

EMPORIA STATE UNIVERSITY
SINGULAR / TRUSLER
RESIDENTIAL HALL – TOWERS COMPLEX



REMODEL PROJECT
MARCH 2012

PROGRAM DOCUMENT

SUBMITTED TO KANSAS BOARD OF REGENTS



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
TOWERS COMPLEX
EMPORIA STATE UNIVERSITY
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SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
TOWERS COMPLEX
EMPORIA STATE UNIVERSITY
PLANNING COMMITTEE

- Dr. Tes Mehring, Provost / Vice President Academic Affairs
and Student Life
- Mr. Ray Hauke, Vice President Administration & Fiscal Affairs
- Ms. Lynn Hobson, Assoc. Vice President for Student Life
- Ms. Jackie Scott, Interim Director of Residential Life
- Mr. Wade Redeker, Director of Residential Life
- Mr. Bill Saueressig, Coordination of Maintenance for Residential Life
- Ms. Bobbi Pearson, Director of Facility Planning
- Mr. Mark Runge, Director of University Facilities



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
FACILITY & PROJECT DESCRIPTION

Singular / Trusler Residential Hall (a part of the Towers Residential Complex) is a 57,384 square foot concrete/masonry building opened in 1959. The hall consists of two wings. The Singular (south) wing has a ground level and three floors. The Trusler (north) wing has a ground level and four floors. Singular wing currently provides 55 double occupancy rooms with community toilet/shower facilities on each floor. Trusler wing currently provides 71 double occupancy rooms. Trusler is currently unoccupied due to its condition and the undersubscription of student housing during the last two years. A five story central connection between the wings provides lobby and vertical connection spaces to other floors. This central connection also provides a “bridge” connection to the Towers Complex where administrative and support services are located. It is located in the northeast section of the main campus and is adjacent to Welch Stadium, Stormont Maintenance Facility and Wilson Park.

Most of the Mechanical/Electrical/Plumbing (M.E.P.) Systems and Equipment in this 53 year old facility are original to the building and at the end of their “life expectancy”. Major remodeling, repairs and replacement are necessary to extend the use of this facility for another 30 to 40 years. Additional issues to be addressed include accessibility, life safety, environmental, space planning and roof conditions. This project plans to provide improvements in a two phase construction project starting in June 2012 and being completed in August 2014. The first phase will be the Trusler wing and the second phase will be the central area and the Singular wing.

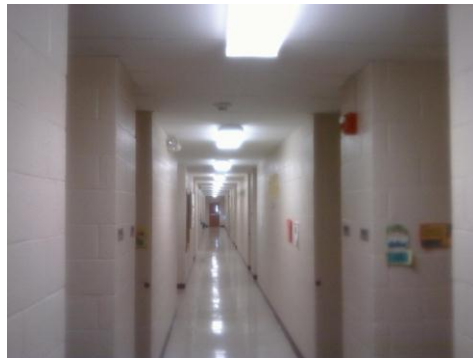


SINGULAR / TRUSLER HALL
FRONT ENTRANCE



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
SPACE PLANNING & ACCESSIBILITY

Current design of residential facilities on university campuses across the country has shown a considerable change over the last few years. Expectations and desires by the students who live in these facilities today compared to dormitory style accommodations provided in the 1960's and 70's are vastly different. Expectations must be met with the ability to offer a variety of options for on campus living. This includes being able to offer apartment style units, single living units, individual bathroom accommodations and community gathering spaces. Additionally, the present demands for electrical and network connectivity significantly surpasses the capabilities of this 53 year old facility. Emporia State University Residential Living has recognized the necessity to provide these options to its potential clients and wishes to include space planning in this project. This will provide options in the Singular / Trusler Residential Complex for students who wish to live on campus.



TYPICAL CORRIDOR



TYPICAL GANG TOILETS
(NOTE: NON COMPLIANT ACCESSIBILITY MEASURES)



This project anticipates to “refresh” each room in this complex by removing the existing fixed furniture and beds. New moveable modular systems will allow the greatest flexibility for each resident to arrange his/her room as they wish. New recently installed insulated windows provide energy efficiency and comfort. New durable floor, wall and ceiling finishes will enhance each space. New suspended acoustical ceiling tile systems will allow for more and better recessed lighting. New ceiling fans in each room will improve individual comfort levels during mid-season intervals. New accessible bathrooms in each sleeping room will provide privacy for individuals without leaving their room. A series of three rooms will be remodeled to develop an apartment style unit for two to four occupants (See Attachments D-1 thru D-5). This will require the installation of a door between the rooms. The center room will become a living area with the rooms on each side to be sleeping rooms. The existing corridor doors to the sleeping rooms will be removed and filled in with a new wall. The result will be approximately 30 apartment style suites in Trusler Hall and 21 suites in Singular Hall (as detailed in Attachments D-1 thru D-3).

Accessibility for all of our students is always a priority in any project and will continue to be in this project. Current regulations and codes will be met or exceeded to provide accessibility. This will include all aspects of this project.

These improvements increase the appeal to prospective students and renew the Singular / Trusler Residential Hall to serve as a major residential living area on campus for many future years.



TYPICAL EXISTING
ROOM FURNISHINGS

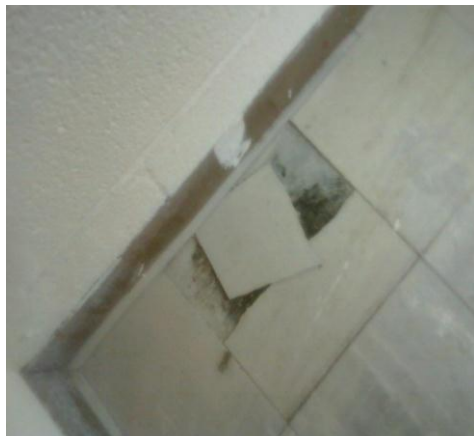


TYPICAL “GANG”
COMMUNITY
SHOWERS

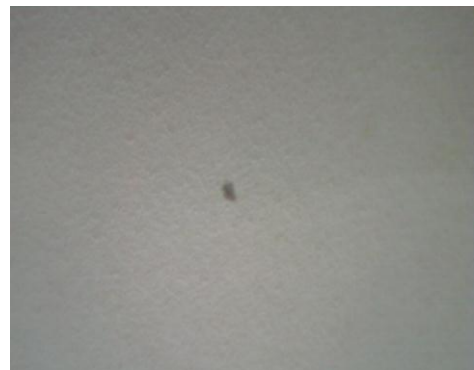


SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
ENVIRONMENTAL ISSUES

An environmental survey has identified the sprayed on texture applied to the ceilings throughout the facility has trace amounts of asbestos included in its mixture. Additionally the floor tile has tested positive for asbestos. Undisturbed, this encapsulated asbestos poses no health threat. However it has been determined that an abatement of this substance should be included in this project. Its removal preserves a healthy environment for the future of the complex. Additionally there is a real possibility this material would be disturbed if not abated prior to start of construction.



TYPICAL ACM FLOOR TILE TO BE
ABATED



TYPICAL ACM SPRAYED ON
CEILING TEXTURE TO BE
ABATED



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
MECHANICAL SYSTEMS

The existing mechanical heating/ventilation/air conditioning (HVAC) system is a two pipe chilled/hot water piping system with fan coil unit (FCU) air distribution. This system's condition is a major concern due, not only to its age, but the damage due to lack of dielectric unions on dissimilar metals. This is increasing the number of leaks and fractures in the piping and will cause a major disruption in services if not replaced as soon as possible. This project reflects the replacement of the water side distribution throughout the facility. The FCU's are original to the building and need to be replaced with new more efficient units. The Complex does have a new chiller and the Singular wing had chilled/hot water piping replaced less than 10 years ago. Neither of these two major components will need to be replaced in this project.



EXISTING MECHANICAL PIPING
AND EQUIPMENT

EXISTING CHILLED / HOT
WATER PIPING TAPED AND
WRAPPED TO STOP LEAKS



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
ELECTRICAL SYSTEMS

The existing main distribution electrical system into Singular is a relatively new 400 Amp Power Center with 120/208V 3 Phase electrical service fed from a 112.5 KVA transformer located outside the building. This system is fed from the existing campus 4160V electrical distribution system through the A-2 S&C Switch Gear located at the southwest corner of the complex. Electrical power is provided through a series of electrical distribution panels located at various locations throughout the facility. There is no grounding available in the power outlets provided in the individual rooms. Additionally, the existing secondary distribution system will not be able to safely handle the additional power requirements with the anticipated changes to space planning, new fire alarm/suppression systems, new supply/exhaust air systems and a general increase in facility usage requirements.

The existing main distribution electrical system into Trusler is the original Federal Pacific 800/1000 Amp Power Center (with two new side mounted 200 Amp Disconnects to two new Variable Speed Drives) with 120/208V 3 Phase electrical service fed from a new 750 KVA transformer located outside the building. This system is fed from the existing campus 4160V electrical distribution system through the A-3 S&C Switch Gear located at the north end of the building. Electrical power is provided through a series of electrical distribution panels located at various locations throughout the facility. There is no grounding available in the power outlets provided in the individual rooms. Additionally, the existing secondary distribution system will not be able to safely handle the additional power requirements with the anticipated changes to space planning, new fire alarm/suppression systems, new supply/exhaust air systems and a general increase in facility usage requirements.



The electrical components of this project will include: new lighting and lighting control circuitry throughout the facility; new receptacles and associated power circuits to all rooms; new panel boards and feeders to serve new receptacles and lighting loads throughout the facility; new egress/emergency lighting and control circuitry throughout the facility; and a new fire alarm system throughout the facility. This new system will provide the electrical needs for existing loads, anticipated loads being added with this project and allows for future increases.



EXISTING FEDERAL PACIFIC MAIN
DISTRIBUTION CENTER
(NOTE: REPLACEMENT PARTS ARE NO
LONGER MANUFACTURED)



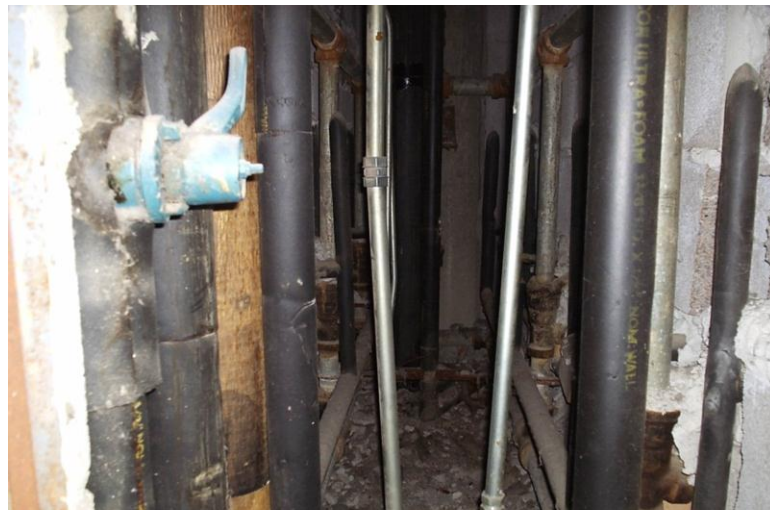
EXISTING ELECTRICAL
DISTRIBUTION PANEL
TYPICAL SURFACE MOUNT
(NOTE: NO REPLACEMENT
PARTS AVAILABLE)



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
PLUMBING SYSTEMS

The existing plumbing supply/waste mains and risers are not adequate to service modifications made to branch feeders and to accommodate changes anticipated in this project. The new plumbing being proposed includes the addition of new bathrooms and sinks to each dwelling unit throughout the facility. Currently there are no plumbing fixtures in any room. Modifications will be necessary to facilitate changes to the dwelling units to service the bathrooms and sinks on each floor. Isolation valves will be added to allow future maintenance work to be accomplished without complete shutdown of the building's water supply. New steam fired water heaters will supply the facilities' domestic hot water requirements.

This project will also add a new fire suppression system by installing a sprinkler system throughout the facility. This will include a new fire pump, electrical connections and fire water service to the facility. A new fire standpipe connection will be added at each stair.



EXISTING PLUMBING CHASE



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY

LIFE SAFETY SYSTEMS

This project will address the concerns and issues raised by the State Fire Marshal's Office regarding the Towers Residential Complex. This project will provide improved notification, detection and suppression systems. A new fire alarm and sprinkler system will be installed throughout this facility to meet current fire/life safety and accessibility codes.

ROOF SYSTEM

The existing three ply built-up roofing system on this facility is over thirty years old and has numerous leaks at all three levels. This project will replace this system with a single ply modified bitumen insulated roof system with no gravel ballast. These new roofs, with maintenance, can expect a life cycle of 30 years or longer.



EXISTING BUILT UP BALLASTED ROOFING
SYSTEM
NOTE THE PONDING



SINGULAR / TRUSLER RESIDENTIAL HALL REMODEL PROJECT
EMPORIA STATE UNIVERSITY
ATTACHMENTS

CAMPUS MAP..... A-1

SITE PLAN..... B-1

EXISTING FLOOR PLANS..... C-1 THRU C-3

PROPOSED FLOOR PLANS..... D-1 THRU D- 4

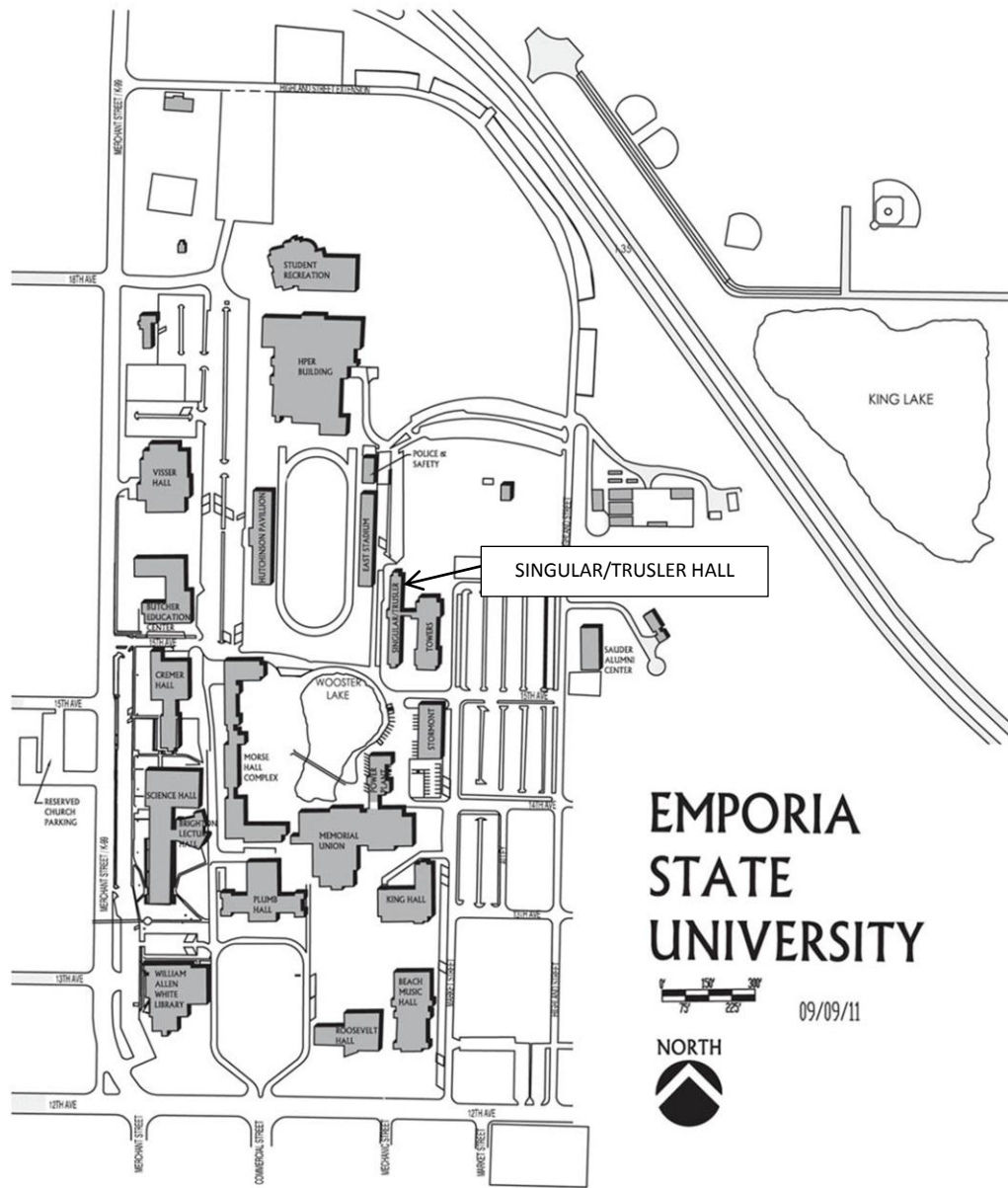
PROJECT SCHEDULE..... E-1 THRU E-2





EMPORIA STATE UNIVERSITY CAMPUS MAP





**EMPORIA
STATE
UNIVERSITY**

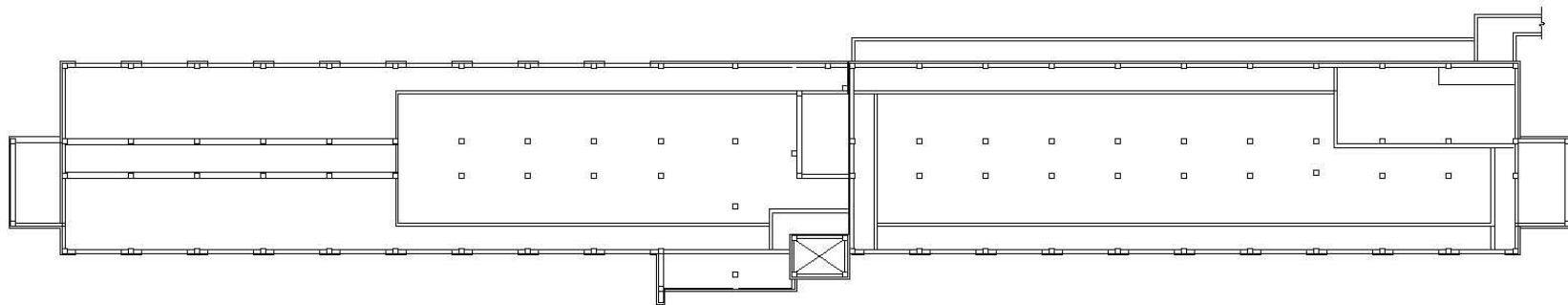


09/09/11



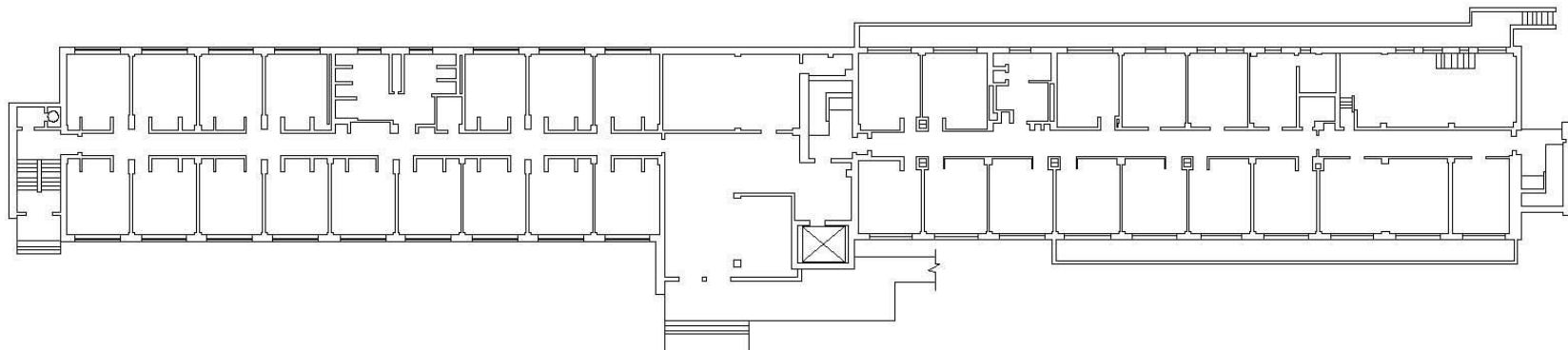
SITE PLAN





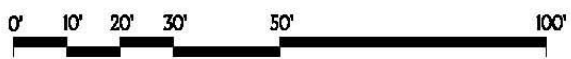
TRUSLER HALL
EXISTING LOWER LEVEL
 1" = 30'-0"

SINGULAR HALL

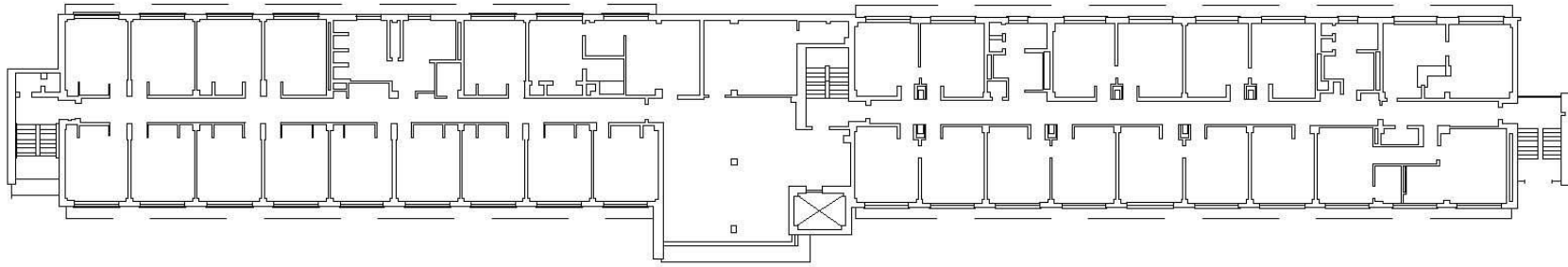


TRUSLER HALL: 14 DOUBLE OCC ROOMS + 1 R.A. = 29
EXISTING GROUND LEVEL
 1" = 30'-0"

SINGULAR HALL: 9 DOUBLE OCC ROOMS. + 1 R.A. = 19



EMPORIA STATE UNIVERSITY
 RESIDENTIAL LIFE
SINGULAR & TRUSLER HALLS
 BUILDING NO. 37900-00025
 1502 WOOSTER DRIVE EMPORIA, KANSAS 66801
 DATE: 03/09/2012 DRAWN BY: BEP CHECKED BY: REV:

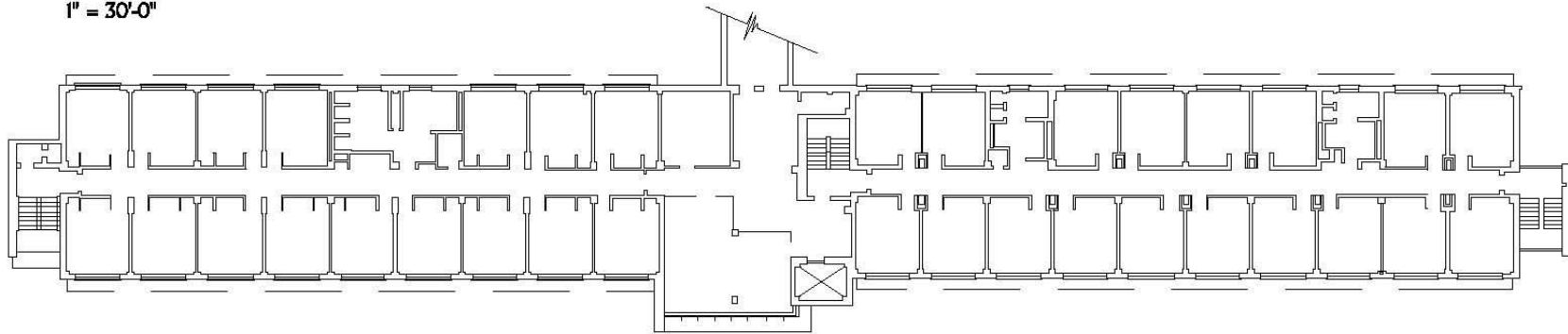


TRUSLER HALL: 12 DOUBLE OCC ROOMS + 1 R.A. = 25

SINGULAR HALL: 12 DOUBLE OCC ROOMS. + 1 R.A. = 25

EXISTING FIRST FLOOR

1" = 30'-0"



TRUSLER HALL: 15 DOUBLE OCC ROOMS + 1 R.A. = 31

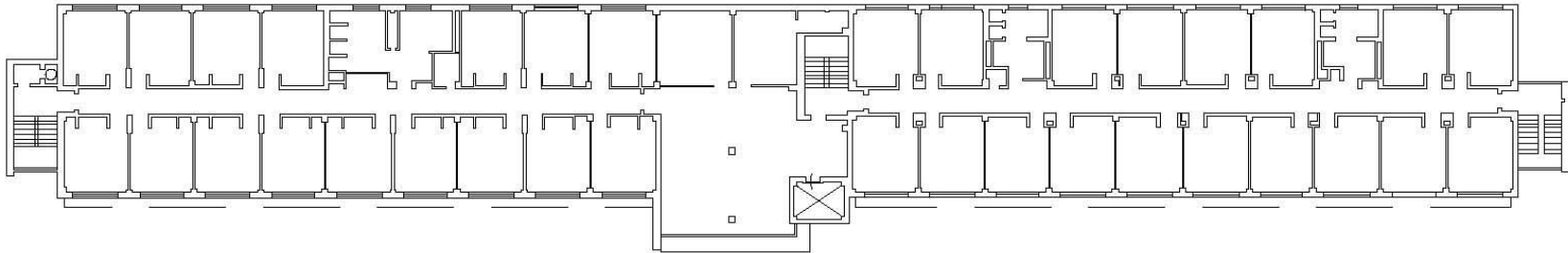
SINGULAR HALL: 17 DOUBLE OCC ROOMS. + 1 R.A. = 35

EXISTING SECOND FLOOR

1" = 30'-0"



EMPORIA STATE UNIVERSITY
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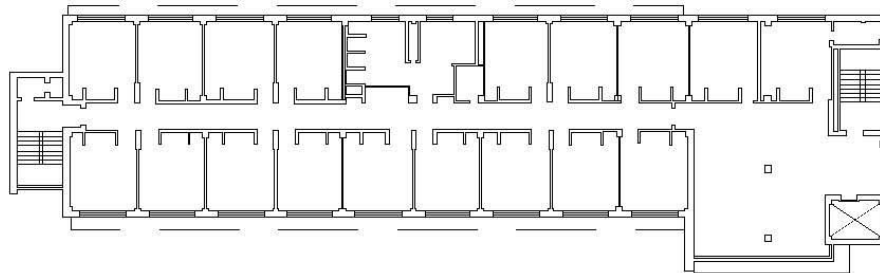


TRUSLER HALL: 15 DOUBLE OCC ROOMS + 1 R.A. = 31

SINGULAR HALL: 17 DOUBLE OCC ROOMS. + 1 R.A. = 35

EXISTING THIRD FLOOR

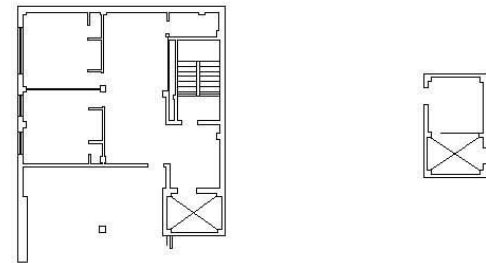
1" = 30'-0"



TRUSLER HALL: 15 DOUBLE OCC ROOMS + 1 R.A. = 31

EXISTING FOURTH FLOOR

1" = 30'-0"



TRUSLER HALL: NO OCC

FIFTH FLOOR

PENTHOUSE

C-3

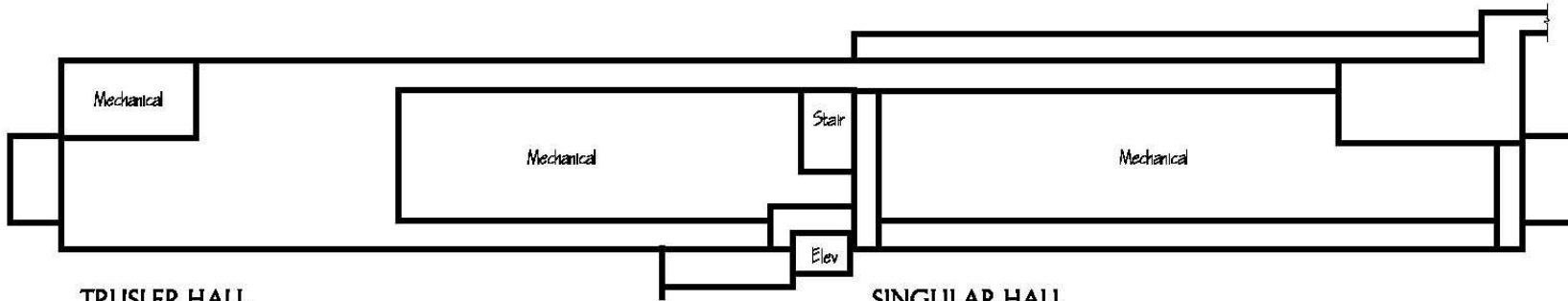


EMPORIA STATE UNIVERSITY
RESIDENTIAL LIFE

SINGULAR & TRUSLER HALLS

BUILDING NO. 37900-00025
1502 WOOSTER DRIVE EMPORIA, KANSAS 66801

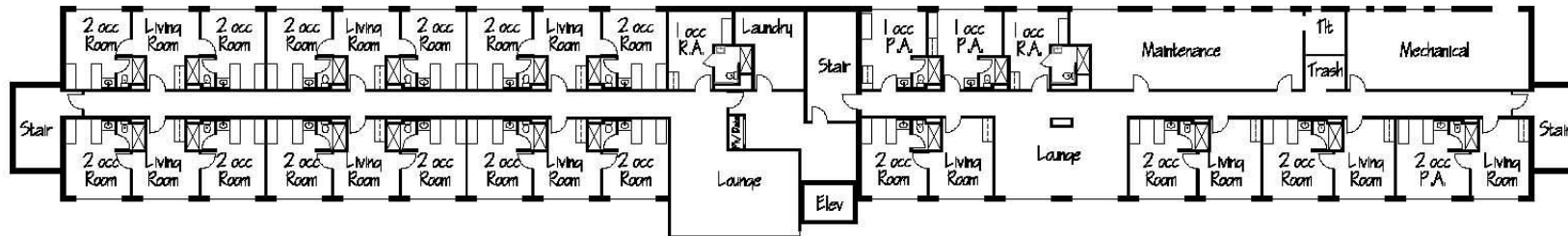
DATE: 03/09/2012 DRAWN BY: BEP CHECKED BY: REV:



TRUSLER HALL
LOWER LEVEL

1" = 30'-0"

SINGULAR HALL

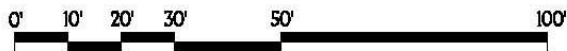


TRUSLER HALL: 6 FOUR OCC SUITES + 1 R.A. = 25

SINGULAR HALL: 4 TWO OCC SUITES + 2 P.A. + 1 R.A. = 11

GROUND LEVEL

1" = 30'-0"



D-1

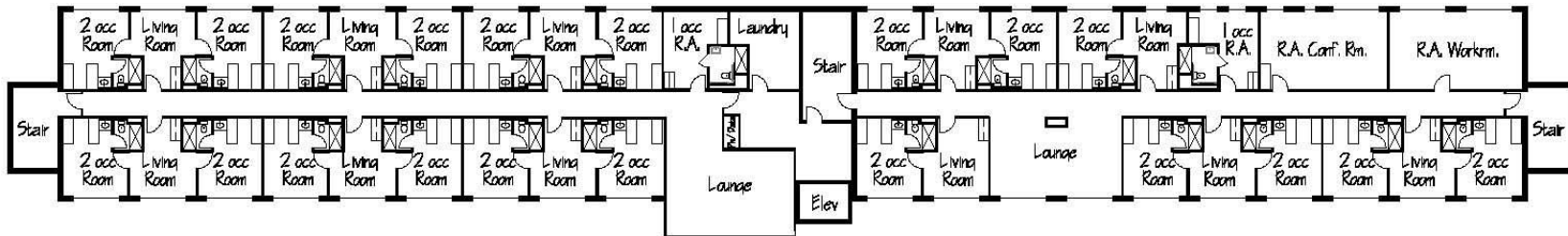


EMPORIA STATE UNIVERSITY
RESIDENTIAL LIFE

SINGULAR & TRUSLER HALLS

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DATE: 03/09/2012 DRAWN BY: BEP CHECKED BY: REV:

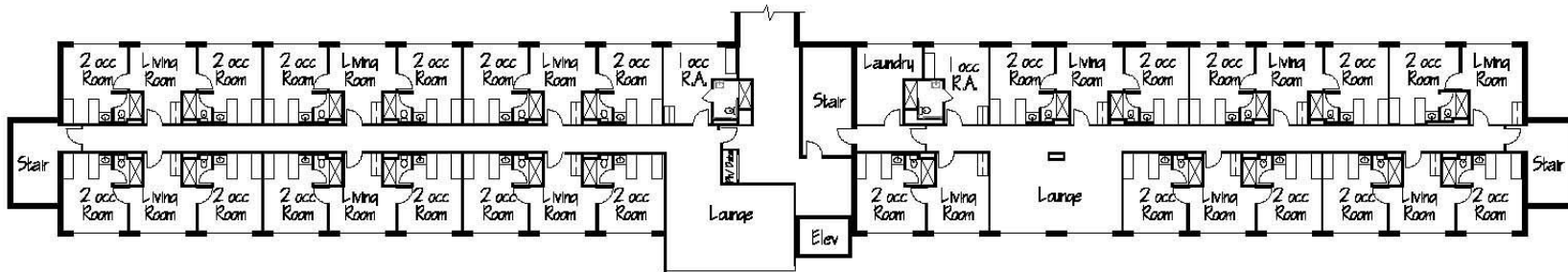


TRUSLER HALL: 6 FOUR OCC SUITES + 1 R.A. = 25

SINGULAR HALL: 3 FOUR OCC SUITES + 2 TWO OCC SUITES + 1 R.A. = 17

FIRST FLOOR

1" = 30'-0"



TRUSLER HALL: 6 FOUR OCC SUITES + 1 R.A. = 25

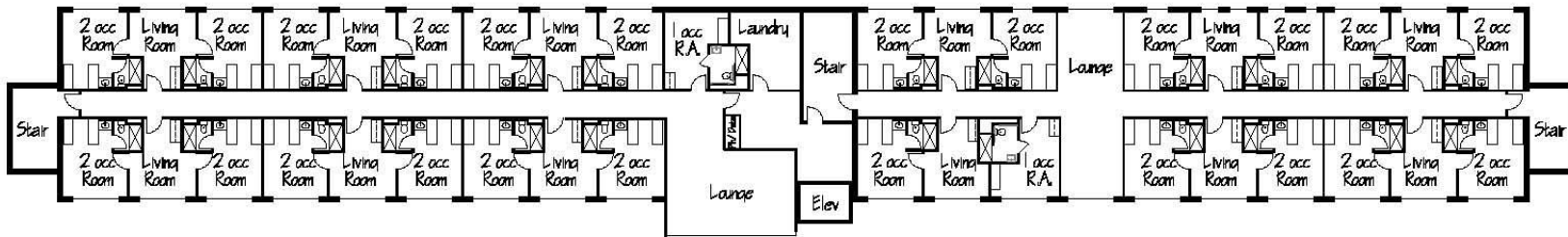
SINGULAR HALL: 4 FOUR OCC SUITES + 2 TWO OCC SUITES + 1 R.A. = 21

SECOND FLOOR

1" = 30'-0"

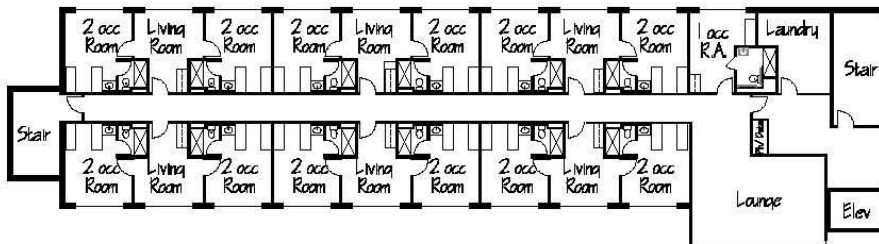


EMPORIA STATE UNIVERSITY
 RESIDENTIAL LIFE
 SINGULAR & TRUSLER HALLS
 BUILDING NO. 37900-00025
 1502 WOOSTER DRIVE EMPORIA, KANSAS 66801
 DATE: 03/09/2012 DRAWN BY: BEP CHECKED BY: REV:



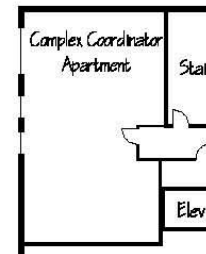
TRUSLER HALL: 6 FOUR OCC SUITES + 1 R.A. = 25
THIRD FLOOR

SINGULAR HALL: 5 FOUR OCC SUITES + 1 TWO OCC SUITES + 1 R.A. = 23

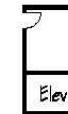


TRUSLER HALL: 6 FOUR OCC SUITES + 1 R.A. = 25
FOURTH FLOOR

1" = 30'-0"



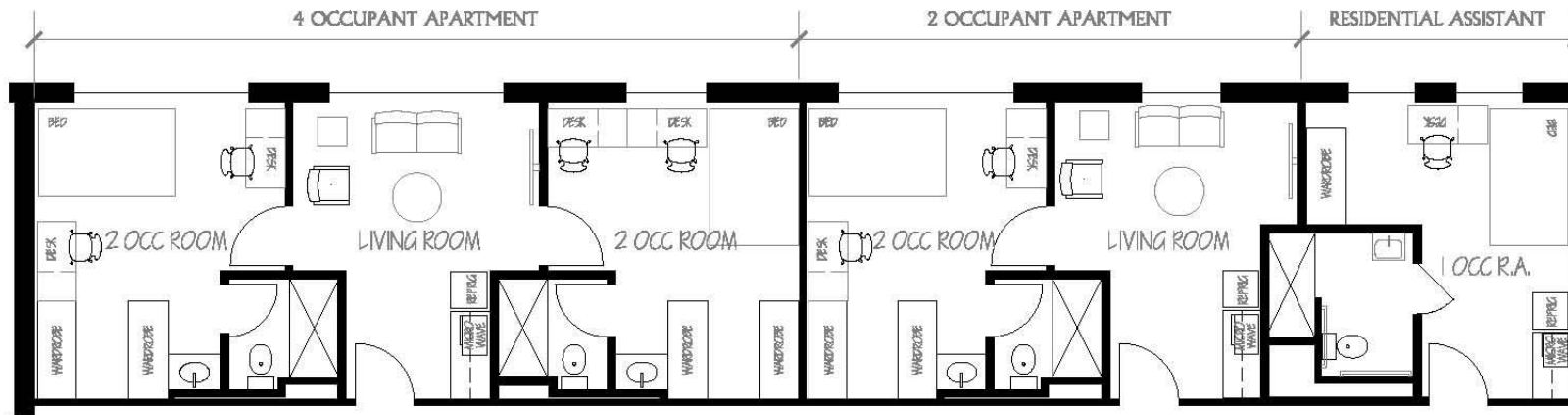
TRUSLER HALL: 2 OCC
FIFTH FLOOR



PENTHOUSE



EMPORIA STATE UNIVERSITY
 RESIDENTIAL LIFE
 SINGULAR & TRUSLER HALLS
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 1502 WOOSTER DRIVE EMPORIA, KANSAS 66801
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TRUSLER & SINGULAR HALLS
TYPICAL SUITES

1/8" = 1'-0"



D-4



EMPORIA STATE UNIVERSITY
 RESIDENTIAL LIFE

SINGULAR & TRUSLER HALLS

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EMPORIA STATE UNIVERSITY
SINGULAR / TRUSLER RESIDENTIAL HALL – TOWERS COMPLEX
REMODEL PROJECT

TRUSLER HALL (PHASE I)
RENOVATION SCHEDULE

IN HOUSE MAINTENANCE & LIFE SAFETY PROJECTS			
START DATE	ACTIVITY & DESCRIPTION	ESTIMATED COST	ESTIMATED COMPLETION
June 2012	Trusler Hall Roof Replacement Project On Call Roof Consultants (RTI) Design Bid Build Method	\$ 150,000	Sept. 15, 2012
June 2012	Trusler Hall Selective Demolition Project In House Planning On Call Construction / Dept. of Administration	\$ 175,000	Sept. 1, 2012
May 2012	Trusler Hall Asbestos Abatement Project On Call Asbestos Abatement Contract Associated Insulation All State Specialty Construction	\$ 300,000	August 1, 2013
December 2012	Trusler Hall Moveable/Fixed Equipment & Furniture In House Planning	\$ 250,000	August 1, 2013
SUBTOTAL		\$ 875,000	
RENOVATION PROJECT - ESU CONSTRUCTION MANAGEMENT			
June 2012	Singular / Trusler Residential Complex Remodel Project Professional Services	\$ 152,500	Dec. 1, 2012
August 2012	Trusler Hall Architectural Improvements	\$ 525,000	August 1, 2013
August 2012	Trusler Hall HVAC/PLMBG/ELECT Improvements	\$1,000,000	August 1, 2013
August 2012	Trusler Hall Fire Protection Systems	\$ 225,000	August 1, 2013
June 2012	Other Costs DFM Fee Contingency Miscellaneous Costs	\$ 142,375	August 1, 2014
SUBTOTAL		\$2,044,875	
TOTAL		\$2,919,875	

SINGULAR / TRUSLER RESIDENTIAL COMPLEX REMODEL PROJECT COSTS

The funding source for this project will be from Residence Hall Funds and Restricted Fee Funds.

Construction Cost		
Demolition	\$ 350,000	(\$ 6.10/gsf)
Architectural	\$ 950,000	(\$ 16.56/gsf)
M.E.P.	\$ 1,600,000	(\$ 27.88/gsf)
Fire Alarm & Suppression	\$ 450,000	(\$ 7.84/gsf)
Subtotal	\$ 3,350,000	(\$ 58.38/gsf)
Professional Consultant Fees		
Engineering/Architectural	\$ 265,000	(\$ 4.62/gsf)
Fire Protection Engineering	\$ 40,000	(\$ 0.70/gsf)
Subtotal	\$ 305,000	(\$ 5.32/gsf)
DFM Fee (1/2% x Const. Cost)	\$ 16,750	(\$ 0.29/gsf)
Asbestos Abatement Estimate	\$ 600,000	(\$ 10.46/gsf)
Roof Replacement	\$ 300,000	(\$ 5.23/gsf)
Construction Contingency (5%)	\$ 167,500	(\$ 2.92/gsf)
Miscellaneous Costs (3%)	\$ 100,500	(\$ 1.75/gsf)
Moveable/Fixed Equipment & Furniture	\$ 500,000	(\$ 8.71/gsf)
Total	\$ 5,339,750	(\$ 93.05/gsf)

EMPORIA STATE UNIVERSITY
SINGULAR / TRUSLER RESIDENTIAL HALL – TOWERS COMPLEX
REMODEL PROJECT

SINGULAR HALL (PHASE II)
RENOVATION SCHEDULE

IN HOUSE MAINTENANCE & LIFE SAFETY PROJECTS			
START DATE	ACTIVITY & DESCRIPTION	ESTIMATED COST	ESTIMATED COMPLETION
June 2012	Singular Hall Roof Replacement Project On Call Roof Consultants (RTI) Design Bid Build Method	\$ 150,000	Sept. 15, 2012
June 2013	Singular Hall Selective Demolition Project In House Planning On Call Construction / Dept. of Administration	\$ 175,000	Sept. 1, 2013
June 2013	Singular Hall Asbestos Abatement Project On Call Asbestos Abatement Contract Associated Insulation All State Specialty Construction	\$ 300,000	Sept. 1, 2013
December 2013	Singular Hall Moveable/Fixed Equipment & Furniture In House Planning	\$ 250,000	August 1, 2014
SUBTOTAL		\$ 875,000	
RENOVATION PROJECT - ESU CONSTRUCTION MANAGEMENT			
June 2012	Singular / Trusler Residential Complex Remodel Project Professional Services	\$ 152,500	Dec. 1, 2012
June 2013	Singular Hall Architectural Improvements	\$ 425,000	August 1, 2014
June 2013	Singular Hall HVAC/PLMBG/ELECT Improvements	\$ 600,000	August 1, 2014
June 2013	Singular Hall Fire Protection Systems	\$ 225,000	August 1, 2014
June 2012	Other Costs DFM Fee Contingency Miscellaneous Costs	\$ 142,375	August 1, 2014
SUBTOTAL		\$1,544,875	
TOTAL		\$2,419,875	

SINGULAR / TRUSLER RESIDENTIAL COMPLEX REMODEL PROJECT COSTS

The funding source for this project will be from Residence Hall Funds and Restricted Fee Funds.

Construction Cost		
Demolition	\$ 350,000	(\$ 6.10/gsf)
Architectural	\$ 950,000	(\$ 16.56/gsf)
M.E.P.	\$ 1,600,000	(\$ 27.88/gsf)
Fire Alarm & Suppression	<u>\$ 450,000</u>	<u>(\$ 7.84/gsf)</u>
Subtotal	\$ 3,350,000	(\$ 58.38/gsf)
Professional Consultant Fees		
Engineering/Architectural	\$ 265,000	(\$ 4.62/gsf)
Fire Protection Engineering	<u>\$ 40,000</u>	<u>(\$ 0.70/gsf)</u>
Subtotal	\$ 305,000	(\$ 5.32/gsf)
DFM Fee (1/2% x Const. Cost)	\$ 16,750	(\$ 0.29/gsf)
Asbestos Abatement Estimate	\$ 600,000	(\$ 10.46/gsf)
Roof Replacement	\$ 300,000	(\$ 5.23/gsf)
Construction Contingency (5%)	\$ 167,500	(\$ 2.92/gsf)
Miscellaneous Costs (3%)	\$ 100,500	(\$ 1.75/gsf)
Moveable/Fixed Equipment & Furniture	<u>\$ 500,000</u>	<u>(\$ 8.71/gsf)</u>
Total	\$ 5,339,750	(\$ 93.05/gsf)