimize erosion during construction to reduce negative impacts on water and air quality.</p> <p>Potential Strategies & Technologies: Standard civil engineering design and specifications for control of erosion and sedimentation that will meet the local requirements (NR 216 or Comm. 61.115, NR 151)</p>
Credit 1	1/1 Required	1			Design	<p>Intent: Avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site.</p> <p>Potential Strategies & Technologies: New addition is sited on a previously developed parcel and meets this requirement.</p>
Credit 2	5	5			Design	<p>Intent: Channel development to urban areas with existing infrastructure, protect greenfields, and preserve habitat and natural resources.</p> <p>Potential Strategies & Technologies: Option 2 - Community Connectivity. Located on a previously developed site, within 1/2 mile of a residential area, within 1/2 mile of 10 basic services and has pedestrian access between the buildings and the services.</p>
Credit 3	1	1			Design	<p>Intent: Rehabilitate damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.</p> <p>Potential Strategies & Technologies: Based on previous renovation projects, asbestos, mercury and lead are very likely to be present in the existing Daniels building being demolished. Claiming this credit is very likely.</p>
Credit 4.1	6	6			Design	<p>Intent: Reduce pollution and land development impacts from automobile use.</p> <p>Potential Strategies & Technologies: Building site is located within .25 miles to at least (2) municipal bus lines.</p>
Credit 4.2	1/1 Required	1			Design	<p>Intent: Reduce pollution and land development impacts from automobile use.</p> <p>Potential Strategies & Technologies: Provide secure and weather protected bike racks / storage for 5% of all building users at peak occupancy, provide shower facilities for 1/2% of the building Full Time Employees (FTE). Shower and changing facilities currently exist on the Mathews 4th floor for Men and Mathews 6th floor for Women. Size and adequacy will need to be confirmed for compliance.</p>
Credit 4.3	3/3 Required	3			Design	<p>Intent: Reduce pollution and land development impacts from automobile use.</p> <p>Potential Strategies & Technologies: Option 4 - Provide building occupant access to a low-emitting or fuel-efficient vehicle-sharing program with the following requirements being met. One low-emitting or fuel-efficient vehicle must be provided per 3% of FTE occupants, assuming that 1 shared vehicle can carry 8 persons (i.e., 1 vehicle per 267 FTE occupants). For buildings with fewer than 267 FTE occupants, at least 1 low emitting or fuel-efficient vehicle must be provided. A vehicle-sharing contract must be provided that has an agreement for at least 2 years. Campus is currently a partner with Community Car and provides employee access to the State Van Pool.</p>
Credit 4.4	2/2 Required	2			Design	<p>Intent: Reduce pollution and land development impacts from single occupancy vehicle use.</p> <p>Potential Strategies & Technologies: Option 3 - No new parking provided with this project.</p>
Credit 5.1	1/1 Required	1			Design	<p>Intent: Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.</p> <p>Potential Strategies & Technologies: Case 2 - Restore a minimum of 50% of the site (excluding the building footprint) or 20% of the total site area (including the building footprint), whichever is greater, with native or adaptive vegetation. Since the project can earn Credit 2: Development Density & Community Connectivity, vegetated roof surface can contribute to credit compliance in its calculation if the plants are native or adapted, provide habitat, and promote biodiversity.</p>

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	Intent/Strategy/Comments
Sustainable Sites continued						
Credit 5.2	Site Development, Maximize Open Space	1		1	Design	<p>Intent: Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.</p> <p>Potential Strategies & Technologies: Case 3 - Sites with Zoning Ordinances but No Open Space Requirements - Provide vegetated open space equal to 20% of the project site area. Since the project can earn Credit 2: Development Density & Community Connectivity, vegetated roof areas can contribute to credit compliance. Also, Credit 2 compliance allows pedestrian-oriented hardscape areas can contribute to credit compliance. For such projects, a minimum of 25% of the open space counted must be vegetated.</p>
Credit 6.1	Stormwater Design, Quantity Control	1		1	Design	<p>Intent: Limit disruption and pollution of natural water flows by managing stormwater runoff.</p> <p>Potential Strategies & Technologies: Case 2 - Sites with Existing Imperviousness Greater Than 50% - Implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff. Promote infiltration by specifying garden roofs and pervious paving. Storm water storage could be incorporated into the design and utilized for landscape irrigation, toilet and urinal flushing or custodial uses.</p>
Credit 6.2	Stormwater Design, Quality Control	1/1 Required		1	Design	<p>Intent: Limit disruption of natural water flows by eliminating stormwater runoff, increasing on-site infiltration and eliminating contaminants.</p> <p>Potential Strategies & Technologies: Treatment of 90% of average rainfall and removal of 80% of total suspended solids is required. Incorporate mechanical or natural treatment systems as rain gardens and vegetated filter strips. DNR standard is less restrictive than the LEED requirements.</p>
Credit 7.1	Heat Island Effect, Non-Roof	1/1 Required	1		Construction	<p>Intent: Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.</p> <p>Potential Strategies & Technologies: Provide shade within 5 years and/or use light colored/high-albedo materials with a reflectance of at least 0.3, and/or open grid pavement for at least 30% of the site's non-roof impervious surfaces, including parking lots, walkways, plazas, etc. Minimize the overall building footprint and shade constructed surfaces on the site with landscape features.</p>
Credit 7.2	Heat Island Effect, Roof *	1	1		Design	<p>Intent: Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.</p> <p>Potential Strategies & Technologies: Propose the use of a white EPDM or vegetated roofs (or a combination) on all new roof areas and reroofed areas of the existing Mathews and Daniels Buildings to reduce thermal load at the roof envelope. Structural analysis of the existing roof loading will determine if green roofs are an option.</p>
Credit 8	Light Pollution Reduction	1/1 Required		1	Design	<p>Intent: Eliminate light trespass from the building and site, improve night sky access and reduce development impact on nocturnal environments.</p> <p>Potential Strategies & Technologies: Maintain safe light levels while avoiding off-site lighting and night sky pollution per IESNA Recommended Practice Manual and City of Madison requirements. Computer model lighting to meet lighting requirements and minimize fixture quantities. Bollards on raised hardscape elements are to be considered.</p>
Subtotal		11 / 26 Credits Required	22	4		

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design			
Water Efficiency								
Prereq 1	Water Use Reduction, 20% Reduction	Required	P			Design	Intent: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. Potential Strategies & Technologies: Reduce water use by 20% through the following strategies: 1) Reducing water use during construction; 2) provide low-flow toilets, sensor lavatories and laboratory sinks; 3) providing water efficient process equipment, i.e. pure water system and glassware washers; 4) commissioning the water use systems prior to occupancy i.e. flow control and shut off devices, process equipment and obtaining an initial comparison of systems design to actual performance.	20% minimum
Credit 1	Water Efficient Landscaping	4/4 Required	4			Design	Intent: Limit or eliminate the use of potable water for landscape irrigation. Potential Strategies & Technologies: No irrigation is anticipated for the project. Climate appropriate landscaping types and design will be integrated.	
Credit 2	Innovative Wastewater Technologies	2		2		Design	Intent: Reduce wastewater generation and potable water demand while increasing the local aquifer recharge. Potential Strategies & Technologies: Option 1 - Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures (e.g. toilets) or nonpotable water (e.g. captured rainwater or recycled graywater). Locate a holding tank (with overflow to storm drain system) for capture of storm water for non-potable use. No room on site for remediation of sanitary drain waste. Pure water system waste could be reused but required removal of high mineral content and will require clarification of byproduct use.	
Credit 3	Water Use Reduction *	4	4			Design	Intent: Further increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. Potential Strategies & Technologies: Reduce water use by a minimum 30% through the following strategies: 1) Provide a house vacuum system in lieu of water aspirators for vacuum (eliminating domestic water once-through to sanitary drain); 2) Provide process cooling water system in lieu of domestic water use (eliminating domestic water once-through to sanitary drain and 3) Providing periodic re-commissioning of water use systems (comparison of systems design to actual performance promoting refinement of building systems operation based on performance data.	30% minimum
Subtotal		4 / 10 Credits Required	8	2				

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design			
Energy & Atmosphere								
Prereq 1	Fundamental CX of Building Energy Systems	Required	P			Construction	Intent: Implement commissioning practices into all procedures and documentation used in the planning, design, construction, closeout and operations of state facilities. Provide for verification through the commissioning process that building systems are designed, installed, and perform according to DSF's project requirements, basis of design, and construction documents. Potential Strategies & Technologies: Engage a commissioning authority and adopt a commissioning plan which includes commissioning requirements in the bid documents. Level 1 Commissioning is included in the standard State Specification already.	
Prereq 2	Minimum Energy Performance	Required	P			Design	Intent: Establish the minimum level of energy efficiency for the base building and systems. Potential Strategies & Technologies: Project must demonstrate a 10% improvement for a new building or 5% improvement for a major renovation as compared to a baseline building. Follow the DSF Energy Design Guidelines and Lighting Design Guidelines.	10% minimum w/ new bldg - 5% w/ renv.
Prereq 3	Fundamental Refrigerant Management	Required	P			Design	Intent: Reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming. Potential Strategies & Technologies: Zero use of CFC based refrigerants can be achieved based on equipment specification.	
Credit 1	Optimize Energy Performance *	Varies/19	15	4		Design	Intent: Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental impacts associated with excessive energy use. Potential Strategies & Technologies: Goal is 15 points (40% better than code for new construction and 36% better than code for renovations).	less than 200,000 btu/sf/yr
Credit 2	On-Site Renewable Energy *	1 to 7		1	6	Design	Intent: Encourage and recognize increasing levels of on-site renewable energy self supply in order to reduce environmental impacts associated with fossil fuel energy use. Potential Strategies & Technologies: Possible strategies include: Photovoltaic arrays or wind turbines. A goal of 1% is possible.	1% possible goal
Credit 3	Enhanced Commissioning	2	2			Design/Construction	Intent: To begin the commissioning process early in the design process and execute additional activities after systems performance verification is completed. Potential Strategies & Technologies: Engage a commissioning authority and adopt an additional commissioning plan which includes fundamental commissioning and enhanced commissioning requirements in the bid documents. Include DSF Level 2 Commissioning and any additional requirements in the Specification.	
Credit 4	Enhanced Refrigerant Management	2/2 Required			2	Design	Intent: Reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming. Potential Strategies & Technologies: Utilize base building HVAC&R systems for the refrigeration cycle that minimize direct impact on ozone depletion and global climate change. Select HVAC&R equipment with reduced refrigerant charge and increased equipment life. Maintain equipment to prevent leakage of refrigerant to the atmosphere. Provide fire suppression systems that do not contain HCFC's or halons. Project equipment to be evaluated once the design progresses to see if credit is applicable.	
Credit 5	Measurement & Verification	3		3		Construction	Intent: Provide for the ongoing accountability and optimization of building energy and water consumption performance over time. Potential Strategies & Technologies: Develop a M&V plan to provide ongoing review of the design and operating parameters of various systems ensuring the most efficient performance possible.	
Credit 6	Green Power Purchase, 35% for two years * [UA]	2		2		Construction	Intent: Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis. Potential Strategies & Technologies: Engage in a contract to purchase 35% of the building's power from renewable sources. Renewable sources are defined per Wisconsin Statute 196.374. This may prove to be very costly.	35% goal
Subtotal		10± / 35 Credits	17	10	8			

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	Intent: Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills. Potential Strategies & Technologies: Promote recycling of materials and reduction of waste by providing collection areas integrated in the building's design (multiple points on each floor and centrally at the loading dock).		
Materials & Resources								
Prereq 1	Storage & Collection of Recyclables	Required	P			Design	Intent: Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills. Potential Strategies & Technologies: Promote recycling of materials and reduction of waste by providing collection areas integrated in the building's design (multiple points on each floor and centrally at the loading dock).	
Credit 1.1	Building Reuse, Maintain Existing Walls, Floors & Roof *	1/3 Required	2		1	Construction	Intent: Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport. Potential Strategies & Technologies: Demolition of the north end of Daniels building is approximately 40,323 GSF is 16% of the overall Daniels/Mathews Building 249,500 GSF.	
Credit 1.2	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1			1	Construction	Intent: Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport. Potential Strategies & Technologies: Scope of the anticipated renovation is significant (greater than 50%) with much of the interior being obsolete and at the end of its useful life (50+ years).	
Credit 2	Construction Waste Management *	2/2 Required	2			Construction	Intent: Divert construction, demolition and land clearing debris from landfill disposal. Redirect recyclables recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites. Potential Strategies & Technologies: DSF goal for new construction is 65% and where the project has significant demolition a goal of 75% is required by DSF. Goal for this project is 80%. Encourage the following strategies: 1) prefabrication of building assemblies (reducing on-site waste, factory fabrication minimizes waste, allows easier recycling of waste materials, better quality/tolerances of component assemblies) and 2) promote recycling of demolition, excavation, and construction waste materials (reducing material sent to landfills and supports markets for recycled materials)	80% goal
Credit 3	Materials Reuse	1 to 2			2	Construction	Intent: Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources. Potential Strategies & Technologies: Much of the existing material is obsolete with limited opportunities for reuse. Creative solution is required to reuse the existing materials. 1 credit = 5%, 2 credits = 10%.	
Credit 4	Recycled Content *	1/2 Required	1		1	Construction	Intent: Increase demand for building products that incorporate recycled content materials, therefore reducing the impacts resulting from extraction and processing of new virgin materials. Potential Strategies & Technologies: Maximize the procurement of materials (building and furnishings) with recycled content.	10% minimum required

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	
Materials & Resources continued						
Credit 5	Regional Materials *	1/2 Required	1	1	Construction	<p>Intent: Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the regional economy and reducing the environmental impacts resulting from transportation.</p> <p>Potential Strategies & Technologies: Provide materials that are regionally (within 500 miles) extracted and manufactured to minimize transportation impact on the environment. 10% = 1 credit, 20 % = 2 credits.</p>
Credit 6	Rapidly Renewable Materials	1		1	Construction	<p>Intent: Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with renewable materials.</p> <p>Potential Strategies & Technologies: Spend 2.5% of the total building material cost on materials that are rapidly renewable. Examples include: wheatboard, sunflower board, bamboo flooring and linoleum.</p>
Credit 7	Certified Wood	1		1	Construction	<p>Intent: Encourage environmentally responsible forest management and use of local forest products.</p> <p>Potential Strategies & Technologies: Procure 50% of wood based products from certified forests. Utilize the Sustainable Facilities Guidelines for Wisconsin certified wood providers.</p>
N/A	Durable Building Materials			Y		<p>Intent: Minimize materials use and construction waste over a building's life resulting from premature failure of the building and its constituent components and assemblies.</p> <p>Potential Strategies & Technologies: Develop and implement a durable building plan in accordance with the CSA S478-95 (R2001) Guidelines on Building Durability. Strategies include: 1) designing building systems for longevity and ease of maintenance (reducing energy use associated with manufacturing/recycling of replacement components); 2) designing the systems to allow change-out in lieu of demolition/reconstruction in the future (reduces energy use associated with processing and manufacturing new assemblies and reduces materials sent to the landfill) and 3) specifying assemblies and equipment for deconstruction/recycling at End of Life (reducing energy use associated with extraction and initial processing of raw materials, reduces materials sent to landfill and supports markets for recycled materials).</p>
Subtotal		5 / 14 Credits Required	6	4	4	

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	
Indoor Environmental Quality						
Prereq 1	Minimum IAQ Performance	Required	P			Design Intent: Establish minimum indoor air quality (IAQ) performance to prevent the development of indoor air quality problems in buildings, thus contributing to the comfort and well-being of the occupants. Potential Technologies & Strategies: Design the HVAC system to meet the minimum ventilation requirements of Sections 4 through 7 of ASHRAE 62.1-2007. Identify potential IAQ problems on the site and locate air intakes away from contaminated sources.
Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required	P			Design Intent: Prevent exposure of building occupants and systems to Environmental Tobacco Smoke (ETS). Potential Technologies & Strategies: Smoking is prohibited in state owned facilities. Prohibit smoking in the building and 25 feet from all entrances, outdoor air intakes and operable windows. No smoking on the site during construction
Credit 1	Outdoor Air Delivery Monitoring	1		1		Design Intent: Provide capacity for ventilation system monitoring to promote occupant comfort and well-being. Potential Technologies & Strategies: Install a permanent carbon Monoxide monitoring system that affords operational adjustments. Monitor CO2 in spaces where more than 25 people will occupy 1000 ASF or less (densely occupied space). Monitor direct outdoor air flow in non densely occupied spaces.
Credit 2	Increased Ventilation *	1			1	Design Intent: Provide additional outdoor air ventilation to improve air quality (IAQ) and promote occupant comfort, well-being and productivity. Potential Technologies & Strategies: Increase outdoor air ventilation rates to all occupied spaces by at least 30% above minimum rates required by ASHRAE 62.1 - 2007.
Credit 3.1	Construction IAQ Management Plan, During Construction	1/1 Required	1			Construction Intent: Prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of construction workers and building occupants. Potential Technologies & Strategies: Contractor to provide IAQ plan as a submittal before construction begins.
Credit 3.2	Construction IAQ Management Plan, Before Occupancy *	1	1			Construction Intent: Prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of construction workers and building occupants. Potential Technologies & Strategies: Schedule a air flush-out of new materials (and furnishings) off-gassing prior to occupancy for the new work areas. Coordination with the Construction Schedule will be necessary.
Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1/1 Required	1			Construction Intent: Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants. Potential Technologies & Strategies: Specify low VOC or Zero VOC Adhesives & Sealants.
Credit 4.2	Low-Emitting Materials, Paints & Coatings	1/1 Required	1			Construction Intent: Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants. Potential Technologies & Strategies: Specify low VOC or Zero VOC Paints & Floor and Wall Coatings
Credit 4.3	Low-Emitting Materials, Flooring Systems	1/1 Required	1			Construction Intent: Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants. Potential Technologies & Strategies: Specify low VOC or Zero VOC Carpet, Resilient Flooring and other flooring systems.

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Description	DSF Required Credits	Y	?	N	Phase Construction or Design	
Indoor Environmental Quality continued						
Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	1	1			Construction Intent: Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants. Potential Technologies & Strategies: Composite wood and agrifiber products are to be specified with no added urea-formaldehyde resins.
Credit 5	Indoor Chemical & Pollutant Source Control	1	1			Design Intent: Avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality. Potential Technologies & Strategies: Composite wood and agrifiber products are to be specified with no added urea-formaldehyde resins.
Credit 6.1	Controllability of Systems, Lighting	1	1			Design Intent: Provide a high level of lighting control by individuals occupants or groups in multi-occupant spaces (e.g., classrooms and conference areas) and promote their productivity, comfort and well-being. Potential Technologies & Strategies: Individual control of lighting for 90% of building occupants.
Credit 6.2	Controllability of Systems, Thermal Comfort	1			1	Design Intent: Provide a high level of thermal comfort system control by individual occupants or groups in multi-occupant spaces (e.g., classrooms or conference areas) and promote their productivity, comfort and well-being. Potential Technologies & Strategies: Providing Thermal Comfort in an open lab layout may not be possible. Provide individual comfort controls for a minimum of 50% of the occupants.
Credit 7.1	Thermal Comfort, Design	1	1			Design Intent: Provide a comfortable thermal environment that promotes occupant productivity and well-being. Potential Technologies & Strategies: meet ASHRAE standard 55-2004.
Credit 7.2	Thermal Comfort, Verification	1	1			Design Intent: Provide for the assessment of building occupant thermal comfort over time. Potential Technologies & Strategies: Provide a permanent monitoring system to ensure building performance. Conduct a thermal comfort survey of all occupants of the building and agree to develop a plan to provide corrective action.
Credit 8.1	Daylight & Views, Daylight 75% of Spaces *	1			1	Design Intent: Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. Potential Technologies & Strategies: Compliance with DSF Daylighting Guidelines is required. At the perimeter zones of the building special attention to the architectural design shall be considered including: wall, ceiling and furniture systems finishes. Installation of lighting controls and sensors is also necessary to reduce energy use when daylight is present.
Credit 8.2	Daylight & Views, Views for 90% of Spaces *	1	1			Design Intent: Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. Potential Technologies & Strategies: Compliance with DSF Daylighting Guidelines is required. At the interior zone of the building special attention to light collection and transfer is needed to achieve this credit. Spatial transmission of light via multi-story interior spaces is a potential strategy.
Subtotal		4 / 15 Credits Required	11	1	3	

 <h2 style="margin: 0;">DSF Sustainable Facilities Checklist</h2> <p style="margin: 5px 0 0 20px;">Projects >10,000 GSF or \$2.5 M total budget shall achieve 50 credits including DSF Required Credits</p> <p style="margin: 10px 0 0 20px;">2012 Draft DSF Sustainability Checklist with LEED 2009 Rating System Incorporated</p>	Project: Chemistry Instructional Addition and Renovation		AE
	Project No: 10K1F	Checklist Date: December 2011	
	A/E: Aro Eberle Ballinger	Checklist Author: Aro Eberle	
	Project Phase: Space Assessment and Feasibility Study		
	Contract Date:		
<input type="checkbox"/> LEED Registered <input type="checkbox"/> Pursuing LEED Certification			

Description	DSF Required Credits	Y	?	N	Phase Construction or Design	
Innovation & Design Process						
Credit 1.1	Innovation in Design: Low Velocity Supply and Exhaust Systems 1/1 Required		1		Design	<p>Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements.</p> <p>Potential Technologies & Strategies: Achieve this credit with the following strategies: 1) Low velocity, neutral temperature supply air system (low velocity reduces fan energy, supply air provided at neutral temperature for ventilation, cooling via chilled beams); 2) Low velocity lab exhaust system (low velocity reduces fan energy, use of envelope negative pressure at discharge to accelerate air flow, architectural design to enhance negative pressure); and 3) Design Supply and exhaust Ductwork with minimal Pressure Drop (reduces fan energy, avoid turbulence within ductwork and synergy with low velocity supply and exhaust systems).</p>
Credit 1.2	Innovation in Design: Fume Hood Control per Occupancy Modes 1		1		Design	<p>Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements.</p> <p>Potential Technologies & Strategies: Achieve this credit with the following strategies: 1) Minimize Ventilation Air Change Rates at Labs in Occupied Mode (labs baseline: minimum 6 air changers per hour (ACH) w/o air quality monitoring, less than 6 ACH with air quality monitoring and design, commissioning, and periodic recommissioning of monitoring system) and 2) Ventilation air change rates at labs in unoccupied and not-in-use modes (lab occupancy sensors and HVAC controls, Reduced air change rates with labs unoccupied and fume hoods closed, and minimal air change when lab is decommissioned for extended periods).</p>
Credit 1.3	Innovation in Design: Low Ambient Lighting Design / Controls 1/1 Required		1		Design	<p>Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements.</p> <p>Potential Technologies & Strategies: Achieve this credit with the following strategies: 1) Lighting Systems Occupancy Sensors (program spaces, public spaces, circulation areas); 2) Low Ambient General Illumination with Task Lighting (non-lab program spaces, public spaces, requires occupant culture via a vis task lighting); 3) LED Lighting (site lighting, general lighting, task lighting); and 4) Occupant Control of Task Lighting (optimization of lighting quality to specific tasks, requires personal commitment to turn off when space is not in use).</p>
Credit 1.4	Innovation in Design: Durable Buildings 1		1		Design	<p>Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements.</p> <p>Potential Technologies & Strategies: Achieve this credit with the following strategies: 1) Design Simple Building Systems with Less Materials and Less Complexity (less energy used in extraction, processing, fabrication, transportation and reduced construction logistics/schedule/cost) 2) Solving the Obsolete Daniels HVAC Infrastructure (renews the Daniels Building for another full cycle 30-40 years); and 3) Repurpose the base of Mathews/Daniels (shift intensive chemistry teaching to the new addition and reusing the 50 year old chassis for classrooms, general chemistry's support functions).</p>

 <h2 style="text-align: center;">DSF Sustainable Facilities Checklist</h2> <p style="text-align: center;">Projects >10,000 GSF or \$2.5 M total budget shall achieve 50 credits including DSF Required Credits</p> <p style="text-align: center;">2012 Draft DSF Sustainability Checklist with LEED 2009 Rating System Incorporated</p>	Project: Chemistry Instructional Addition and Renovation		AE
	Project No: 10K1F	Checklist Date: December 2011	
	A/E: Aro Eberle Ballinger	Checklist Author: Aro Eberle	
	Project Phase: Space Assessment and Feasibility Study		
	Contract Date:		
<input type="checkbox"/> LEED Registered <input type="checkbox"/> Pursuing LEED Certification			

Description	DSF Required Credits	Y	?	N	Phase Construction or Design	
Innovation & Design Process						
Credit 1.5	Innovation in Design: Integrated Design	1	1		Design	Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements. Potential Technologies & Strategies: Achieve this credit with the following strategies: 1) Iterative Energy Modeling Integral to the Design Process (encourages holistic view of Building Systems and energy use, identifies focal areas for refinement of systems design, reduces gap between systems design and systems performance) and 2) Design the new addition to optimize the use of scarce resources (exceed standard net to gross efficiency: 57% (62%), reduce energy use below benchmark of 350-400KBTU by 30-40%. reduce water use by 40-50%, recycle demolished material by 90%).
Credit 1.6	Innovation in Design: Occupant Education	1	1		Design	Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements. Potential Technologies & Strategies: Community Education Program: Signage denoting and explaining sustainable features of the project.
Credit 1.7	Innovation in Design: LEED-EB Registration at Completion [UA]	1	1			Intent: Provide design teams and projects the opportunity to achieve exceptional performance above the requirements. Potential Technologies & Strategies: Register and track project at LEED-EB upon completion.
Credit 2	LEED® Accredited Professional	1	1		Design/Construction	Intent: To support and encourage the design integration required by LEED to streamline the application and certification process. Potential Technologies & Strategies: Selection of an A/E Team with LEED accredited professionals to educate the project team members about green building design and construction, the LEED requirements and application process early in the life of a project. Consider assigning integrated design and construction process facilitation to the LEED Accredited Professional.
Subtotal		2 / 8 Credits Required	1	7		

 <h2 style="margin: 0;">DSF Sustainable Facilities Checklist</h2> <p style="margin: 5px 0 0 0;">Projects >10,000 GSF or \$2.5 M total budget shall achieve 50 credits including DSF Required Credits</p> <p style="margin: 10px 0 0 0;">2012 Draft DSF Sustainability Checklist with LEED 2009 Rating System Incorporated</p>	Project: Chemistry Instructional Addition and Renovation	AE	
	Project No: 10K1F		Checklist Date: December 2011
	A/E: Aro Eberle Ballinger		Checklist Author: Aro Eberle
	Project Phase: Space Assessment and Feasibility Study		
	Contract Date:		
<input type="checkbox"/> LEED Registered <input type="checkbox"/> Pursuing LEED Certification			

Description	DSF Required Credits	Y	?	N	Phase Construction or Design		
Regional Priority							
ZIP Code	53706 - Qualifying Credits					SSc4.1, SSc4.2, SSc4.4, SSc6.1, SSc7.2, MRc1.1 (55%)	
Credit 1.1	Regional Priority: SSc4.1 - Public Transportation	1	1		Design	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for SSc4.1 Public Transportation - see above.	
Credit 1.2	Regional Priority: SSc4.2 - Bicycle Storage	1	1		Design	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for SSc4.2 Bicycle Storage - see above.	
Credit 1.3	Regional Priority: SSc4.4 - Parking Capacity	1	1		Design	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for SSc4.4 Parking Capacity - see above.	
Credit 1.4	Regional Priority: SSc6.1 Stormwater Quantity	1		1	Design	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for SSc6.1 Stormwater Quantity - see above.	
Credit 1.5	Regional Priority: SSc7.2 Heat Island Roof	1	1		Design	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for SSc7.2 Heat Island Roof - see above.	
Credit 1.6	Regional Priority: MRc1.1 Building Reuse (55%)	1		1	Construction	Intent: Provide an incentive for the achievement of credits that address geographically specific environmental priorities. Potential Technologies & Strategies: Meet the requirements for MRc1.1 Building Reuse - see above.	55% goal
Subtotal	0 / 4 Credits Required	4	2				

Project Totals (pre-design estimates)	110 Possible Credits	69	21	15
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[UA] Indicates User-Agency responsibility for compliance and documentation
 * Asterisk indicates Inserted Note

LEED Scoring Levels	Credits
Certified	40-49
Silver	50-59
Gold	60-79
Platinum	80+

UNIVERSITY OF WISCONSIN - MADISON
CHEMISTRY INSTRUCTIONAL ADDITION AND RENOVATION

APPENDIX H

ESTIMATE OF PROBABLE
COST

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EXECUTIVE SUMMARY

TARGET VALUE BUDGET DEVELOPMENT APPROACH

Included within this report is a comprehensive Target Value Budget Model that Mortenson Construction has developed through a collaborative effort with the design team lead by Aro Eberle Architects and Ballinger. The intent of this effort was to identify the budget for the overall program of the UW Chemistry Instructional Addition and Renovation in its entirety for the base project and beyond. From the comprehensive all-program cost model, the scope of the Base Project, Future Projects, and other Infrastructure Projects was captured.

This Target Value Budget (TVB) was arrived at from a cost model that Mortenson Construction developed with numerous sources of information, coordination meetings, and working sessions with the Core Team and Design Team. Mortenson's base cost model was based on the scope outlined through these interactions and information. The Core Team then developed the TVB by honing in on the overall strategy for funding the program.

The proposed Base Project for the UW Chemistry Addition and Renovation is reflected in this report as a \$103 million total project budget. This report supports and provides the detail back-up to the budgets that have been proposed to the Campus Planning Committee. The Future Projects identified through this process are budgeted at \$41 million total project budget. And lastly, the Other Infrastructure Projects, which are intended to be taken on individually, total another \$10 million total project budget. The total of all projects identified within this study is \$154 million total project budget. With these target budgets established and their related scope of work identified, the Core Team can move forward to planning their project.

TARGET VALUE BUDGET BREAKDOWN AND FORMAT

This Target Value Budget is broken down to reflect the grouping of scope in alignment with the (3) groups of projects - Base, Future, and Other. This breakdown has been arrived at through several iterations with the Design and Core Team to support the State and UW campus planning process. Please find outlined below the scope of work included within each group of projects.

BASE PROJECT SCOPE (REPORT SECTION C)

- Chemistry New Tower - 170,015 SF building addition, 8-story building with basement and penthouse, (2) floors shelled for future build-out
- General Chemistry Renovations - 41,256 SF building renovation of floors Basement, First and Second of Daniels building. Includes lab areas as well as core circulation areas.
- Daniels Mechanical Renovations - complete overhaul of roof-top exhaust systems and tie-in to systems in Chemistry New Tower penthouse

FUTURE PROJECTS SCOPE (REPORT SECTION D)

- Chemistry New Tower Build-Out (7th Floor) - 20,190 SF build-out of lab and related areas to include infrastructure and equipment to support these areas.
- Daniels & Mathews Renovations - 41,449 SF of renovations on Basement, First and Second floors of both buildings. Includes new structural openings, new MEP equipment and distribution, and complete gut and rework of these areas.
- Chemistry New Tower Build-Out (8th Floor) - 20,725 SF build-out of lab and related areas to include infrastructure and equipment to support these areas.

OTHER INFRASTRUCTURE PROJECTS SCOPE (REPORT SECTION E)

- Series of infrastructure projects outlined in our log of projects that addresses infrastructure and building issues in Mathews and Daniels buildings that are not resolved within the Base and Future projects scope of work.

A clarification on how budgets were allocated between Instructional, Infrastructure, and Shell categories:

- Instructional - all selective demolition, structure, enclosure, interior construction and finishes, and MEP distribution work to accomplish new or upgraded instructional areas in the Chemistry New Tower and within the Daniels and Mathews buildings.
- Infrastructure - the scope of work captured in this category is related to the work that is required to get both the Daniels and Mathews buildings systems brought to industry standard operations. This does not include the renovation of the research areas, but the MEP systems and other systems required to support those areas properly.

- Shell - this captures the work to accomplish the 8th floor build-out of the Chemistry New Tower. This is not reflected in Instructional as its future use remains unidentified at this time.

In each Sections C, D, and E you will find the executive summary and back-up to the target value budget for each category. The back-up includes our total construction budget summary, the breakdown by area, a Gross Square Footage and Enclosure Area Summary as well as any detail on each of the breakdown areas.

The construction cost models includes a construction escalation factor based on 2.5% starting in 2013 until the mid-point of construction for each project. The mid-point for each project was arrived at with the anticipated construction schedules outlined below.

	Project Area	Estimated Start	Estimated Completion
Base Project	Chemistry New Tower	September 2015	July 2017
	General Chemistry Renovations	July 2017	March 2018
	Daniels Mechanical Renovations	July 2017	March 2018
Future Projects	Chemistry New Tower Build-out (7th & 8th Floors)	September 2017	February 2018
	Daniels & Mathews Renovations	October 2018	October 2019
Other Projects	Other Infrastructure Projects	September 2015	April 2020

TARGET VALUE BUDGET BREAKDOWN AND FORMAT - CONT.

Also included in the construction cost models is a contingency factor of 0% for the base project and, 3% for the Future and Other projects, a 3.5% factor for contractor insurances, bonds, and fees. The indirect cost factors included are based on a percent of construction costs - A/E Design fees at 8%, DSF Management at 4% (of both construction and contingency), Contingency at 5% for Instructional and shell work and 7% for Infrastructure work, and FF&E at 3% for Instructional and shell work and 1% for Infrastructure work.

WORKING SESSIONS

Mortenson participated in a number of working sessions with the Design team in order to gain a comprehensive understanding of the program and intended scope for all areas of the building. The following outlines these sessions that contributed to the development of the enclosed Target Value Budget.

July 20, 2011 Initial working session with Design Team to kick-off effort
August 9, 2011 Walk-Thru of existing Daniels/Mathews Buildings with Kyle Roux
August 10, 2011 Design Team working session
August 16, 2011 Structural Systems discussion with Henneman Engineering
August 22, 2011 Initial Cost Model Review with Design Team
August 23, 2011 MEP Cost Model Review and Systems Scope with AEI
September 9, 2011 Core Team Meeting at Chemistry
September 20, 2011 Review Cost Model Updates with Design Team
October 14, 2011 Other Infrastructure Projects Matrix Review
October 18, 2011 Infrastructure Projects Scope Review with AEI
November 1, 2011 Infrastructure Projects Budget Review with Design Team
November 15, 2011 Updated Project Budget Breakdown Review with Design Team
November 22 & 29 Final MEP Infrastructure Scope and Budget Review

ARCHITECTURAL

Project Initiation Meeting summary provided by Aro Eberle and Ballinger dated January 10, 2011.

Executive Summary presented during Core Team Meeting by Aro Eberle and Ballinger on September 9, 2011.

Drawings provided by Aro Eberle and Ballinger dated June 30, 2011.

Updated drawings provided by Aro Eberle and Ballinger received electronically on July 29, 2011.

Proposed project breakdown provided by Aro Eberle and Ballinger dated July 13, 2011.

Systems Repair Matrix provided by Aro Eberle and Ballinger dated October 4, 2011.

STRUCTURAL SYSTEMS

Building Structural information provided by Henneman Engineering during conference call on August 16, 2011.

EXISTING ENCLOSURE

Daniel's and Mathew's building enclosure matrix received from Aro Eberle and Ballinger on October 27, 2011.

MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS

MEP/IT/F Cost Estimate provided by Affiliated Engineers, Inc. dated July 28, 2011.

Plumbing systems narrative provided by Affiliated Engineers, Inc. received on July 27, 2011.

Electrical systems narrative provided by Affiliated Engineers, Inc. received on July 27, 2011.

Mechanical systems narrative provided by Affiliated Engineers, Inc. received on August 4, 2011.

UW Chemistry - Daniels Existing Systems memo provided by Affiliated Engineers, Inc. dated September 20, 2011.

Sheet MD111 Mezzanine Demolition Floor Plan - HVAC provided by Affiliated Engineers, Inc. dated July 10, 2010 with notes clarifying

Infrastructure Project Item D310 received on October 24, 2011.

TARGET VALUE BUDGET - ALL PROJECTS TOP LEVEL SUMMARY

	INSTRUCTIONAL	INFRASTRUCTURE	SHELL	COMBINED
Base Project - Total Project Budget	\$89,178,565	\$14,312,699		\$103,491,263
Future Projects - Total Project Budget	\$12,805,412	\$20,667,216	\$7,505,613	\$40,978,240
Other Infrastructure Projects - Total Project Budget		\$9,673,103		\$9,673,103
TOTAL PROJECT BUDGET - ALL PROJECTS	\$101,983,976	\$44,653,018	\$7,505,613	\$154,142,606

CLARIFICATIONS:

General Notes:

- Target value budgets include escalation at 2.5%/year starting in 2013 to mid-point of construction for each project
- Target value budgets are based on project scope outlines and floor plans provided by Aro Eberle/Ballinger and narratives from Affiliated Engineers
- Target value budgets are based on historical benchmark project costs for similar projects
- Target values are construction only, and do not include indirect costs including hazardous material abatement/removal
- A/E Design fees are included at 8% of construction cost
- DSF Management fee is included at 4% of construction cost combined with contingency
- Owner contingency is included at 5% for Instructional and Other projects, 7% for Infrastructure projects
- Moveable and Special Equipment has been included at 3% for Instructional and Other projects, and 1% for Infrastructure projects

Note:

Executive and detailed summaries for each group of projects are included in this report.

BASE PROJECT - TARGET VALUE BUDGET

EXECUTIVE SUMMARY

BASE PROJECT SCOPE	INSTRUCTIONAL	INFRASTRUCTURE	COMBINED
Chemistry New Tower - Construction Cost	\$68,905,875	\$610,481	\$69,516,356
Daniels General Chemistry Renovations - Construction Cost	\$5,409,453	\$7,407,427	\$12,816,880
Daniels Mechanical Renovations - Construction Cost		\$3,908,399	\$3,908,399
Construction Budget - Sub-Total	\$74,315,328	\$11,926,307	\$86,241,635
A/E Design Fees (8%)	\$5,945,226	\$954,105	\$6,899,331
DSF Management Fees (4%)	\$3,121,244	\$510,446	\$3,631,690
Contingency (5% for Instructional, 7% for Infrastructure)	\$3,715,766	\$834,841	\$4,550,608
Moveable/Special Equipment	\$2,081,000	\$87,000	\$2,168,000
TOTAL BASE PROJECT BUDGET	\$89,178,565	\$14,312,699	\$103,491,263

PROJECT SCOPE INCLUSIONS / CLARIFICATIONS:

GENERAL NOTES:

- Target value budgets include escalation at 2.5%/year starting in 2013
- Target value budgets are based on project scope outlines and floor plans provided by Aro Eberle/Ballinger and narratives from Affiliated Engineers
- Target value budgets are based on historical benchmark project costs for similar projects
- Target values are construction only, and do not include indirect costs including hazardous material abatement/removal

CHEMISTRY NEW TOWER SCOPE/CLARIFICATIONS

- Includes demolition of existing building spaces and adjacent church rectory structure
- Includes construction of new tower floors basement through 8th and penthouse
- Includes relocation of exterior area well on east elevation
- Includes buildout of electrical room in subbasement of Daniels building (30'x30')
- Includes renovation of Daniels building spaces affected to tie buildings together
- Includes tunnel for new steam/chilled water feed to tower from Charter Street
- Includes infrastructure/equipment to serve areas built out in the New Tower only
- Includes buildout of Floors basement through 6th floor and penthouse
- 7th and 8th Floors remain shelled space for future build-out

GENERAL CHEMISTRY RENOVATIONS SCOPE/CLARIFICATIONS

- Includes full gut and renovation of spaces shown on floor plans
- Includes all new MEP distribution within affected spaces
- Assumes new equipment infrastructure in accordance with AEI narratives
- Includes renovation of existing toilet rooms on floors affected within current confines of the existing rooms
- Includes shifting of existing outside air intake to an exterior area well and related structural infill at SE corner of space

DANIELS TOWER MECHANICAL UPGRADES SCOPE/CLARIFICATIONS

- Includes new equipment in New Tower Penthouse and tie-in at Daniels penthouse
- Includes demolition of existing Daniels tower metal panel penthouse enclosure
- Includes rework of roof structure for infills and reconstruction of roof at Daniels Tower
- Includes tie-in to all exhausting shafts to new equipment and removal of old exhaust fans/equipment

BASE PROJECT

TOTAL CONSTRUCTION SUMMARY

Total Construction - Unifomat Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	27,600 sf		\$83.70	\$10.27	\$2,310,120
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	206,906 sf		\$35.27	\$32.43	\$7,298,258
EXTERIOR ENCLOSURE	94,663 sf		\$80.00	\$33.65	\$7,573,047
ROOFING	60,050 sf		\$17.11	\$4.57	\$1,027,680
INTERIOR CONSTRUCTION	170,356 sf		\$31.79	\$24.06	\$5,415,002
STAIRS	630 rise		\$773.33	\$2.17	\$487,200
INTERIOR FINISHES	170,356 sf		\$22.99	\$17.41	\$3,916,824
CONVEYING	33 stop		\$35,878.79	\$5.26	\$1,184,000
PLUMBING	225,023 sf		\$18.87	\$18.87	\$4,245,784
HVAC	225,023 sf		\$70.72	\$70.72	\$15,913,455
FIRE PROTECTION	211,271 sf		\$3.80	\$3.57	\$802,269
ELECTRICAL	225,023 sf		\$44.53	\$44.53	\$10,019,449
EQUIPMENT	150,940 sf		\$23.97	\$16.08	\$3,617,779
FURNISHINGS	170,356 sf		\$16.34	\$12.37	\$2,782,982
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	225,023 sf		\$4.94	\$4.94	\$1,112,477
SITE PREPARATION	37,630 sf		\$4.98	\$0.83	\$187,325
SITE IMPROVEMENTS	37,630 sf		\$14.31	\$2.39	\$538,625
SITE CIVIL / MECHANICAL UTILITIES	37,630 sf		\$4.55	\$0.76	\$171,185
SITE ELECTRICAL UTILITIES	37,630 sf		\$10.07	\$1.68	\$378,783
GENERAL REQUIREMENTS	225,023 sf		\$31.70	\$31.70	\$7,132,767
UNIFORMAT SYSTEM - SUBTOTAL				\$338.25	\$76,115,011
CONSTRUCTION ESCALATION			9.811%	\$33.19	\$7,467,755
SUBTOTAL					\$83,582,766
EST./CONST. CONTINGENCY			0.000%	\$0.00	\$0
SUBTOTAL					\$83,582,766
INSURANCES, BOND & FEE			3.500%	\$13.00	\$2,925,401
TOTAL CONSTRUCTION					\$86,508,167
PER GROSS SQUARE FOOT				\$384.44	\$/GSF
GROSS SQUARE FEET				225,023	GSF

BASE PROJECT

TOTAL CONSTRUCTION - BUILDING / AREA BREAKDOWN

Unifomat System Summary

UniFormat System Breakdown	CHEMISTRY NEW TOWER		DANIELS GENERAL CHEMISTRY RENOVATIONS		DANIELS GENERAL CHEMISTRY CORE RENOVATIONS		DANIELS MECHANICAL RENOVATIONS		TOTAL	
	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total
FOUNDATIONS	\$13.59	\$2,310,120	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$10.27	\$2,310,120
BASEMENT CONSTRUCTION	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SUPERSTRUCTURE	\$41.90	\$7,123,258	\$0.00	\$0	\$6.44	\$125,000	\$3.64	\$50,000	\$32.43	\$7,298,258
EXTERIOR ENCLOSURE	\$44.54	\$7,573,047	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$33.65	\$7,573,047
ROOFING	\$3.62	\$615,120	\$0.00	\$0	\$0.00	\$0	\$30.00	\$412,560	\$4.57	\$1,027,680
INTERIOR CONSTRUCTION	\$25.78	\$4,383,602	\$25.00	\$546,000	\$25.00	\$485,400	\$0.00	\$0	\$24.06	\$5,415,002
STAIRS	\$2.87	\$487,200	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$2.17	\$487,200
INTERIOR FINISHES	\$18.43	\$3,132,960	\$19.00	\$414,960	\$19.00	\$368,904	\$0.00	\$0	\$17.41	\$3,916,824
CONVEYING	\$6.96	\$1,184,000	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$5.26	\$1,184,000
PLUMBING	\$17.37	\$2,953,922	\$28.68	\$626,343	\$8.95	\$173,679	\$35.76	\$491,840	\$18.87	\$4,245,784
HVAC	\$66.79	\$11,355,645	\$76.62	\$1,673,305	\$39.31	\$763,272	\$154.25	\$2,121,233	\$70.72	\$15,913,455
FIRE PROTECTION	\$3.91	\$664,521	\$3.00	\$65,520	\$3.72	\$72,228	\$0.00	\$0	\$3.57	\$802,269
ELECTRICAL	\$48.27	\$8,206,426	\$46.49	\$1,015,302	\$37.33	\$724,721	\$5.31	\$73,000	\$44.53	\$10,019,449
EQUIPMENT	\$15.54	\$2,642,779	\$44.64	\$975,000	\$0.00	\$0	\$0.00	\$0	\$16.08	\$3,617,779
FURNISHINGS	\$9.95	\$1,691,462	\$49.71	\$1,085,760	\$0.30	\$5,760	\$0.00	\$0	\$12.37	\$2,782,982
SPECIAL CONSTRUCTION	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	\$2.42	\$411,125	\$15.00	\$327,600	\$15.00	\$291,240	\$6.00	\$82,512	\$4.94	\$1,112,477
SITE PREPARATION	\$0.54	\$92,325	\$4.35	\$95,000	\$0.00	\$0	\$0.00	\$0	\$0.83	\$187,325
SITE IMPROVEMENTS	\$2.72	\$461,625	\$3.53	\$77,000	\$0.00	\$0	\$0.00	\$0	\$2.39	\$538,625
SITE CIVIL / MECHANICAL UTILITIES	\$0.98	\$166,185	\$0.23	\$5,000	\$0.00	\$0	\$0.00	\$0	\$0.76	\$171,185
SITE ELECTRICAL UTILITIES	\$2.21	\$376,283	\$0.11	\$2,500	\$0.00	\$0	\$0.00	\$0	\$1.68	\$378,783
GENERAL REQUIREMENTS	\$33.96	\$5,772,989	\$32.71	\$714,421	\$16.03	\$311,256	\$24.29	\$334,101	\$31.70	\$7,132,767
SUBTOTAL	\$362.35	\$61,604,594	\$349.07	\$7,623,711	\$171.07	\$3,321,460	\$259.25	\$3,565,246	\$338.25	\$76,115,011
CONSTRUCTION ESCALATION	9.03%	\$5,560,965	13.14%	\$1,001,819	13.14%	\$436,468	13.14%	\$468,503	9.81%	\$7,467,755
SUBTOTAL		\$67,165,559		\$8,625,530		\$3,757,928		\$4,033,749		\$83,582,766
EST./CONST. CONTINGENCY	0.000%	\$0		\$0		\$0		\$0		\$0
SUBTOTAL		\$67,165,559		\$8,625,530		\$3,757,928		\$4,033,749		\$83,582,766
INSURANCES, BOND & FEE	3.500%	\$2,350,797		\$301,894		\$131,528		\$141,182		\$2,925,401
CONSTRUCTION TOTAL		\$69,516,356		\$8,927,424		\$3,889,456		\$4,174,931		\$86,508,167
PER GROSS SQUARE FOOT	\$408.88	\$/GSF	\$408.76	\$/GSF	\$200.32	\$/GSF	\$303.59	\$/GSF	\$384.44	\$/GSF
GROSS SQUARE FEET	170,015	GSF	21,840	GSF	19,416	GSF	13,752	GSF	225,023	GSF

BASE PROJECT

Gross Square Footage And Enclosure Area Summary - Cont.

		NEW BUILDING GSF	BUILD-OUT GSF	RENOVATION GSF	TOTAL GSF	PERIMETER DISTANCE FT	FLR. TO FLR. HEIGHT	BUILDING ENCLOSURE SF
11	Chemistry New Tower Shell & Core	14,560			14,560	544	16.00	8,704
15	Chemistry New Tower Build-Out		14,560		0			0
					0			0
	PENTHOUSE 2 (Elevation 228'-0")				0			0
11	Chemistry New Tower Shell & Core	0			0	544	16.00	8,704
15	Chemistry New Tower Build-Out		0		0			0
					0			0
	DANIELS - Renovations				0			0
	BASEMENT FLOOR (Elevation 88'-0")				0			0
20	Daniels General Chemistry Renovations			7,280	7,280		12.00	0
25	Daniels General Chemistry Core Renovations			6,472	6,472		12.00	0
					0			0
	FIRST FLOOR (Elevation 100'-0")				0			0
20	Daniels General Chemistry Renovations			7,280	7,280		12.00	0
25	Daniels General Chemistry Core Renovations			6,472	6,472		12.00	0
					0			0
	SECOND FLOOR (Elevation 112'-0")				0			0
20	Daniels General Chemistry Renovations			7,280	7,280		12.00	0
25	Daniels General Chemistry Core Renovations			6,472	6,472		12.00	0
					0			0
	EIGHTH FLOOR (Elevation 184'-0")				0			0
30	Daniels Mechanical Renovations			13,752	13,752		12.00	0
					0			0
	ADDITIONAL ENCLOSURE				0			0
11	Parapets				0	960	3.50	3,360
11	Soffits & Overhangs				0			3,723
	Miscellaneous Additional Enclosure 8.0%				0			7,012
					0			0
	TOTALS	170,015	129,100	55,008	225,023	0.56 :encl/GSF		94,663

BASE PROJECT

TOTAL CONSTRUCTION - CHEMISTRY NEW TOWER

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	27,600 sf		\$83.70	\$13.59	\$2,310,120
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	173,738 sf		\$41.00	\$41.90	\$7,123,258
EXTERIOR ENCLOSURE	94,663 sf		\$80.00	\$44.54	\$7,573,047
ROOFING	32,546 sf		\$18.90	\$3.62	\$615,120
INTERIOR CONSTRUCTION	129,100 sf		\$33.96	\$25.78	\$4,383,602
STAIRS	630 rise		\$773.33	\$2.87	\$487,200
INTERIOR FINISHES	129,100 sf		\$24.27	\$18.43	\$3,132,960
CONVEYING	33 stop		\$35,878.79	\$6.96	\$1,184,000
PLUMBING	170,015 sf		\$17.37	\$17.37	\$2,953,922
HVAC	170,015 sf		\$66.79	\$66.79	\$11,355,645
FIRE PROTECTION	170,015 sf		\$3.91	\$3.91	\$664,521
ELECTRICAL	170,015 sf		\$48.27	\$48.27	\$8,206,426
EQUIPMENT	129,100 sf		\$20.47	\$15.54	\$2,642,779
FURNISHINGS	129,100 sf		\$13.10	\$9.95	\$1,691,462
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	170,015 sf		\$2.42	\$2.42	\$411,125
SITE PREPARATION	36,930 sf		\$2.50	\$0.54	\$92,325
SITE IMPROVEMENTS	36,930 sf		\$12.50	\$2.72	\$461,625
SITE CIVIL / MECHANICAL UTILITIES	36,930 sf		\$4.50	\$0.98	\$166,185
SITE ELECTRICAL UTILITIES	36,930 sf		\$10.19	\$2.21	\$376,283
GENERAL REQUIREMENTS	170,015 sf		\$33.96	\$33.96	\$5,772,989
UNIFORMAT SYSTEM - SUBTOTAL				\$362.35	\$61,604,594
CONSTRUCTION ESCALATION			9.027%	\$32.71	\$5,560,965
SUBTOTAL					\$67,165,559
EST./CONST. CONTINGENCY			0.000%	\$0.00	\$0
SUBTOTAL					\$67,165,559
INSURANCES, BOND & FEE			3.500%	\$13.83	\$2,350,797
TOTAL CONSTRUCTION					\$69,516,356
PER GROSS SQUARE FOOT				\$408.88 \$/GSF	
GROSS SQUARE FEET				170,015 GSF	

BASE PROJECT

TOTAL CONSTRUCTION - GENERAL CHEMISTRY RENOVATIONS - DANIELS BUILDING

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	0 sf		\$0.00	\$0.00	\$0
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	21,840 sf		\$25.00	\$25.00	\$546,000
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	21,840 sf		\$19.00	\$19.00	\$414,960
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	21,840 sf		\$28.68	\$28.68	\$626,343
HVAC	21,840 sf		\$76.62	\$76.62	\$1,673,305
FIRE PROTECTION	21,840 sf		\$3.00	\$3.00	\$65,520
ELECTRICAL	21,840 sf		\$46.49	\$46.49	\$1,015,302
EQUIPMENT	21,840 sf		\$44.64	\$44.64	\$975,000
FURNISHINGS	21,840 sf		\$49.71	\$49.71	\$1,085,760
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	21,840 sf		\$15.00	\$15.00	\$327,600
SITE PREPARATION	700 sf		\$135.71	\$4.35	\$95,000
SITE IMPROVEMENTS	700 sf		\$110.00	\$3.53	\$77,000
SITE CIVIL / MECHANICAL UTILITIES	700 sf		\$7.14	\$0.23	\$5,000
SITE ELECTRICAL UTILITIES	700 sf		\$3.57	\$0.11	\$2,500
GENERAL REQUIREMENTS	21,840 sf		\$32.71	\$32.71	\$714,421
UNIFORMAT SYSTEM - SUBTOTAL				\$349.07	\$7,623,711
CONSTRUCTION ESCALATION			13.141%	\$45.87	\$1,001,819
SUBTOTAL					\$8,625,530
EST./CONST. CONTINGENCY			0.000%	\$0.00	\$0
SUBTOTAL					\$8,625,530
INSURANCES, BOND & FEE			3.500%	\$13.82	\$301,894
TOTAL CONSTRUCTION					\$8,927,424
PER GROSS SQUARE FOOT				\$408.76 \$/GSF	
GROSS SQUARE FEET				21,840 GSF	

BASE PROJECT

TOTAL CONSTRUCTION - GENERAL CHEMISTRY CORE RENOVATIONS - DANIELS BUILDING

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	19,416 sf		\$6.44	\$6.44	\$125,000
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	19,416 sf		\$25.00	\$25.00	\$485,400
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	19,416 sf		\$19.00	\$19.00	\$368,904
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	19,416 sf		\$8.95	\$8.95	\$173,679
HVAC	19,416 sf		\$39.31	\$39.31	\$763,272
FIRE PROTECTION	19,416 sf		\$3.72	\$3.72	\$72,228
ELECTRICAL	19,416 sf		\$37.33	\$37.33	\$724,721
EQUIPMENT	0 sf		\$0.00	\$0.00	\$0
FURNISHINGS	19,416 sf		\$0.30	\$0.30	\$5,760
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	19,416 sf		\$15.00	\$15.00	\$291,240
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	19,416 sf		\$16.03	\$16.03	\$311,256
UNIFORMAT SYSTEM - SUBTOTAL				\$171.07	\$3,321,460
CONSTRUCTION ESCALATION			13.141%	\$22.48	\$436,468
SUBTOTAL					\$3,757,928
EST./CONST. CONTINGENCY			0.000%	\$0.00	\$0
SUBTOTAL					\$3,757,928
INSURANCES, BOND & FEE			3.500%	\$6.77	\$131,528
TOTAL CONSTRUCTION					\$3,889,456
PER GROSS SQUARE FOOT				\$200.32 \$/GSF	
GROSS SQUARE FEET				19,416 GSF	

BASE PROJECT

TOTAL CONSTRUCTION - DANIELS MECHANICAL RENOVATIONS

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	13,752 sf		\$3.64	\$3.64	\$50,000
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	13,752 sf		\$15.00	\$15.00	\$206,280
INTERIOR CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	0 sf		\$0.00	\$0.00	\$0
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	13,752 sf		\$35.76	\$35.76	\$491,840
HVAC	13,752 sf		\$154.25	\$154.25	\$2,121,233
FIRE PROTECTION	0 sf		\$0.00	\$0.00	\$0
ELECTRICAL	13,752 sf		\$5.31	\$5.31	\$73,000
EQUIPMENT	0 sf		\$0.00	\$0.00	\$0
FURNISHINGS	0 sf		\$0.00	\$0.00	\$0
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	13,752 sf		\$6.00	\$6.00	\$82,512
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	13,752 sf		\$22.74	\$22.74	\$312,772
UNIFORMAT SYSTEM - SUBTOTAL				\$242.70	\$3,337,637
CONSTRUCTION ESCALATION			13.141%	\$31.89	\$438,593
SUBTOTAL					\$3,776,230
EST./CONST. CONTINGENCY			0.000%	\$0.00	\$0
SUBTOTAL					\$3,776,230
INSURANCES, BOND & FEE			3.500%	\$9.61	\$132,169
TOTAL CONSTRUCTION					\$3,908,399
PER GROSS SQUARE FOOT				\$284.21 \$/GSF	
GROSS SQUARE FEET				13,752 GSF	

FUTURE PROJECTS - TARGET VALUE BUDGET

EXECUTIVE SUMMARY

FUTURE PROJECTS SCOPE	INSTRUCTIONAL	INFRASTRUCTURE	SHELL	COMBINED
Chemistry New Tower Build-Out (7th Floor) - Construction Cost	\$6,124,262			\$6,124,262
Daniels & Mathews Renovations - Construction Cost	\$4,529,159	\$7,847,145		\$12,376,304
Daniels & Mathews Infrastructure Projects - Construction Cost		\$9,335,442		\$9,335,442
Chemistry New Tower Build-Out (8th Floor) - Construction Cost			\$6,244,270	\$6,244,270
Construction Budget - Sub-Total	\$10,653,421	\$17,182,587	\$6,244,270	\$34,080,278
A/E Design Fees (8%)	\$852,274	\$1,374,607	\$499,542	\$2,726,422
DSF Management Fees (4%)	\$447,444	\$735,415	\$262,259	\$1,445,118
Contingency (5% for Instructional and Shell, 7% for Infrastructure)	\$532,671	\$1,202,781	\$312,214	\$2,047,666
Move/Special Equipment (3% for Instructional and Shell, 1% for Infrastructure)	\$319,603	\$171,826	\$187,328	\$678,757
TOTAL FUTURE PROJECTS BUDGET	\$12,805,412	\$20,667,216	\$7,505,613	\$40,978,240

PROJECT SCOPE INCLUSIONS/CLARIFICATIONS:

GENERAL NOTES:

- Target value budgets include escalation at 2.5%/year starting in 2013
- Target value budgets are based on project scope outlines and floor plans provided by Aro Eberle/Ballinger and narratives from Affiliated Engineers
- Target value budgets are based on historical benchmark project costs for similar projects
- Target values are construction only, and do not include indirect costs including hazardous material abatement/removal

CHEMISTRY NEW TOWER BUILD-OUT (7TH FLOOR) SCOPE/CLARIFICATIONS

- Includes fitout of 7th floor including lab spaces
- Includes additional penthouse equipment to services these fitout areas

DANIELS & MATHEWS RENOVATIONS SCOPE/CLARIFICATIONS

- Includes complete gut and renovation of spaces shown on floor plans
- Includes rework of structural openings at new floor openings as shown
- Includes all new MEP distribution within affected spaces
- Assumes new equipment infrastructure in accordance with AEI narratives
- Includes fire protection system upgrades an unaffected spaces on Ground and Second Floor of Mathews building

DANIELS & MATHEWS INFRASTRUCTURE PROJECT SCOPE/CLARIFICATIONS

- Includes demolition and replacement of roof at Mathews to facilitate new penthouse for new mechanical equipment
- Includes all new MEP distribution and source equipment to support Floors 36
- Includes rework/new shafts and modifications to interior construction and finishes to accomplish for mechanical work at Floors 36 of Mathews building
- Includes new mechanical equipment at penthouse in lieu of basement, including replacing exterior plastic ductwork
- Includes fire protection system upgrades through Floors 36 at Mathews Tower
- Includes replacement of plumbing mains with copper in lieu of existing at Daniels

DANIELS & MATHEWS INFRASTRUCTURE PROJECT SCOPE/CLARIFICATIONS

- Includes replacement of bus duct at Daniels Tower Floors 3 through 9

CHEMISTRY NEW TOWER BUILDOUT (8TH FLOOR) SCOPE/CLARIFICATIONS

- Includes fitout of 8th floor including lab spaces
- Includes additional penthouse equipment to service these fitout areas

FUTURE PROJECTS

TOTAL CONSTRUCTION

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	5,187 sf		\$30.00	\$0.72	\$155,610
EXTERIOR ENCLOSURE	4,410 sf		\$45.00	\$0.92	\$198,450
ROOFING	10,374 sf		\$21.46	\$1.03	\$222,667
INTERIOR CONSTRUCTION	216,194 sf		\$12.91	\$12.91	\$2,791,042
STAIRS	23 rise		\$1,250.00	\$0.13	\$28,750
INTERIOR FINISHES	216,194 sf		\$10.88	\$10.88	\$2,351,979
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	216,194 sf		\$7.65	\$7.65	\$1,653,638
HVAC	216,194 sf		\$37.56	\$37.56	\$8,119,574
FIRE PROTECTION	216,194 sf		\$3.37	\$3.37	\$727,554
ELECTRICAL	216,194 sf		\$17.16	\$17.16	\$3,710,652
EQUIPMENT	216,194 sf		\$8.27	\$8.27	\$1,787,500
FURNISHINGS	216,194 sf		\$9.30	\$9.30	\$2,010,480
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	216,194 sf		\$5.81	\$5.81	\$1,256,751
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	216,194 sf		\$11.96	\$11.96	\$2,586,516
UNIFORMAT SYSTEM - SUBTOTAL				\$127.67	\$27,601,163
CONSTRUCTION ESCALATION			15.824%	\$20.20	\$4,367,576
SUBTOTAL					\$31,968,739
EST./CONST. CONTINGENCY			3.000%	\$4.44	\$959,064
SUBTOTAL					\$32,927,803
INSURANCES, BOND & FEE			3.500%	\$5.33	\$1,152,475
TOTAL CONSTRUCTION					\$34,080,278
PER GROSS SQUARE FOOT				\$157.64 \$/GSF	
GROSS SQUARE FEET				216,194 GSF	

FUTURE PROJECTS

TOTAL CONSTRUCTION - BUILDING / AREA BREAKDOWN

Uniformat System Summary

UniFormat System Breakdown	CHEMISTRY NEW TOWER BUILD-OUT (7TH FLR)		DANIELS & MATHEWS RENOVATIONS		DANIELS & MATHEWS INFRASTRUCTURE PROJECTS		CHEMISTRY NEW TOWER BUILD-OUT (8TH FLR)		TOTAL	
	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total	\$/GSF	Total
FOUNDATIONS	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
BASEMENT CONSTRUCTION	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SUPERSTRUCTURE	\$0.00	\$0	\$0.00	\$0	\$1.16	\$155,610	\$0.00	\$0	\$0.72	\$155,610
EXTERIOR ENCLOSURE	\$0.00	\$0	\$0.00	\$0	\$1.48	\$198,450	\$0.00	\$0	\$0.92	\$198,450
ROOFING	\$0.00	\$0	\$0.00	\$0	\$1.66	\$222,667	\$0.00	\$0	\$1.03	\$222,667
INTERIOR CONSTRUCTION	\$25.00	\$504,750	\$25.00	\$1,036,225	\$5.47	\$731,942	\$25.00	\$518,125	\$12.91	\$2,791,042
STAIRS	\$0.00	\$0	\$0.69	\$28,750	\$0.00	\$0	\$0.00	\$0	\$0.13	\$28,750
INTERIOR FINISHES	\$19.00	\$383,610	\$19.00	\$787,531	\$5.88	\$787,063	\$19.00	\$393,775	\$10.88	\$2,351,979
CONVEYING	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
PLUMBING	\$22.67	\$457,693	\$13.95	\$578,268	\$1.10	\$147,856	\$22.67	\$469,821	\$7.65	\$1,653,638
HVAC	\$56.96	\$1,149,936	\$67.42	\$2,794,324	\$22.38	\$2,994,906	\$56.96	\$1,180,408	\$37.56	\$8,119,574
FIRE PROTECTION	\$2.89	\$58,295	\$4.03	\$166,950	\$3.31	\$442,470	\$2.89	\$59,839	\$3.37	\$727,554
ELECTRICAL	\$42.04	\$848,724	\$37.33	\$1,547,124	\$3.31	\$443,590	\$42.04	\$871,214	\$17.16	\$3,710,652
EQUIPMENT	\$28.17	\$568,750	\$15.68	\$650,000	\$0.00	\$0	\$27.44	\$568,750	\$8.27	\$1,787,500
FURNISHINGS	\$31.20	\$630,000	\$18.11	\$750,480	\$0.00	\$0	\$30.40	\$630,000	\$9.30	\$2,010,480
SPECIAL CONSTRUCTION	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	\$0.00	\$0	\$15.00	\$621,735	\$4.74	\$635,016	\$0.00	\$0	\$5.81	\$1,256,751
SITE PREPARATION	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SITE IMPROVEMENTS	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
SITE ELECTRICAL UTILITIES	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
GENERAL REQUIREMENTS	\$23.57	\$475,822	\$22.36	\$926,608	\$5.22	\$698,940	\$23.41	\$485,146	\$11.96	\$2,586,516
SUBTOTAL	\$251.49	\$5,077,580	\$238.56	\$9,887,995	\$55.73	\$7,458,510	\$249.80	\$5,177,078	\$127.67	\$27,601,163
CONSTRUCTION ESCALATION	13.14%	\$667,236	17.41%	\$1,721,501	17.41%	\$1,298,528	13.14%	\$680,311	15.82%	\$4,367,576
SUBTOTAL		\$5,744,816		\$11,609,496		\$8,757,038		\$5,857,389		\$31,968,739
EST./CONST. CONTINGENCY 3.000%		\$172,345		\$348,285		\$262,712		\$175,722		\$959,064
SUBTOTAL		\$5,917,161		\$11,957,781		\$9,019,750		\$6,033,111		\$32,927,803
INSURANCES, BOND & FEE 3.500%		\$207,101		\$418,523		\$315,692		\$211,159		\$1,152,475
CONSTRUCTION TOTAL		\$6,124,262		\$12,376,304		\$9,335,442		\$6,244,270		\$34,080,278
PER GROSS SQUARE FOOT	\$303.33	\$/GSF	\$298.59	\$/GSF	\$69.76	\$/GSF	\$301.29	\$/GSF	\$157.64	\$/GSF
GROSS SQUARE FEET	20,190	GSF	41,449	GSF	133,830	GSF	20,725	GSF	216,194	GSF

FUTURE PROJECTS

Gross Square Footage and Enclosed Area Summary

	NEW BUILDING GSF	BUILD-OUT GSF	RENOVATION GSF	TOTAL GSF	PERIMETER DISTANCE FT	FLR. TO FLR. HEIGHT	BUILDING ENCLOSURE SF
CHEMISTRY ADDITION				0			0
SEVENTH FLOOR (Elevation 180'-0")				0			0
40 Chemistry New Tower Build-Out		20,190		20,190			0
				0			0
EIGHTH FLOOR (Elevation 196'-0")				0			0
60 Chemistry New Tower Build-Out		20,725		20,725			0
				0			0
DANIELS - Renovations				0			0
BASEMENT FLOOR (Elevation 88'-0")				0			0
50 Daniels & Mathews Renovations			8,460	8,460		12.00	0
				0			0
FIRST FLOOR (Elevation 100'-0")				0			0
50 Daniels & Mathews Renovations			8,460	8,460		12.00	0
				0			0
SECOND FLOOR (Elevation 112'-0")				0			0
50 Daniels & Mathews Renovations			7,608	7,608		12.00	0
				0			0
THIRD FLOOR (Elevation 124'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
FOURTH FLOOR (Elevation 136'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
FIFTH FLOOR (Elevation 148'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
SIXTH FLOOR (Elevation 160'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
SEVENTH FLOOR (Elevation 172'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
EIGHTH FLOOR (Elevation 184'-0")				0			0
55 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0

Gross Square Footage and Enclosed Area Summary

	NEW BUILDING GSF	BUILD-OUT GSF	RENOVATION GSF	TOTAL GSF	PERIMETER DISTANCE FT	FLR. TO FLR. HEIGHT	BUILDING ENCLOSURE SF
MATHEWS - Renovations				0			0
BASEMENT FLOOR (Elevation 88'-0")				0			0
50 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
FIRST FLOOR (Elevation 100'-0")				0			0
50 Daniels & Mathews Renovations			6,547	6,547		12.00	0
				0			0
SECOND FLOOR (Elevation 112'-0")				0			0
55 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
THIRD FLOOR (Elevation 124'-0")				0			0
55 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
FOURTH FLOOR (Elevation 136'-0")				0			0
55 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
FIFTH FLOOR (Elevation 148'-0")				0			0
55 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
SIXTH FLOOR (Elevation 160'-0")				0			0
55 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
TOTALS	0	40,915	175,279	216,194	0.00 :encl/GSF		0

FUTURE PROJECTS

TOTAL CONSTRUCTION - CHEMISTRY NEW TOWER BUILD-OUT (7TH FLOOR)

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	0 sf		\$0.00	\$0.00	\$0
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	20,190 sf		\$25.00	\$25.00	\$504,750
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	20,190 sf		\$19.00	\$19.00	\$383,610
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	20,190 sf		\$22.67	\$22.67	\$457,693
HVAC	20,190 sf		\$56.96	\$56.96	\$1,149,936
FIRE PROTECTION	20,190 sf		\$2.89	\$2.89	\$58,295
ELECTRICAL	20,190 sf		\$42.04	\$42.04	\$848,724
EQUIPMENT	20,190 sf		\$28.17	\$28.17	\$568,750
FURNISHINGS	20,190 sf		\$31.20	\$31.20	\$630,000
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	0 sf		\$0.00	\$0.00	\$0
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	20,190 sf		\$23.57	\$23.57	\$475,822
UNIFORMAT SYSTEM - SUBTOTAL				\$251.49	\$5,077,580
CONSTRUCTION ESCALATION			13.141%	\$33.05	\$667,236
SUBTOTAL					\$5,744,816
EST./CONST. CONTINGENCY			3.000%	\$8.54	\$172,345
SUBTOTAL					\$5,917,161
INSURANCES, BOND & FEE			3.500%	\$10.26	\$207,101
TOTAL CONSTRUCTION					\$6,124,262
PER GROSS SQUARE FOOT				\$303.33	\$/GSF
GROSS SQUARE FEET				20,190	GSF

TOTAL CONSTRUCTION - DANIELS & MATHEWS RENOVATIONS

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	0 sf		\$0.00	\$0.00	\$0
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	20,190 sf		\$25.00	\$25.00	\$504,750
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	20,190 sf		\$19.00	\$19.00	\$383,610
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	20,190 sf		\$22.67	\$22.67	\$457,693
HVAC	20,190 sf		\$56.96	\$56.96	\$1,149,936
FIRE PROTECTION	20,190 sf		\$2.89	\$2.89	\$58,295
ELECTRICAL	20,190 sf		\$42.04	\$42.04	\$848,724
EQUIPMENT	20,190 sf		\$28.17	\$28.17	\$568,750
FURNISHINGS	20,190 sf		\$31.20	\$31.20	\$630,000
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	0 sf		\$0.00	\$0.00	\$0
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	20,190 sf		\$23.57	\$23.57	\$475,822
UNIFORMAT SYSTEM - SUBTOTAL				\$251.49	\$5,077,580
CONSTRUCTION ESCALATION			13.141%	\$33.05	\$667,236
SUBTOTAL					\$5,744,816
EST./CONST. CONTINGENCY			3.000%	\$8.54	\$172,345
SUBTOTAL					\$5,917,161
INSURANCES, BOND & FEE			3.500%	\$10.26	\$207,101
TOTAL CONSTRUCTION					\$6,124,262
PER GROSS SQUARE FOOT				\$303.33 \$/GSF	
GROSS SQUARE FEET				20,190 GSF	

FUTURE PROJECTS

TOTAL CONSTRUCTION - DANIELS AND MATHEWS INFRASTRUCTURE PROJECTS

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	0 sf		\$0.00	\$0.00	\$0
EXTERIOR ENCLOSURE	0 sf		\$0.00	\$0.00	\$0
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	41,449 sf		\$25.00	\$25.00	\$1,036,225
STAIRS	23 rise		\$1,250.00	\$0.69	\$28,750
INTERIOR FINISHES	41,449 sf		\$19.00	\$19.00	\$787,531
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	41,449 sf		\$13.95	\$13.95	\$578,268
HVAC	41,449 sf		\$67.42	\$67.42	\$2,794,324
FIRE PROTECTION	55,650 sf		\$3.00	\$4.03	\$166,950
ELECTRICAL	41,449 sf		\$37.33	\$37.33	\$1,547,124
EQUIPMENT	41,449 sf		\$15.68	\$15.68	\$650,000
FURNISHINGS	41,449 sf		\$18.11	\$18.11	\$750,480
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	41,449 sf		\$15.00	\$15.00	\$621,735
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	41,449 sf		\$22.36	\$22.36	\$926,608
UNIFORMAT SYSTEM - SUBTOTAL				\$238.56	\$9,887,995
CONSTRUCTION ESCALATION			17.410%	\$41.53	\$1,721,501
SUBTOTAL					\$11,609,496
EST./CONST. CONTINGENCY			3.000%	\$8.40	\$348,285
SUBTOTAL					\$11,957,781
INSURANCES, BOND & FEE			3.500%	\$10.10	\$418,523
TOTAL CONSTRUCTION					\$12,376,304
PER GROSS SQUARE FOOT				\$298.59 /GSF	
GROSS SQUARE FEET				41,449 GSF	

TOTAL CONSTRUCTION - CHEMISTRY NEW TOWER BUILD-OUT (8TH FLOOR)

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	5,187 sf		\$30.00	\$1.16	\$155,610
EXTERIOR ENCLOSURE	4,410 sf		\$45.00	\$1.48	\$198,450
ROOFING	10,374 sf		\$21.46	\$1.66	\$222,667
INTERIOR CONSTRUCTION	133,830 sf		\$5.47	\$5.47	\$731,942
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	133,830 sf		\$5.88	\$5.88	\$787,063
CONVEYING	0 stop		\$0.00	\$0.00	\$0
PLUMBING	133,830 sf		\$1.10	\$1.10	\$147,856
HVAC	133,830 sf		\$22.38	\$22.38	\$2,994,906
FIRE PROTECTION	133,830 sf		\$3.31	\$3.31	\$442,470
ELECTRICAL	133,830 sf		\$3.31	\$3.31	\$443,590
EQUIPMENT	0 sf		\$0.00	\$0.00	\$0
FURNISHINGS	0 sf		\$0.00	\$0.00	\$0
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	133,830 sf		\$4.74	\$4.74	\$635,016
SITE PREPARATION	0 sf		\$0.00	\$0.00	\$0
SITE IMPROVEMENTS	0 sf		\$0.00	\$0.00	\$0
SITE CIVIL / MECHANICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	133,830 sf		\$5.22	\$5.22	\$698,940
UNIFORMAT SYSTEM - SUBTOTAL				\$55.73	\$7,458,510
CONSTRUCTION ESCALATION			17.410%	\$9.70	\$1,298,528
SUBTOTAL					\$8,757,038
EST./CONST. CONTINGENCY			3.000%	\$1.96	\$262,712
SUBTOTAL					\$9,019,750
INSURANCES, BOND & FEE			3.500%	\$2.36	\$315,692
TOTAL CONSTRUCTION					\$9,335,442
PER GROSS SQUARE FOOT				\$69.76	\$/GSF
GROSS SQUARE FEET				133,830	GSF

OTHER PROJECTS - TARGET VALUE BUDGET

EXECUTIVE SUMMARY

OTHER PROJECTS SCOPE	INSTRUCTIONAL	INFRASTRUCTURE	COMBINED
Other Infrastructure Projects - Construction Costs		\$8,042,154	\$8,042,154
Construction Budget - Sub-Total	\$0	\$8,042,154	\$8,042,154
A/E Design Fees (8%)	\$0	\$643,372	\$643,372
DSF Management Fees (4%)	\$0	\$344,204	\$344,204
Contingency (5% for Instructional, 7% for Infrastructure)	\$0	\$562,951	\$562,951
Moveable/Special Equipment (1%)	\$0	\$80,422	\$80,422
TOTAL OTHER PROJECTS BUDGET	\$0	\$9,673,103	\$9,673,103

PROJECT SCOPE INCLUSIONS/CLARIFICATIONS:

GENERAL NOTES:

- Target value budgets include escalation at 2.5%/year starting in 2013, escalation taken to midpoint of Base and Future Projects schedule (12/2017)
- Target value budgets are based on future project matrix and scope descriptions provided by Aro Eberle/Ballinger and Affiliated Engineers
- Target value budgets are based on historical benchmark project costs for similar projects
- Target values are construction only, and do not include indirect costs including hazardous material abatement/removal

OTHER PROJECTS

TOTAL CONSTRUCTION - OTHER PROJECTS

Uniformat System Summary

UniFormat System Breakdown	System Area SF	UM	per Sys. SF	per GSF	Total
FOUNDATIONS	0 sf		\$0.00	\$0.00	\$0
BASEMENT CONSTRUCTION	0 cf		\$0.00	\$0.00	\$0
SUPERSTRUCTURE	133,830 sf		\$0.29	\$0.29	\$39,000
EXTERIOR ENCLOSURE	133,830 sf		\$17.12	\$17.12	\$2,290,545
ROOFING	0 sf		\$0.00	\$0.00	\$0
INTERIOR CONSTRUCTION	133,830 sf		\$5.68	\$5.68	\$760,065
STAIRS	0 rise		\$0.00	\$0.00	\$0
INTERIOR FINISHES	133,830 sf		\$0.50	\$0.50	\$66,483
CONVEYING	41 stop		\$24,390.24	\$7.47	\$1,000,000
PLUMBING	133,830 sf		\$0.61	\$0.61	\$81,490
HVAC	133,830 sf		\$0.42	\$0.42	\$56,236
FIRE PROTECTION	133,830 sf		\$0.04	\$0.04	\$4,800
ELECTRICAL	133,830 sf		\$0.95	\$0.95	\$127,000
EQUIPMENT	133,830 sf		\$0.12	\$0.12	\$16,500
FURNISHINGS	0 sf		\$0.00	\$0.00	\$0
SPECIAL CONSTRUCTION	0 sf		\$0.00	\$0.00	\$0
SELECTIVE BUILDING DEMOLITION	133,830 sf		\$2.88	\$2.88	\$385,300
SITE PREPARATION	133,830 sf		\$0.03	\$0.03	\$4,000
SITE IMPROVEMENTS	133,830 sf		\$1.91	\$1.91	\$256,000
SITE CIVIL / MECHANICAL UTILITIES	133,830 sf		\$7.85	\$7.85	\$1,050,000
SITE ELECTRICAL UTILITIES	0 sf		\$0.00	\$0.00	\$0
GENERAL REQUIREMENTS	133,830 sf		\$3.96	\$3.96	\$530,271
UNIFORMAT SYSTEM - SUBTOTAL				\$49.82	\$6,667,690
CONSTRUCTION ESCALATION			13.141%	\$6.55	\$876,190
SUBTOTAL					\$7,543,880
EST./CONST. CONTINGENCY			3.000%	\$1.69	\$226,317
SUBTOTAL					\$7,770,197
INSURANCES, BOND & FEE			3.500%	\$2.03	\$271,957
TOTAL CONSTRUCTION					\$8,042,154
PER GROSS SQUARE FOOT				\$60.09 \$/GSF	
GROSS SQUARE FEET				133,830 GSF	

OTHER PROJECTS

Gross Square Footage and Enclosure Area Summary

	NEW BUILDING GSF	BUILD-OUT GSF	RENOVATION GSF	TOTAL GSF	PERIMETER DISTANCE FT	FLR. TO FLR. HEIGHT	BUILDING ENCLOSURE SF
				0			0
DANIELS - Renovations				0			0
THIRD FLOOR (Elevation 124'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
FOURTH FLOOR (Elevation 136'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
FIFTH FLOOR (Elevation 148'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
SIXTH FLOOR (Elevation 160'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
SEVENTH FLOOR (Elevation 172'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
EIGHTH FLOOR (Elevation 184'-0")				0			0
70 Daniels & Mathews Renovations			13,660	13,660		12.00	0
				0			0
MATHEWS - Renovations				0			0
SECOND FLOOR (Elevation 112'-0")				0			0
70 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
THIRD FLOOR (Elevation 124'-0")				0			0
70 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
FOURTH FLOOR (Elevation 136'-0")				0			0
70 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
FIFTH FLOOR (Elevation 148'-0")				0			0
70 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
SIXTH FLOOR (Elevation 160'-0")				0			0
70 Daniels & Mathews Renovations			10,374	10,374		12.00	0
				0			0
				0			0
TOTALS	0	0	133,830	133,830	0.00 :encl/GSF		0

OTHER INFRASTRUCTURE PROJECTS

Project Log

Value Item	Item Date	Description	Section	Status	Decision Req'd Date	Amount	Responsible	Comments & Notes
SECTION								
UNIFORMAT								
B100	6/22/12	Structural patch at 9th floor of Daniels	Daniels Building	Open		\$80,329	Owner	Based on a 500 SF structure patch. Includes shoring and finishes rework below.
B200	10/24/11	Replace Mathews enclosure glass/glazing	Mathews Building	Open		\$860,398	Owner	Assumes replacement of glazing only. Need to confirm details of enclosure framing system.
B210	10/24/11	Replace Daniels enclosure glass/glazing	Daniels Building	Open		\$2,244,394	Owner	Need to confirm rework of unit heaters at perimeter scope of work and add.
B220	10/24/11	Clean and caulk existing precast on Daniels	Daniels Building	Open		\$93,354	Owner	
B230	10/24/11	Clean and caulk existing precast on Mathews	Mathews Building	Open		\$37,681	Owner	
C100	10/24/11	Replace interior doors throughout in Mathews	Mathews Building	Open		\$464,526	Owner	
C110	10/24/11	Replace interior doors throughout in Daniels	Daniels Building	Open		\$733,999	Owner	
D100	10/24/11	Freight elevator modernization in Daniels	Daniels Building	Open		\$331,687	Owner	Based on budgets provided by owner.
D110	10/24/11	Modernization of (2) passenger elevators at Daniels	Daniels Building	Open		\$663,376	Owner	Based on budgets provided by owner.
D120	10/24/11	Freight elevator modernization in Mathews	Mathews Building	Open		\$331,687	Owner	Based on budgets provided by owner.
D210	10/24/11	Provide ventilation/exhaust at Nitrogen filling station	Daniels Building	Open		\$12,807	Owner	
D220	10/24/11	Cross connect RO water system at Shain Tower	Other	Open		\$69,105	Owner	Assumes all rework to take pace in mechanical spaces.
D230	10/24/11	Cross connect RO water system at Mathews	Mathews Building	Open		\$69,105	Owner	Assumes all rework to take pace in mechanical spaces.
D500	10/24/11	Consolidate electrical equipment at Daniels	Daniels Building	Open		\$0	Owner	More information required.
D520	10/24/11	Add emergency power generation for Daniels	Daniels Building	Open		\$137,500	Owner	Delta attributable to Daniels included in Phase 1.
E100	10/24/11	Rework 5th Floor Autoclave set-up - venting, dam, etc.	Mathews Building	Open		\$32,004	Owner	Assumes a 15'x15' gypsum dam and misc. ceiling patching along with new SS ductwork.
E110	10/24/11	Extend Loading/Receiving area and add dock bay	Mathews Building	Open		\$282,068	Owner	Based on extending Loading and Receiving by 800 SF for 1600 SF of total space. Adds 560 SF of loading dock platform on exterior.

Value Item	Item Date	Description	Section	Status	Decision Req'd Date	Amount	Responsible	Comments & Notes
G300	10/24/11	Extend CWS feed from Shain to Daniels to accomplish bypass	Daniels Building	Open		\$1,598,132	Owner	Assume direct bury CWS piping with site restoration. If extensive conflicts/coordination with other utilities are confronted, cost would escalate.
Totals by Section:			Mathews Building			\$2,077,469		
			Daniels Building			\$5,895,578		
			Other			\$69,105		
			Sitework			\$0		
						\$8,042,152		
Totals by Status:			Approved			\$0		
			Recommend			\$0		
			Open			\$8,042,152		
			Closed			\$0		
			Alternate			\$0		
						\$8,042,152		
Totals by Priority:			High			\$0		
			Medium			\$0		
			Low			\$0		
						\$0		

The Value Analysis items listed above have been provided to generate conversation and possible solutions for achieving the owner's desired project scope and budget, and should not be interpreted as engineered solutions. By acceptance of any item and prior to incorporating into the design, the Architect / Engineer of Record shall be solely responsible for verification of all design compatibility within the project including but not limited to life safety, code requirements, thermal and moisture protection, building functionality and program requirements.

The Value Analysis items listed above have been provided to generate conversation and possible solutions for achieving the owner's desired project scope and budget, and should not be interpreted as engineered solutions. By acceptance of any item and prior to incorporating into the design, the Architect / Engineer of Record shall be solely responsible for verification of all design compatibility within the project including but not limited to life safety, code requirements, thermal and moisture protection, building functionality and program requirements.