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COLLABORATIVE PROCESS PERFORMANCE SOLUTIONS

MEETING MINUTES

Johnson County Joint Emergency Communication Center (JECC) Subcommittee

Meeting Date: April 18, 2008

Attendees:	Jeff Davidson, Regenia Bailey, Pat Harney, Lonny Pulkrabek, Andy Rocca, Henry Herwig, Barry Bedford, Steve Spenler, Jim Thayer, Dave Wilson, Tom Salm, Sam Hargadine, Mike Milas, Dave Kaun, John Thompson, Kevin Monson, Bill Hoefer, Terry Brennan,	City of Iowa City City of Iowa City Johnson County Supervisor Johnson County Sheriff Iowa City Fire Department Chief City of Coralville Coralville Police Chief Johnson County Ambulance Johnson County Sheriff's Dept. Johnson County Emergency Management City of North Liberty Iowa City Police Chief Elert & Associates Elert & Associates Elert & Associates Elert & Associates Neumann Monson Architects Neumann Monson Architects Raycom
	Terry Brennan, Gregg Hennigan,	Raycom The Gazette

Minutes by: Bill Hoefer

1. Call to Order by Jeff Davidson

2. Public discussion:

a. None

3. Discussion on Executive Director Job Description

a. Jeff Davidson presented the Executive Director Job Description (included in Meeting Packet issued April 11, 2008)

4. Discussion on arrangement for JECC support services

- a. The consensus was that support services for the JECC shall be completely provided by either the City of Iowa City or Johnson County. Jeff will seek proposals from both. Each entity's experience with 28E agreements should be considered.
- b. The JECC will also need to establish a maintenance plan for building and grounds. Responsibilities could be performed by JECC staff or a bid contract with the County or private companies.

5. Update on Assistance to Firefighters Grant application

- a. Andy Rocca has made application.
- b. The grant would be for \$1,000,000 for mobile and portable radios, with one-year time frame to use the moneys.

6. Building Design

- a. Presentation of Schematic Design Site Plan, Building Plan, and Exterior Elevations (copies attached). Comments as follows:
 - i. Elert will prepare a proposal to do A/V systems design. Neumann Monson (NM) needs the A/V system and components designed within 30 days so that they can incorporate conduit and power locations, etc. into the building design.
 - ii. Site:
 - 1. The subcommittee would like to get rid of the Chatham Oaks parking on the south side of the Melrose Ridge access drive. If that cannot be done, then the JECC parking lot and building needs to shift south to allow more space for the birm between the lots. The County shall pursue eliminating the Chatham Oaks parking.
 - 2. NM will work with MMS to prepare a legal description of the property for leasing. They will factor in potential grading easements and construction setup limits.
 - 3. The site is currently leased to a farmer. The County shall notify him of the project and alter his lease.
 - 4. The west, south, and east perimeter may be reduced to 100 feet.
 - iii. General Building items:
 - 1. The facility cannot have any roof problems.
 - a. The roof construction will be structural precast with a ¼" per foot sloped topping slab, insulation, waterproof membrane, and protective concrete topping slab. The goal is no roof penetrations except roof drains.
 - b. NM will investigate the cost of raising the entire building to one height to eliminate flashing issues at roof-wall intersections.
 - c. Both CRAC-Units in the Data Equipment Room will be located at the north end of the room, so that all three rack aisles can expand to the south if necessary.

- iv. Dispatch Room:
 - 1. There is room for flat panel monitors high on all four walls.
 - 2. NM will present more information and examples of the proposed shutters to be used over the dispatch windows. Elert mentioned that a facility in Champaign, IL uses such shutters.
- v. Warrants:
 - 1. The subcommittee needs to revisit the issue of whether warrants need to be picked up by patrol officers at the new JECC building.
 - 2. When they determine the procedure to follow, NM will make modifications to the building design to accommodate it. The sooner a procedure is decided upon the easier it will be to incorporate it into the design.
- b. The Schematic Design of the site and building were approved by the subcommittee as qualified by the above comments, and NM was authorized to proceed into Design Development phase.

7. Risk Mitigation

- a. Review of Vulnerability Matrix:
 - i. Traffic Accidents were moved to Neutral/Noticeable, and Earthquake was moved to Unlikely/Minor.
 - ii. A revised matrix with these changes is attached to these meeting minutes.
- Review of proposed Draft of Risk Mitigation Strategies, Proposed Security Goals, and Proposed Security Priorities (included in Meeting Packet issued April 11, 2008). Comments and revisions as follows:
 - i. The north stand-off distance was decreased from 148 feet to 121 feet.
 - ii. The distance between the parking lot and the building was decreased from 60 feet to 33 feet.
 - iii. Instead of a swale through the middle of the front yard, a protective landscape form will be constructed at the south edge of the main parking lot.
 - iv. A rolling electric gate (similar to the Waterplant's) at the main entrance is desired; it would remain open during business hours. Only an "employee parking only" sign is required between the main lot and the employee lot.
 - v. The building structure and exterior will not be analyzed for blast-resistance, but measures taken to achieve FEMA 361 tornado standards should provide more blast protection than conventional construction.
 - vi. Dispatch windows shall be protected with Hurricane Shutters.
 - vii. Bullet-resistant glazing is not required at interior windows between Dispatch and the Dispatch Lobby or Main Corridor.
 - viii. Air Intakes will be located at least 10-feet off the ground.

- ix. Utility Redundancies:
 - 1. Generator for electricity.
 - a. External connections for portable generators are not necessary.
 - b. Generator may be able to be used during peak load times for savings on electric bill.
 - 2. Bottled Water and Portable Chemical Toilets for water and sewer.
 - 3. Microwave for fiber and copper lines (no separate copper phone service needed)
 - 4. Offsite backup Dispatch Center and EOC.
- x. The JECC may consider use of portable HVAC units should a main unit go down, or possibly keep spare compressors on hand for critical units.
- c. The subcommittee adopted the Proposed Security Goals and Proposed Security Priorities.
 - i. The process for shutting off the outside air intakes needs to be reviewed with the Work Group.
- d. An updated copy of the Risk Mitigation Strategies, documenting the measures selected by the subcommittee, is attached to these meeting minutes.

8. Discussion on Tower Location alternatives at the County Farm building site

- a. Elert presented their Tower Location memo (included in supplement to Meeting Packet issued April 15, 2008 by Mayor Bailey).
- b. Elert does not recommend locating the Tower at the Secondary Roads complex due to increased costs and performance loss.
 - i. The possibility of co-locating Secondary Road's antennae on the new Tower will still be explored.
 - ii. The Tower will require amateur radio antennae cables connecting to the building.
 - iii. If space is sold to cell phone carriers, they will each require a 20'x20' space at the base of the tower.
- c. The subcommittee agreed to follow Elert's recommendation to locate the Tower adjacent to the new JECC.

9. Discussion on Radio System Specifications and RFP Process and Format

- a. Elert presented Draft Radio System Specification Outline and Timeline (copy attached).
 - i. Andy Rocca asked if a Digital system was right for Fire Service.
 - 1. Elert indicated that the International Association of Fire Chiefs will be issuing a best practices manual for using digital.

- 2. Elert described that both Analog and VHF also have background noise issues. They also indicated that 700-800 MHz is better than VHF for interoperability, and can do radio-to-radio communication even if on a trunked system.
- 3. The subcommittee asked for further data indicating Digital is the best option for Fire Service.
- ii. The JECC will activate the County tornado systems. Elert shall contact Jim Thayer regarding details of how this shall operate.
- iii. There will be language in the bid to make sure the system is tested with foliage.
- iv. Timeline:
 - 1. Once the vendor is known (October 2008) Elert can evaluate if having the system up and running by October 2009 is possible. Having the new radio system up and running July 1, 2009 is not possible.
 - 2. The new JECC building could operate using the current radio systems, but there would be extra costs to do so and Elert does not recommend it.
 - 3. If deemed necessary by the Policy Board Elert recommended putting the new JECC department in place July 2009, but have its dispatchers physically work within their current facilities until the new systems are up and running at the new JECC building.
 - 4. Jeff commented that it then appears they should plan on the existing centers operating for six months of FY 2010.
- b. Discussion on Tower Site Locations and Options
 - i. The subcommittee could begin talking to owners of hypothetical tower locations now, but actual proposed locations for towers will not be known until vendor is selected.
 - ii. Leases and purchases of land will not be included in the vendors' bids; they are the JECC's responsibility.
 - iii. All tower locations will need to go through FAA approval.
- c. Discussion of RFP Options and Alternatives
 - i. Elert proposes bundling the bids for the Radio System, Terminals, Radio Consoles, and Recording Devices.
 - ii. The subcommittee is interested in exploring private-public partnerships, but not if they will compromise their system. They have had contact with Raycom already.

10. Review Project Schedule

- a. The building and sitework specifications are currently planned to call for the building to be completed before July 2009. The design schedule (including an August 2008 bid date) was included in the Agenda Packet issued April 11, 2008.
- b. For Radio System schedule refer to Draft Radio System Specification Outline and Timeline (copy attached) and notes under the above item 9.a.iv. "Timeline".

11. Other Business

- a. The next meeting of this subcommittee will be 1:30pm Wednesday May 21, 2008 at the lowa City Waterplant.
- b. Mike Milas will follow-up with Jeff to circulate issues Elert needs input on prior to the next meeting.

12. Meeting Adjourned

The preceding constitutes our understanding of the items discussed and decisions reached. If you have any comments or revisions, please contact the undersigned ASAP.

Bill Hoefer, AIA Neumann Monson Architects

Draft Radio System Specification Outline and Timeline

Timeline:

- Specification draft ready for review by May 15th
- Review and feedback May 15th May 31st
- Specification and RFP ready for release by June 10th
- Mandatory pre-bid meeting on or about June 18th or 19th
- Proposals due on or about August 15th
- Proposal review period Aug 15th to August 31st
- Vendor selection discussion and decision in Early September
- Vendor negotiations in mid-late September
- Contract award on or about October 1st 2008

Specification/RFP Sections

PROJECT SCOPE

EXISTING CONDITIONS

IOWA CITY COMMUNICATIONS

- Current sites and frequencies
- Police
- Fire
- EMS
- Public Works
- University
- Paging

JOHNSON COUNTY COMMUNICATIONS

- Current sites and frequencies
- Sheriff
- County Fire
- EMS
- Paging

RADIO SYSTEM SPECIFICATIONS/REQUIREMENTS

- County-wide Coverage
 - o 95/95 portable outdoor coverage
 - Enhanced building penetration in core area
 - o Tower quantity and location
- System Capacity needs
 - o Johnson County
 - o Iowa City
- Frequency / Channels
- Technology
 - o Trunked Radio
 - o P25 Digital
 - o Simulcast
 - o Encryption
- Product Reauirements
 - o Consoles and console furniture
 - o Repeater
 - o Backhaul
 - o Mobiles
 - P/S
 - Non-P/S
 - o Portables
 - P/S
 - Non-P/S
 - Fire Alerting
- Interoperability
 - o Border counties
 - o State Fire frequencies
 - o PTP
 - Regional and statewide networks
 - o State and Federal Agencies
- Narrowband requirements
- Paging
 - New narrowband pagers required with enhanced coverage
- Standards
- Grounding

SYSTEM USERS

- Mobile
 - o # User Feature set
 - Portable
 - o # User Feature set

TESTING, ACCEPTANCE, AND CERTIFICATION

- Contractor Installation and Component Testing
- Project Certification/Acceptance Testing
- Post Project Certification

WARRANTY AND MAINTENANCE

- Software Performance Warranty
- Hardware Performance Warranty
- Maintenance Options
- Instructional Service Manuals
- Parts
- Service Facilities
- Service Response Time
 - o Emergency
 - o Non-Emergency

Public Private Partnership Options

- Network Ownership alternatives
- Shared sites
- Shared network access

APPENDIX – Johnson County Tower Sites

Related Discussions –

- Discuss Tower owner contact process.
- Discuss system design and tower site selection process and timing
- Discuss estimated overall system implementation timeline
 - Award contract Oct 1 08
 - o Nov, Dec 08 and Jan 09 System design effort
 - o Feb, Mar, Apr, May 09 tower modification or new builds effort

- o June, July, August system installation
- Sept/Oct 09 testing and acceptance

Note: Tower site development could take significantly longer which could delay system testing (with foliage) until late spring of 2010

		PROBABILITY						
		Highly Likely	Likely	Neutral	Unlikely	Highly Unlikely		
I M P A C T	Devastating			Sabotage Terrorism				
	Severe	Lightning Loss of Utilities/	Power Outage/Surge Mechanical Failure Human Error		Loss of Access			
	Noticeable	Hail Wind	Cyber Crime/Hackers Chemical Release	Traffic Accidents	Explosion Acts of War			
	Minor	Road Construction			Arson Fire Earthquake	Train Derailment Flood		

High Risk Moderate Risk Low Risk

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RISK MITIGATION STRATEGIES

Johnson County Joint Emergency Communication Center

Date: April 18, 2008 (end of Schematic Design)

The attached Vulnerability Matrix was developed at our October 24, 2007 meeting and then revised at the April 18, 2008 meeting.

There are no set standards for local dispatch and EOC facilities to follow regarding site and building design. Vulnerabilities (Threat Ratings vs. Asset Values) and the following proposed mitigation strategies have been reviewed by the Subcommittee for their appropriateness for this project. The security goals and priorities listed below have been reviewed and adopted by the Subcommittee.

Security Goals:

- 1. Security of people and equipment
- 2. Survivability of operations
- 3. Sustainability of operations without interruption

Security Priorities:

- 1. In the event of an attack or bomb blast the priority is on reducing the chances of building collapse and personal injuries, so that the building can be evacuated. Dispatch and EOC operations may be interrupted.
- 2. In the event of a wind, chemical, or other event the priority is on reducing the chances of building damage and personal injury so that the operation of the Dispatch Center and EOC may continue uninterrupted.

The sections below describe the mitigation strategies and levels of protection selected by the Subcommittee for adoption into the building design. This list of mitigation measures may continue to be evaluated though each phase of design as more accurate cost estimations are available.

General Design Note:

The building structure and exterior will not be analyzed for blast-resistance. The measures listed below to mitigate damage from tornadoes should inherently also provide a higher level of blast-protection than conventional construction. Any levels of blast protection included below are for reference only in comparing published levels of protection to the mitigation strategies selected for this project.

Proposed Site Measures:

SETBACKS

- 1. Provide 121 feet of stand-off distance between the nearest uncontrolled road, drive, or parking area and the JECC building.
 - This distance was determined by adding the 33-foot stand-off between the building and parking lot, the width of the parking lot, and width required to form the perimeter birm.
 - The DoD stand-off requirement for a Primary Gathering Building (Low Level of Protection) built from conventional construction means is 148-feet. UFC 4-010-01 "DoD Minimum Antiterrorism Standards for Buildings".
 - According to UFC 4-020-01 "DoD Security Engineering Facilities Planning Manual" a 121foot stand-off should provide a Conventionally Constructed building (non-hardened) with a "Medium" Level of Protection from 50 lbs of TNT.
 - "Low Level of Protection" from bombs is defined by DoD as: "Damaged, Unrepairable. The facility or protected space will sustain a high degree of damage without collapse. Although collapse is prevented, occupants may be injured and other assets may be damaged but will survive. Damaged building components, including structural members, will require replacement. Depending on the scale of the blast damage, its location, and facility characteristics, the facility may be completely unrepairable, requiring demolition and replacement. The damage allowed may make surviving assets vulnerable to subsequent attack." UFC 4-020-01.
 - "Medium Level of Protection" from bombs is defined by DoD as: "Damaged, Repair- able. The facility or protected space will sustain a significant degree of damage, but the structure will be reusable. Occupants and other assets may sustain minor injuries or damage. Damaged building components other than structural members may require replacement, but damaged structural members can be repaired." UFC 4-020-01.
 - "High Level of Protection" from bombs is defined by DoD as: "Superficial Damage. The facility or protected space will sustain only superficial damage. Occupants and other assets will also incur only superficial injury or damage." UFC 4-020-01.
 - John Maddock, Federal Protection Services, stated that for the federal buildings he patrols they aim for an ideal setback of 100-feet.
 - The entire 100 to 121 foot perimeter is viewed as an "exclusive zone" as described in FEMA 426 "Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings". This means everyone entering the zone must have a specific purpose related to the building.
- 2. Provide minimum 33 feet of stand-off distance between controlled parking lot and the JECC building.
 - The building structure will not be analyzed for blast-hardening, but the tornado-resistant standards and window protection measures being employed should offer higher blast protection than conventional construction.
 - UFC 4-020-01 states that an 8" reinforced CMU wall should provide a Low level of protection from 50 lbs of TNT at a stand-off distance of 33-feet.
 - UFC 4-020-01 states that a 5" concrete roof slab should provide a Medium level of protection from 50 lbs of TNT at a stand-off distance of 33-feet.

- Construct a protective landscape form between the parking lot and the building, along the south edge of the parking lot.
- The service drive to the loading area will extend within this 33-foot zone, and will not have a gate.
- 3. Provide minimum 33 feet of stand-off distance between the employee parking lot and the JECC building, and between the trash dumpster and the building. An "employee parking only" sign, not a secondary gate, shall be provided at the entrance to the employee lot.

PROTECTIVE PERIMETER

- 4. Provide a 100 foot perimeter by ringing the facility with ditches that serve as vehicle traps. The ditches would extend around the south side of the building and outlet into the start of the natural valley to the south.
 - A birm may be substituted for the ditch along the north property line between the drive road and the parking lot.
 - No perimeter fencing
 - The entire area within the 100-foot perimeter will be as unobstructed as possible, so that people or items cannot be hidden from view. The immediate 33-foot perimeter of the building shall have no obstructed view areas
- 5. Provide only one parking lot access off the drive/road
 - Locating it at the east corner of the property reduces the risk associated with a straight approach that is perpendicular to the building; so there is less risk of an aggressor being able to build up speed on the straight run of road from Melrose Ave.
 - Provide a security gate at the entrance from the drive/road into the parking lot. The gate will be left open during Monday-Friday business hours and closed all other hours.
 - Gate shall have Card Access, and Intercom with Video Camera for visitor recognition

OTHER MISC. SITE PROVISIONS

- 6. Install fencing around the on-site radio tower to prevent unauthorized access. Potentially, a larger service area (including the tower) on the south side of the building could be fenced.
- 7. The trash dumpster shall be secured. Its screening shall not block visibility from the building.
- 8. The exterior employee break area should be protected with a wall on the north side.

Proposed Structural Measures:

TORNADOES

- 9. The building's structural system, exterior walls, and roof shall be built (to resist extreme wind pressures and windborne debris) according to the tornado-resistant standards of FEMA 361 "Design and Construction Guidance for Community Shelters".
 - Shelters designed and constructed in accordance with the guidance presented in this manual provide "near-absolute protection" from extreme-wind events. Near-absolute protection means that, based on FEMA's knowledge of tornadoes and hurricanes, the

occupants of a shelter built according to this guidance will be protected from injury or death. FEMA's knowledge of hurricanes and tornadoes is based on substantial meteorological records as well as extensive investigations of damage from extreme winds. However, more extreme wind events may hypothetically exist, although they have not been observed. For this reason, the protection provided by these shelters is called "near-absolute" rather than absolute.

• Design for wind loads/pressures using a design wind speed of 250 mph.

WALLS

10. Exterior Walls constructed to pass FEMA tornado debris-impact test.

- 8" reinforced CMU walls with brick veneer.
- The standard missile used to determine impact resistance for all wind conditions is defined as follows (based on a representative missile for a 250- mph windstorm):
 - ° 15-lb wood 2x4 (nominal) member
 - The missile is assumed to be propelled into wall and roof sections at the following missile speeds. 100-mph missile speed for horizontally traveling missiles. 67-mph missile speed for vertically traveling missiles
- Blast-Resistance:
 - UFC 4-020-01 states that an 8" reinforced CMU wall should provide a High level of protection from 220 lbs of TNT, and a Low level of protection from 500 lbs of TNT, at a stand-off distance of 121-feet.

ROOF

11. Roof constructed to protect from tornado windborne debris and larger falling objects.

- Strengthening the building to handle potential load of the radio tower falling on it.
- Precast concrete roof members with additional concrete topping slab.
- Blast-Resistance:
 - UFC 4-020-01 states that a 5" concrete roof slab should provide a High level of protection from 220 lbs of TNT, and a Medium level of protection from 500 lbs of TNT, at a stand-off distance of 121-feet.

Proposed Architectural Measures:

WINDOWS

- 12. Window systems (including their connection to the building structure and walls) will be constructed to meet GSA Performance Condition 3a, which based on their testing methods means glazing shall respond to a blast by cracking but fragments entering the space should land on the floor no more than 40-inches from the window.
 - The GSA Glazing Performance Condition of 3a corresponds to the DoD Low Level of Protection referenced above. FEMA 426, GSA PBS-PQ 100.1 "Facilities Standards for the Public Building Service".
 - Laminated Glazing and/or Fragment Retention Films will be employed

- Chair locations in offices shall be located a minimum of 3-feet from the windows. In the event of a tornado, people should evacuate the north perimeter offices.
- There is no glazing system that has been tested for Tornados, but the blast-rated and bullet-resistant systems being provided should provide increased protection from tornadoes over conventional windows.
- In Dispatch:
 - ° Windows recessed into the masonry wall will be used; they will also be protected by exterior Hurricane Shutters.
 - Grade-level exterior windows shall use Bullet-Resistant glazing, National Institute of Justice level 3A (.44 Magnum/.9mm).
 - ^o Bullet-Resistant glass will not be used at interior windows between Dispatch and the Dispatch Lobby or Main Corridor.

DOORS

- 13. Exterior Doors will meet FEMA 361 standards and 12psi blast-resistant ratings.
 - Many door and hardware assemblies have been tested to pass FEMA requirements.
 - UFC 4-020-01 states that 12psi rated doors should provide protection from 500 lbs of TNT at a stand-off distance of 121-feet.

INTERIOR WALLS

- 14. Because during a tornado the north windows could be breached, the north wall of the main interior corridor shall also be constructed to FEMA 361 standards. Glazing within this corridor wall will be minimized. The counter shutters between the receptionist & kitchen and the corridor will be Hurricane-rated. "Hurricane-rated" does not mean "tornado-resistant", but should offer more protection than conventional construction. Tornado-rated counter shutters do not exist.
- 15. All interior walls that are available to the public will be constructed of CMU.

MISC. ARCHITECTURAL PROVISIONS

- 16. There are currently no special provisions for mail-rooms or mail-handling planned in the building design.
- 17. There are currently no special provisions proposed for blast-mitigation within the lobby vestibule.
- 18. A Lightning Protection system shall be provided.

Proposed MEPT Measures:

CONTROL OF OUTSIDE AIR

- 19. All outside air intakes shall be located at least 10-feet off the ground. UFC 4-010-01.
 Intakes will also be protected from items being thrown into them.
- 20. An emergency HVAC shut-off will be provided. UFC 4-010-01.

UTILITIES

- 21. Consider providing at least one layer of redundancy or back-up for each critical utility service.
 - Generator for electricity.
 - Bottled Water and Portable Chemical Toilets for water and sewer.
 - Microwave for fiber and copper lines (no separate copper phone service needed)
 - Offsite backup Dispatch Center and EOC.
- 22. Critical Utilities shall not be installed on/in exterior walls. Redundant utilities shall not be co-located. UFC 4-010-01.

BACK-UP SYSTEMS

- 23. Back-up Systems should be located away from the systems they are backing up. UFC 4-010-01.
 - Except because they're in an interior room the UPS system may be co-located with the electrical switchgear.
 - Systems to be on UPS need to be determined.
- 24. The generator and its fuel tank will be sized to run the building for 5 days.
 - The generator will be located within the hardened building enclosure.
 - The fuel tank will be buried outside within the 100-foot perimeter. FEMA 426 recommends locating fuel storage tanks at least 100-feet from the building.
 - External connections are not necessary for portable generators
 - Generator may be able to be used during peak load times for savings on electric bill.
- 25. Portable HVAC units, or spare compressors kept on-site, will be used to backup heating and cooling in critical areas (Dispatch, EOC & Comm. Cntr., and Data Equipment rooms).

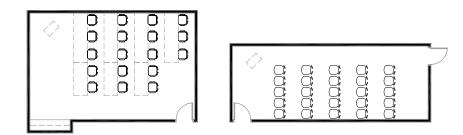
SECURITY

- 26. A PA system will be provided
- 27. Interior & Exterior video surveillance will be provided
- 28. Potentially employ increasing levels of security as you progress into the building. ID Cards, Codes, etc (thumbprints?)
 - Is a way to allow media to the RR and break room, while securing the EOC, necessary?

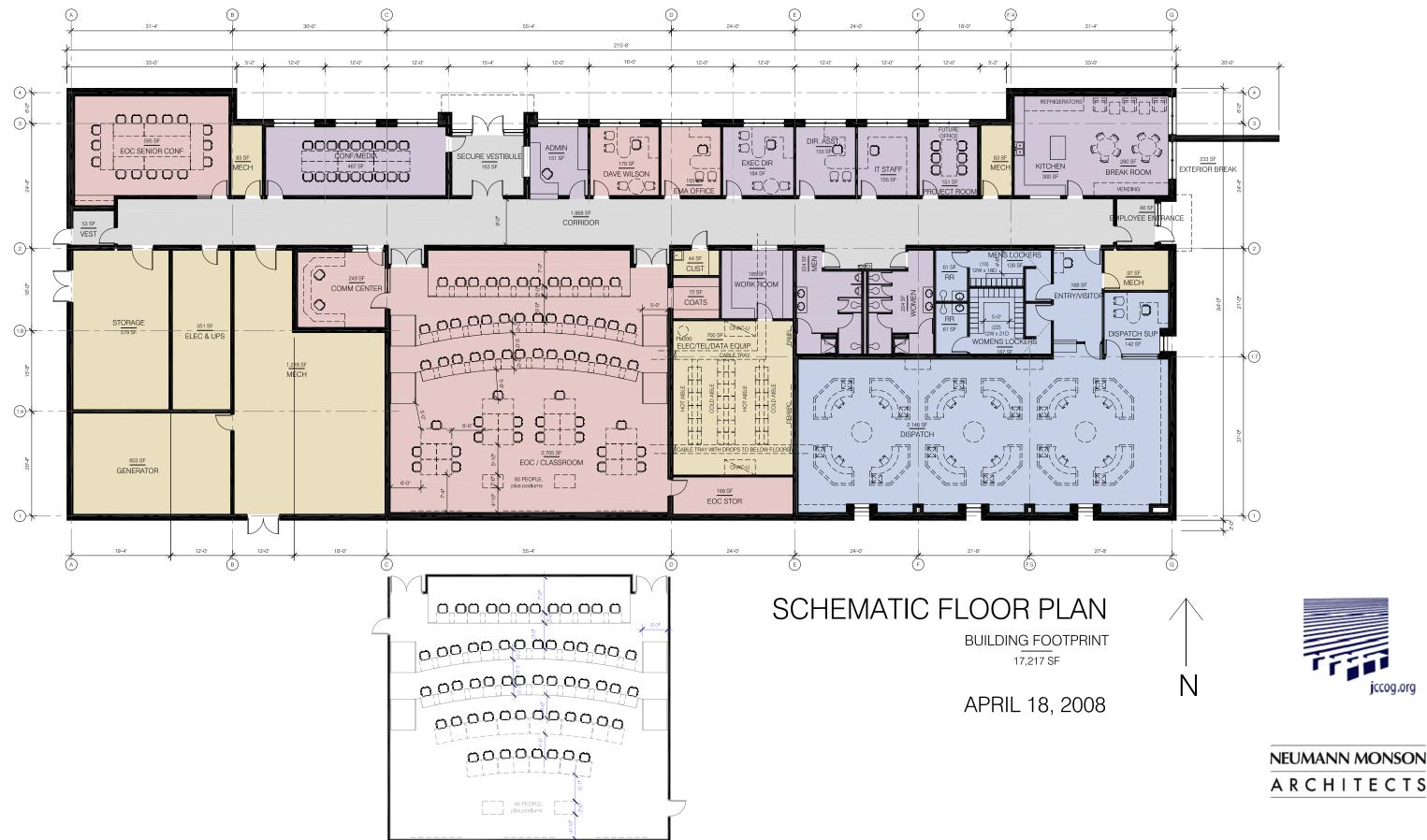
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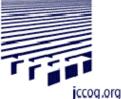
- 29. Types of Fire Protection Systems need to be discussed: FM-200 for data room? Pre-Action? Wet? Etc.
- 30. Washer and dryer, dishwasher, and disposal will be provided for extended operations.





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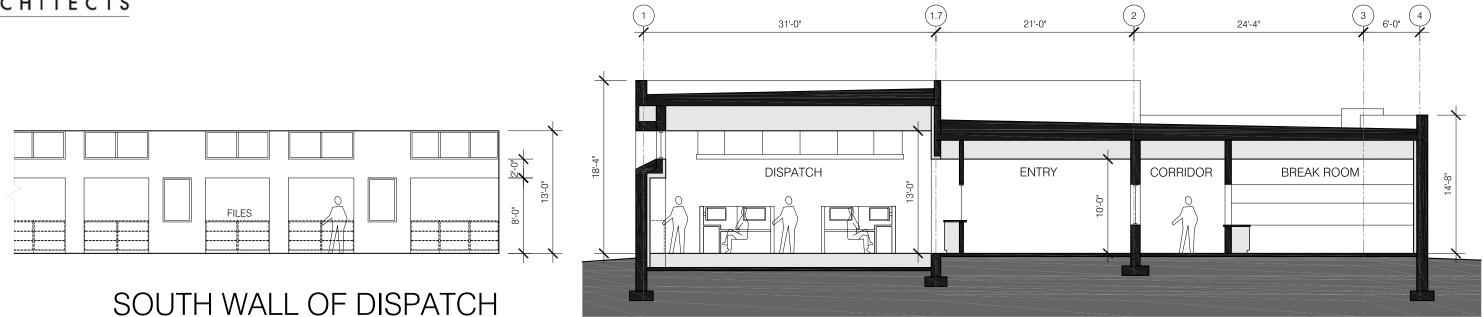


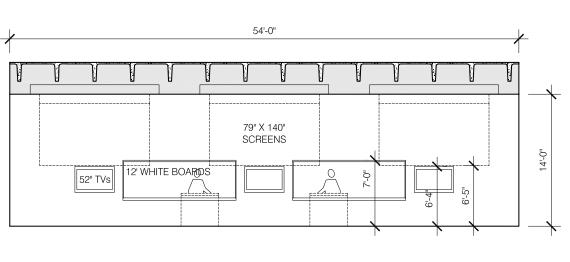




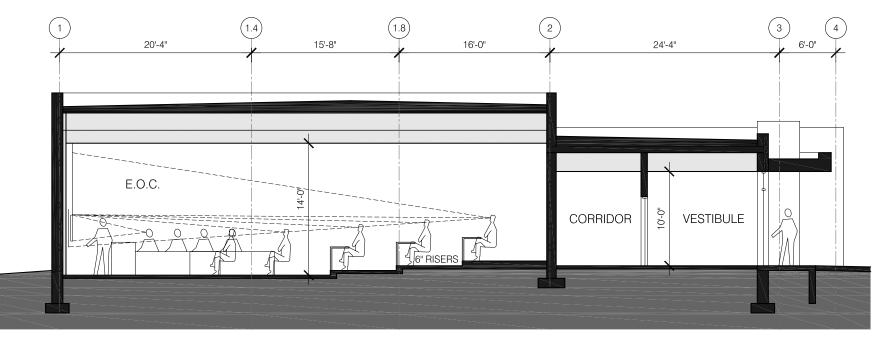


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FRONT WALL OF E.O.C.



JOHNSON COUNTY JOINT EMERGENCY COMMUNICATION CENTER

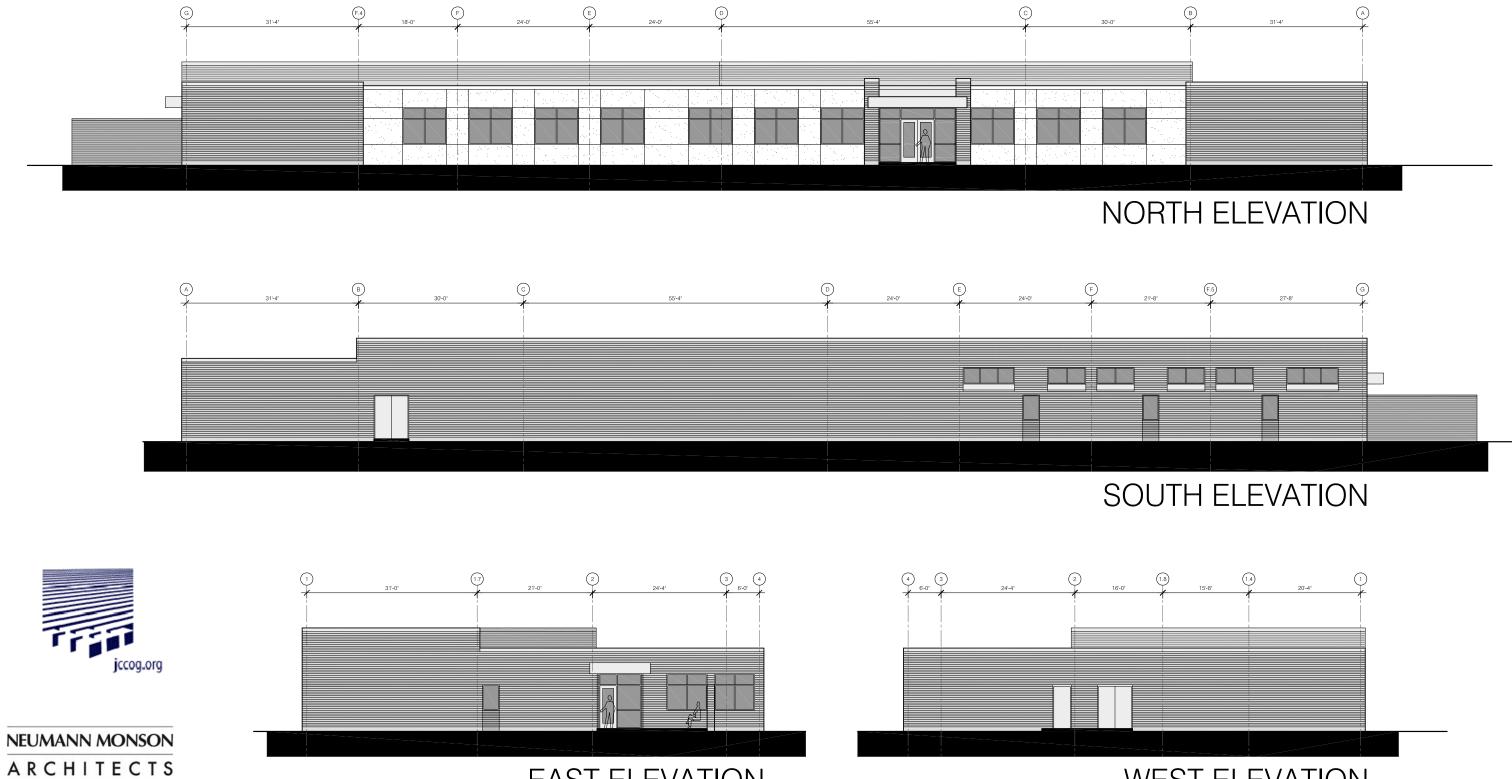
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SECTION @ E.O.C.

JOHNSON COUNTY JOINT EMERGENCY COMMUNICATION CENTER

APRIL 18, 2008



EAST ELEVATION

WEST ELEVATION







