

## MEETING MINUTES

April 9, 2012

**To:** Eric Philps  
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**From:** Brian Johnston/ Rob/Ron Bayles/Paul  
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**rfc:**

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**Project:** U of O - EMU  
**Project #:** 02.11.00679  
**Subject:** 75% SD UO Review Comments

Mail Original 

**Meeting Date/Time:** 04/05/12 9am – 4pm  
**Next Meeting  
Date/Time:**

**Meeting Location:** EMU –Oak Room  
**Next Meeting  
Location:**

**ATTENDANCE:** (persons shown in **bold** were present) ) (Persons shown with \* attended only part of the meeting, SERA has a detailed list for each session)

Name	Company	Phone	E-mail
<b>Martina Bill</b>	University of Oregon	(541) 346-5880	mbill@uoregon.edu
<b>Janet Lobue</b>	University of Oregon	(541) 346-5259	lobue@uoregon.edu
<b>Gregg Lobisser</b>	UO User Group		
<b>Dana Winitzky</b>	UO User Group		
<b>Mike</b>	UO - EMU		
<b>Wendy</b>	UO – EMU		
<b>*David</b>	UO Mechanical		
<b>*Chad</b>			
<b>*Jeff Madsen</b>	UO Mechanical Scope	(541) 346-5880	jmadsen@uoregon.edu
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<b>*Jeff Hite</b>	UO Telecom	(541) 346-1732	jeffh@uoregon.edu
<b>*Eric Fullar?</b>	UO Telecom		
<b>*Bill Anderson</b>	UO Dept Public Safety		
<b>*Clark Hansen</b>	UO Dept Public Safety		
<b>*Ken Straw</b>	UO Lock Shop/Security		
<b>*Kirk Gilbert</b>	UO Lock Shop/Security		
<b>*Drew Standridge</b>	UO Fire protection Scope		
<b>Jeff</b>	Civil		
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Item #	Action Req'd By	Due Date	Issues/Actions
<b>GENERAL</b>			
04.05.01			Schedule: Student voting on referendum 4/6/12 which will determine the next step for the project. (Subsequently the student referendum failed).
04.05.02			UO is anticipating the building being operational during construction. With a lot of major systems like the power distribution, fire alarm system, telecom systems being totally redone there will be a great deal of coordination and costs for this work. The design team has not addressed how the phasing for these systems will work at this time. Overall project construction phasing needs to be determined prior to defining phasing at the system level.
04.05.03			UO Mechanical and electrical folks will mark up drawings and narratives with any other comments.
04.05.04			Budget Pressures <ul style="list-style-type: none"> <li>VE items will be documented for review with the final budget. Facilities to add VE items if they have ideas.</li> </ul>
<b>MECHANICAL (Meeting time 9-10:30)</b>			
04.05.05			Campus Utilities <ul style="list-style-type: none"> <li>Del is concerned with the NW tunnel access to the building but understands that this is the best option with the existing tunnel serving the 1970s building being demolished as required to meet exterior grading.</li> <li>Services from existing Campus tunnel to new NW mechanical room will have to rise out the top of the existing tunnel. Facilities will not allow any horizontal piping across the tunnel or any access obstructions within the tunnel. This will require an exterior building addition to route the pipes from the top of the tunnel into the building.</li> <li>The Southwest mechanical room will remain. Existing HVAC equipment is at end of life and will be replaced. Area usage will be optimized.</li> <li>The Northwest mechanical room is new. The existing floor elevation is 10ft. above the Lower Floor level.</li> <li>The Northwest mechanical room will serve primarily the new construction areas. Providing a separate NW mechanical room will eliminate the need to provide much larger pumps and piping to distribute heating and cooling from the southwest mechanical room.</li> </ul>
04.05.06			Demolition <ul style="list-style-type: none"> <li>1970s building will be demolished in its entirety.</li> </ul>

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Item #	Action Req'd By	Due Date	Issues/Actions
			<ul style="list-style-type: none"> <li>1950s Green room and stage – replace old air handling equipment.</li> <li>Control room (ballroom) unit is OK to remain.</li> <li>Gas packs (2) on roof to be replaced with stand alone units. Add integrated BAS controls.</li> <li>AHU-3 is to remain. EF-3 to be replaced.</li> <li>Existing north elevator will remain. Lowest stop will be lowered. Check smoke venting for elevator shaft.</li> <li>AHU-1, Existing piping is undersized and needs replacement.</li> </ul>
04.05.07			<p>Existing Building Areas to be Renovated</p> <ul style="list-style-type: none"> <li>Existing air handling units are at end of life and will be replaced.</li> <li>A few air handling units which have previously been replaced will be retained (eg. bat cave).</li> <li>General concept is to provide dedicated outside air systems (DOAS) with radiant sails, panels, or beams for heating and cooling.</li> <li>Areas of high occupancy such as conference rooms, the pub, the coffee shop, etc. will be similar but with DOAS+ units which are return air capable to increase air movement.</li> </ul>
04.05.08			<p>Existing Food Services</p> <ul style="list-style-type: none"> <li>Extent of food service area renovation is still under consideration given budget constraints.</li> <li>Exhaust grease exhaust is approved on an exception – does not meet code. Provide individual ducting for each new and existing tenant.</li> <li>UO requires each food vendor to be metered separately. Currently electrical, cold water and gas are metered separately. Domestic hot water is not currently metered. Hot water distribution to food vendors will be from a common system, metered separately for each vendor. Point of use heaters are not desired. HVAC is not metered separate.</li> </ul>
04.05.09			<p>3rd Floor</p> <ul style="list-style-type: none"> <li>3rd floor corridor in 1950s has no HVAC – heating radiators only. Gets hot in the summer. Consider adding cooling. Program for 3rd floor area will not change. Existing finishes to remain.</li> <li>Replace existing flex duct – 3rd floor? More investigation required.</li> <li>Window shaker AC units to be removed. new HVAC will be required. roof structure is pan construction.</li> <li>Existing ceiling tiles glued to structure have asbestos. An encapsulated ceiling was added under the hot ceiling. Sera to consider removal within this project.</li> </ul>
04.05.10			<p>Ballroom and Support Areas:</p> <ul style="list-style-type: none"> <li>Ballroom has HVAC noise issues.</li> <li>Adjacent Ballroom support areas have HVAC noise issues.</li> <li>Ballroom has cooling capacity shortfall during high occupancy usage (graduation ceremonies).</li> </ul>

Item #	Action Req'd By	Due Date	Issues/Actions
			<ul style="list-style-type: none"> <li>Review cooling capacity and control opportunities.</li> </ul>
04.05.11			<p>Craft Services</p> <ul style="list-style-type: none"> <li>Area within the craft shop is required for new craft shop HVAC equipment including an air handling unit and exhaust fans.</li> <li>Outside air will be drawn from the west face of the building. Exhaust air will discharge to the loading dock to the south.</li> <li>Vents from equipment in the outdoor area will rise up through the canopy.</li> </ul>
04.05.12			<p>New Construction</p> <ul style="list-style-type: none"> <li>DOAS and DOAS + concept explained. DOAS is minimum outside air unit. Units have heat recovery. DOAS+ units have the ability to increase air supply volume for high occupancy areas.</li> <li>Facilities advised that most comfort complaints come in the spring and fall on high humidity days with 100% OSA economizer systems.</li> <li>North building block will be served by dedicated outside air systems and radiant, sails, panels, or beams for heating and cooling. DOAS units with heat recovery provide less relief air for atrium conditioning.</li> <li>North concert hall support areas will be served by dedicated outside air systems and radiant, sails, panels, or beams for heating and cooling.</li> <li>UO expressed a concern about the elevator not going up to the top floor of the concert hall for HVAC motor replacement. Architect to investigate alternate routes for maneuvering heavy equipment to the mechanical room.</li> </ul>
04.05.13			<p>Atrium</p> <ul style="list-style-type: none"> <li>In slab radiation is proposed to maintain 60F-80F. Preliminary ASHRAE comfort calculations were provided to Sera by Glumac.</li> <li>EMU/UO recommend 65F-80F.</li> <li>Non transition space needs to be 68-74 (typical office) – this does not include the atrium.</li> <li>Transitional space requires some level of conditioning and CO2 management.</li> <li>With a radiant heating system, off hours operation of the atrium area will be more efficient when adjacent building systems (relief air) are shut down.</li> <li>Consider natural ventilation and relief air heat from adjacent buildings only, but that will create a wider temperature band which may not provide the required occupant comfort</li> <li>Piping distribution will typically be at underside of bridges and walkways. Underground piping distribution is not desirable.</li> <li>Hydronic piping in the floor is not desirable from an ability to fasten things to the floor.</li> <li>Atrium Smoke control: provide rated construction around third floor to eliminate smoke evacuation requirement. Third floor circulation spaces will be part of the open space. Program areas will be separated. Under review with the City.</li> </ul>

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			<p>Separations may require rated separations, window sprinkler systems, doors on magnetic hold opens, rolling shutters, etc.</p> <ul style="list-style-type: none"> <li>The Alumni center atrium has radiant floor heat plus relief air from adjacent building areas.</li> <li>Lillis Building – 4 storey atrium, limited areas of radiant heat. Works OK with transfer air from adjacent building areas. No vestibules currently but looking to add vestibules.</li> <li>Obtain temperature logs from Lillis Atrium for review.</li> </ul>
04.05.14			<p>Concert Hall</p> <ul style="list-style-type: none"> <li>HVAC concepts reviewed. General concept is to supply air low and return air high using displacement ventilation and stratification.</li> <li>Structural separation and acoustic attenuation will be provided between the concert hall and the north service building.</li> <li>Supply air distribution in seating areas will be via salad spinner diffusers under the seats.</li> <li>Side aisle walkways will be supplied from overhead. This may be an issue with the warmer displacement ventilation supply air.</li> <li>A separate DOAS air handling unit in the basement will supply air to the south lobby and meeting area via sidewall displacement diffusers.</li> <li>Radiant slab heating and cooling will be provided for the south lobby and meeting area.</li> </ul>
<b>ELECTRICAL (Meeting time 10:30-11:15)</b>			
04.05.15	UO/Glumac		<p>Site</p> <ul style="list-style-type: none"> <li>Discussed the exterior pad-mounted transformer locations and the history of moving from the knuckle of the building to the southeast side and most recently to the south parking area. Current locations are shown on E1.00.</li> <li>A manual transfer switch for the radio station is needed for connection of a portable generator (similar to Allen Hall). This connection is to provide power during maintenance of the campus distribution system.</li> <li>Del is ok with secondary conductors (from transformers) running in the tunnel as long as they are in galvanized conduit. These are not required to be encased in concrete like typical service secondaries per UO. The bigger issues is the available space in the tunnel for the quantity of conduits required which will likely be around (12) 4-inch conduits.</li> <li>12.47KVA primary conductors will be run in the tunnel in armored cable within cable tray.</li> <li>Oil filled transformers will be provided by UO. Currently planning on reusing existing 750KVA, 480/277V transformer for new stand-by system.</li> <li>Jeff M. reiterated the fact that every alternate source of power needs to be called “standby” until you get into the building, then a branch can be called “emergency” after the transfer switch.</li> <li>No exterior receptacle required except for events.</li> </ul>

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			<ul style="list-style-type: none"> <li>A future UO (Del) and Glumac on site meeting/tunnel walk to discuss the transformer primary and secondary conduit routing and connection to the existing 12.4KV systems is needed. Overlaying both floors and loading dock area will need to be done to review the best routing in detail. Others expressed interest in attending the meeting.</li> </ul>
04.05.16			<p>Lighting</p> <ul style="list-style-type: none"> <li>Discussed that, in general, most of the lighting that is touched on the project will need to be replaced with energy efficient lighting to meet current energy codes. Even areas that are not being remodeled with non energy efficient lighting will need to be upgraded.</li> <li>UO would like to limit the amount of lamp types on the project for maintenance reasons. EMU stores the replacement lamps at the EMU building and a large selection takes up more space. Multiple luminaire types will be required but will be specified using the same lamp types. The type of building and quantity of different usage areas will require many different fixture types.</li> <li>Lighting sources – Fluorescent and LED will be the primary light sources. Little or no HID is planned for this project.</li> <li>Luminaires with acrylic lenses are acceptable for the EMU project. This opens up the spec for better performing luminaires and more options for the project. EMU does not use students for relamping like other campus building do.</li> <li>For this project UO campus standard 4100k lamps are not required. Other warmer color temperature lamps like 3500k will be reviewed. Lighting over food is very important and will be discussed in more detail as the project moves forward.</li> <li>Exterior lighting – Proposed lighting is the campus standard LED pole light with some LED bollards near the building. No building mounted lights proposed. LEED does not allow much up-lighting on the building exterior. All entry ways will have lighting.</li> </ul>
04.05.17			<p>Lighting Control</p> <ul style="list-style-type: none"> <li>Discussed that, in general, most of the areas with lighting changes will get new controls to meet current energy codes. Even areas that are not being remodeled may need to have some automatic lighting controls added.</li> <li>Discussed that the building will have a programmable low voltage control system in the corridors and common areas. Individual spaces will typically have occupancy sensor control and areas that have natural light will be reviewed for automatic day lighting control. Most of the existing lighting system does not have automatic control. EMU facilities staff manually switch breakers in power panels twice a day.</li> <li>Jeff M. wanted to verify that there would be one system that could be programmed from a central location like the Lutron 7000 or quantum ecosystem systems. UO desires a single lighting control interface point for programming which will be</li> </ul>

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			<p>provided with new system.</p> <ul style="list-style-type: none"> <li>Discussed the Oregon code requirements to provide egress lighting while building is occupied and turn the egress lighting off when the building is not occupied. We propose occupancy sensors to accomplish this requirement. Further discussions related to perceived safety issues and energy savings are needed as the project moves into more detailed phases.</li> <li>Unoccupied time frames and limited use areas need to be reviewed and discussed to determine programming of lighting, programming of HVAC systems and the opportunity to use occupancy sensors to control lighting and the HVAC system in various areas.</li> </ul>
04.05.18			<p>Power Distribution</p> <ul style="list-style-type: none"> <li>Discussed that in general, most of the electrical distribution that is impacted by the remodel will not be reused. Given the year of the equipment (reliability &amp; maintenance issues) and the fault current issues with a larger service it is not practical to relocate the equipment in general.</li> <li>Discussed the electrical room placement and the fact some are still moving. In general we are trying to stack electrical rooms located on each floor and in the areas that they serve. The proposed placement of electrical rooms lowers the initial installation costs and makes future changes and maintenance much easier. UO wants to make sure electrical rooms have adequate space for equipment maintenance and service. Proposed electrical sizes are shown on E5.01 and power distribution zoning are shown on E3.__ series.</li> <li>Existing electrical distribution, branch panels and existing to remain mechanical equipment in areas that are not impacted by remodel will be back fed for new electrical distribution system.</li> <li>Reviewed items listed on E6.03 that are to be backed up by generator power.</li> <li>The existing ballroom is on an isolation transformer, we are proposing to keep this infrastructure. The radio station and computer labs are not currently on an isolation transformer and UO did not express a need add them.</li> <li>Vendor Food Service Space – Design is to include a 480-volt power panel sized for square footage of each individual vendor and is to be metered individually. The intent is that the mechanical equipment would be connected to the tenant panel and would not serve other spaces.</li> <li>There will be a dedicated electrical room and distribution for the concert hall and multi-purpose room sized per information provided by concert hall consultant.</li> <li>Glumac requested that UO provide any special grounding, power quality or other specialty requirements to the design team.</li> </ul>
04.05.19			<p>Separate Power Metering Requirements:</p> <ul style="list-style-type: none"> <li>Food Vendors</li> </ul>

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Item #	Action Req'd By	Due Date	Issues/Actions
			<ul style="list-style-type: none"> <li>Kitchen</li> <li>Craft Center</li> <li>Concert Hall</li> </ul>
<b>PLUMBING (Meeting time 11:15-12)</b>			
04.05.20			Flush valves (urinals and WC) shall be battery rather than hardwire. Facilities service batteries once per year. Lavatory fittings infrared – battery. Facilities do not want solar powered lavatory fittings.
04.05.21			SW mechanical room – demolish existing plumbing systems and replace with new. Add new heat exchanger for central hot water distribution with recirculation pumps.
04.05.22			Replace existing fixtures with new low flow fixtures. Currently have some areas where ADA fixture stalls do not meet current requirements. Further review required to determine extent of upgrades to ADA stalls required.
04.05.23			Urinal hangers for new fixtures will require wall demolition and replacement. WC not as much of an issue. Existing hangers could be reused unless relocation for ADA is required.
04.05.24			All systems – detail services at the underside of the atrium bridges. Other projects did not detail services crossing bridges and it resulted in problems.
04.05.25			Sub meter cold and hot water to retail tenants.
04.05.26			Change out water and waste where touched. Change out storm where touched. (reuse existing?) Facilities advise that waste line p-traps are rotted out and should be replaced. Some elbows on cast drawing are leaking.
04.05.27			Clarify scope of plumbing replacement. Include an allowance for replacement. Food service waste to be replaced. Independent tests should be performed to determine the integrity of the 1950s and 1960s plumbing pipe.
04.05.28			No current problems identified with domestic hot water and recirculation system (seems unusual given the age of the piping).
04.05.29			Food service grease traps – new code requirements? Glumac to review. Dishwasher & Panda have above floor grease traps.
04.05.30			Craft center should be gas metered separately.
04.05.31			Existing Gas meters: Food service, Mills Center, Taylor Lounge. Separate BTU metering is not required for the Concert Hall.
04.05.32			New water entry to north block from 13th Ave. Domestic water pump required?
04.05.33			North block restrooms for solo rooms – instantaneous heaters for toilet room lavatories. No showers.
04.05.34			Provide drinking fountains outside of the restrooms. Provide bottle fillers separate from the drinking fountains.
04.05.35			Rainwater recovery has been identified as an alternate for flushing WC.
04.05.36			Clarify back of house lavatory and sink requirements. Women's center (lactation room), bike center shop, craft center, meditation room (foot washing stations per gender). EMU Lounge/VIP boardroom lav., backstage has common shared lavatory. Showers



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			for bike commuters were deleted during downsizing (LEED requirement?)
04.05.37			Solar water heating – add alternate. P2.06.
04.05.38			Exterior hose connections. Glumac to take a first crack at it. Recessed with a keyed box.
04.05.39			Exterior event power will be provided. exterior event water required?
<b>TELECOM (Meeting time 1-2)</b>			
04.05.40			<p>General</p> <ul style="list-style-type: none"> <li>Add section to narrative requiring audit and documentation of all existing cabling prior to demo to ensure no downtime to systems during phased project.</li> <li>Existing system - Currently CATV service is currently fed from Johnson and there is no head-end feed in the building currently. A new feed directly into EMU will be required.</li> <li>RF coordination for campus – UO IT is responsible for all RF coordination (eg., wireless microphones, radios, etc.)</li> </ul>
04.05.41	UO	4/18/12	<p>Site</p> <ul style="list-style-type: none"> <li>Discussed entry point from tunnel into EMU. UO to determine if there is sufficient capacity for IT cabling in the tunnel for direct connection into EMU, or if they want to proceed as planned and tie into the existing duct bank and then connect to the tunnel as is currently shown on E1.00 at the NW corner. UO IT to provide decision and confirm.</li> <li>CATV interbuilding riser will be single-mode fiber.</li> <li>New telecom service will need to be installed before removal of existing service to maintain service during construction. Construction will be phased. Phasing will be discussed later when the contractor is available.</li> </ul>
04.05.42	UO/SERA	4/18/12	<p>Telecom Distribution</p> <ul style="list-style-type: none"> <li>Discussed that, in general, most all the telecom distribution that is impacted from the remodel will not be reused.</li> <li>Discuss the telecom rooms placement, in general we are trying to have stacked telecom rooms located on each floor that they serve. Proposed electrical sizes are shown on E5.01 and power distribution zoning are shown on E4.__ series.</li> <li>All riser runs need to be home run back to main Telecom room (Star topology).</li> <li>Intra building CATV riser will be .500 hardline coax.</li> <li>Fiber count in the riser from the MDF to each of the IDF's will increase from 6 single-mode and 6 multi-mode to minimum 12 single-mode and 12 multi-mode to accommodate all the various systems. UO IT to confirm.</li> <li>Wall outlets will be 4-port Cat5e, exceptions are in the ODE/cubicle type work areas which will require only 2-port Cat5e outlets.</li> <li>IT wants to ensure hardwired locations are sufficient in quantity. Jeff Hite has marked up drawings and provided to design team.</li> </ul>



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			<ul style="list-style-type: none"> <li>• Telecom/IT Campus distribution is single-mode fiber.</li> <li>• UO to provide locations for CATV outlets.</li> <li>• Provide cable tray where feasible, conduit where not.</li> <li>• UO to identify where electronic signage or televisions required. Digital signage locations will require (1) Cat5e and (1) coaxial cable.</li> </ul>
04.05.43	UO	4/18/12	<p>Wireless Coverage</p> <ul style="list-style-type: none"> <li>• All wireless outlets will be 2-port outlets per UO design standards.</li> <li>• Discussed need for complete coverage of wireless within building including all meeting spaces, conference rooms and the ballroom.</li> <li>• UO to determine need/requirement for wireless and/or cell coverage in the concert hall and provide information to design team.</li> <li>• Wireless coverage in spaces with very high ceilings has been challenging for IT. Wireless outlets in those spaces will be wall-mounted 8' AFF and coordinated with architect to minimize architectural impact.</li> <li>• UO is working with Verizon to develop a DAS (Distributed Antenna System) cellular reinforcement system. Glumac recommends Verizon's inclusion to the project team if design continues beyond SD.</li> <li>• UO IT discussed possibility of requirement for a DAS for emergency radio. Currently Eugene does not require it, but surrounding AHJ's do. Glumac and UO to monitor when design moves forward.</li> </ul>
04.05.44	UO/SERA		<p>Special Areas</p> <ul style="list-style-type: none"> <li>• Mills Center – horizontal services could remain as is. Replace backbone only. UO to check for existing telecom drawings for this area.</li> <li>• Computer Lab –The computer lab will require a high concentration of cabling, but telecom outlets can be duplex at each workstation.</li> <li>• Radio Station - In addition to University telecom cabling, the Radio Station will require its own network equipment and cabling. Equipment will be mounted in a wall-mount cabinet/rack. UO to provide Radio Station network outlet locations/quantities</li> <li>• Concert Hall - In addition to University telecom cabling, the Concert Hall will require its own network equipment and cabling. Equipment will be mounted in a wall-mount cabinet/rack. UO to provide Concert Hall network outlet locations/quantities. UO to determine need for Broadcast services in the concert hall and what that would entail.</li> <li>• Food Vendors - Will require one 4-port telecom outlet near dedicated electrical panel, and 2-port POS outlets at all POS locations.</li> <li>• TV Truck Docking - If needed Sera and UO to provide location</li> </ul>

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			<p>and UO to provide requirements for pathway and copper and fiber requirements.</p> <ul style="list-style-type: none"> <li>Electrical Rooms - Glumac to provide a phone connection.</li> <li>Elevator Equipment Rooms - Provide 2 cables unterminated.</li> <li>DDC panels – 2 cables – coordinate with controls contractor.</li> <li>Call center connections can be integrated into telecom cabling. Separate network is not required.</li> </ul>
04.05.45	UO		<p>Clocks- Wireless clock system – Primex. Clock system is not part of present scope, clocks are anticipated to be battery powered. If hardwired, UO will need to provide locations and specifications for inclusion in design.</p>
<b>A/V (Meeting time)</b>			
04.05.46			AV Consultant not available for meeting.
04.05.47			AV requirements will use IT infrastructure to transport signals. Coordination with AV consultant required.
04.05.48	UO/ Sera		<p>AV pathways</p> <ul style="list-style-type: none"> <li>For small and small-medium sized rooms pathway will be required to support wall-mounted monitors and will require connectivity to a floor box and one wall-mount location directly below monitor.</li> <li>Medium rooms will require pathway for a large monitor a floor box at the front of the room (presenter) and one at the back of the room (control)</li> <li>Large rooms will require pathway to support a ceiling-mounted projector, four floor boxes and four AV wall outlets, one at each corner</li> <li>UO would like multiple floor boxes and wall AV outlets in the ballroom to create a very flexible space.</li> <li>All rooms will require pathway for sound reinforcement (speakers).</li> <li>All rooms will require network and CATV connectivity.</li> <li>Rooms which have a projector in place of a monitor/TV will require a separate tuner device for CATV access.</li> </ul>
04.05.49			<p>Public Address System</p> <ul style="list-style-type: none"> <li>Building wide public address system required. Existing head end is in 1970s building and will be demolished. Further discussion required by UO if public address system is necessary.</li> <li>It is acceptable to UO to use code-approved combination speakers for fire alarm voice evac and public address. UO would like a lot of choices concerning zones for general announcements.</li> </ul>
04.05.50	UO/Sera	4/18/12	<p>Exterior Event Electrical</p> <ul style="list-style-type: none"> <li>The current design has 208-volt power with 2 Cat5e telecom cables near the northwest corner and near where the stage would be on the south of student block.</li> <li>It is desired to have a trench system that allows cable to be dropped in rather than pulled to raceway system.</li> </ul>

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			<ul style="list-style-type: none"> <li>Sera and UO to provide Glumac with location of outdoor AV locations if needed.</li> </ul>
04.05.51			Video Conferencing – At least one large conference room will need this capability. Conduit and raceway by EMU team. Equipment by Owner. HP and Cisco could be approached for promotional system.
04.05.52	UO		Pub - AV treatment (sound system and TV). UO to advise.
<b>SECURITY (Meeting time 3-3:30)</b>			
04.05.53			<p>Site</p> <ul style="list-style-type: none"> <li>Discussed emergency call towers with call station, camera and speaker. UO advised that those are not currently their standard, but the plan is to move to them. Currently the standard is a small pedestal with emergency call only. Design will show multi conduits to support either.</li> </ul>
04.05.54	UO	4/18/12	<p>Exterior Door Access Controls</p> <ul style="list-style-type: none"> <li>Not all doors will require card readers there maybe only (5-7) exterior door locations needed with only one leaf of the multi doors. UO to review plans and provide design team with quantities of card access doors, as well as quantities of electronically locked and monitored doors with no card reader.</li> <li>UO prefers electric strikes and does not like mag locks.</li> <li>While all exterior doors do not require card readers electric locking is desired to lock down and unlock the building during operational hours.</li> </ul>
04.05.55	UO	4/18/12	<p>Interior Door Access Controls</p> <ul style="list-style-type: none"> <li>These locations are determined by users. System is good for auditing and monitoring of users usage. Card readers help with lost key issue.</li> <li>Telecom staff wants card readers on telecom rooms and keys are preferred on other utility spaces (electrical and mechanical rooms).</li> </ul>
04.05.56	UO	4/18/12	<p>Video Surveillance</p> <ul style="list-style-type: none"> <li>UO to review plans and provide design team with interior and exterior quantities and locations of cameras and monitoring stations.</li> </ul>
04.05.57			<p>Intrusion Alarms</p> <ul style="list-style-type: none"> <li>Glass break detection is not currently in scope, nor is it currently installed in the building. If budget will allow security would approve, but system is not mandatory. UO to provide any further direction.</li> </ul>
04.05.58	UO	4/18/12	<p>Art Security</p> <ul style="list-style-type: none"> <li>UO referenced Ohio State's art security system. UO to determine and communicate requirements for art security to design team.</li> </ul>
04.05.59			<p>Existing Security at the EMU</p> <ul style="list-style-type: none"> <li>Currently it takes ~45 minutes to lock and unlock EMU every day. Electric locks also better for security lock down. Holiday, weekend and event schedules are easier with electric locks. Auditing and monitoring of users.</li> <li>Interior security is a greater problem – student offices – lost</li> </ul>



Item #	Action Req'd By	Due Date	Issues/Actions
			keys. Possibly do 1 keyed access point to a suite with keys to separate offices.
04.05.60			General Security Comments <ul style="list-style-type: none"> <li>• Card access ~\$5,000 per opening for a building of similar scope.</li> <li>• Card reader pay for themselves at some point because of the lost key/rekeying door issue.</li> <li>• Generally campus security defines requirements for exterior door access. Interior door access determined by users.</li> <li>• UO does not operate security and access on the same network – separate systems.</li> <li>• UO has electronic key distribution. Works very well.</li> </ul>
<b>FIRE ALARM and FIRE PROTECTION (Meeting time 3:30-4)</b>			
04.05.61			Fire Alarm Systems <ul style="list-style-type: none"> <li>• New Notifier fire alarm system will be provided throughout the building per code.</li> <li>• Voice evac is needed. It is acceptable to UO to use combination speakers for fire alarm and AV. as part of the fire alarm that will double as voice evac speakers.</li> <li>• Fire Command Center is not required for fire alarm systems and is only required if smoke control system is required. Annunciator panels will be placed at entrances per fire marshal's direction.</li> <li>• There are currently 4 annunciators (including the fire alarm panel). They currently use 3 of them and would expect the same quantity to be listed in our design scope. Annunciator panel – existing building has main panel and 3 satellites. Main panel is in a room. Would like one in the facilities office. FLS team will advise.</li> <li>• Mass voice notification is new code/NFPA requirements which has not been defined by the City of Eugene - Design team are not to reference anything to do with this on our documentation because it will cause problems.</li> </ul>
04.05.62			Fire Sprinkler System <ul style="list-style-type: none"> <li>• Fire department connections: There are currently 3. Fire department connection locations. A single point connection is strongly desired by UO and the City. The fire protection system is currently split into a south system and a north system. A dry pipe underground would do the trick. Probably 6" or larger. Not currently included in the budget.</li> <li>• Window sprinkler systems used on other buildings on the campus use Tyco heads – costly but only game in town. Firelight glass is an option. Sprinklered glass does not work with blinds. Window mullion design is very important. May require chair rails.</li> <li>• Atrium system must be a separate sprinkler zone including window sprinklers on atrium side. Floor area sprinklers serve window sprinklers on floor side. Verify – window sprinklers may require a dedicated zone.</li> </ul>



Eric Philps  
 SERA Architects  
 April 9, 2012  
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Item #	Action Req'd By	Due Date	Issues/Actions
04.05.63			Atrium Smoke Control: smoke control will be provided by separating 3rd floor program areas from the atrium with rated separations to eliminate the atrium smoke venting requirement.
04.05.64			Voice activation required on fire alarm.
04.05.65			Design to include speaker circuits only.
04.05.66			AM&M for atrium smoke/fire concept is in place.

These meeting minutes reflect our understanding of the issues discussed. This will act as the project record unless the sender of these minutes is notified within 3 days of the issue date.

