



## CONSTRUCTION MEETING MINUTES

### UNIVERSITY OF MINNESOTA - DULUTH James I. Swenson Science Lab

**U of M PROJECT NUMBER** 581-65-1221  
**BUILDING PERMIT** 111068  
**ARCHITECT PROJECT NO.** 01023  
**DATE:** **December 23, 2003**  
**PROJECT:** James I. Swenson Science Lab  
**LOCATION:** University of Minnesota – Duluth  
Duluth, MN 55812  
**OWNER:** University of Minnesota  
**CONTRACTOR:** M.A. Mortenson  
**SCOPE:** \$ 25,451,000  
**START DATE:** April 1, 2003  
**COMPLETION DATE:** **December 31, 2004**

**PRESENT:** Greg Ewald -UMD  
Rick Stanius -STANIUS JOHNSON architects  
Bret Woodland -M.A. Mortenson  
Bob Braun -M.A.Mortenson

#### OBSERVATIONS AND DISCUSSIONS:

A construction meeting was held at 1:30 p.m. on Tuesday, December 23, 2003. There was a review of the previous construction meeting minutes dated December 16, 2003.

The following items were discussed and observations made:

#### Stanisus Johnson Architects

[www.staniusjohnson.com](http://www.staniusjohnson.com)

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*Principals* Kenneth D. Johnson AIA Rickard A. Stanius AIA Ronald E. Stanius AIA  
*Partners* Brian D. Morse AIA Steven B. P. Kalkman AIA  
*Associates* Larry M. Turbes AIA Jeffrey E. La Tour AIA Deanna Schmidt CID

## ACTION

- MAM** 1. Relative to item no. 1 of the previous meeting minutes, questioned by the architect Mortenson stated that the project is approximately 2 weeks behind schedule.
- SJA** 2. Attached to these meeting minutes is the Contractors Short Term Schedule. Architect will send Contractor his Roster for coordination with their logs.
3. Regarding proposal requests, the contractor is reminded that all proposal requests require backup by the subcontractor/supplier indicating labor, materials, and quantities. This is required for the architect's review of the proposal request prior to approvals.
- MAM** Outstanding PR's are #'s 40, 46, 47, 50, 51, 53, 55, 56, 57.1, 58, 60, 61, 62, 63, 64, and 65. **Contractor is to respond to these proposal requests as soon as possible.**
4. Disruption avoidance issues:
- MAM**     ▪ None.
5. Progress to date:
- For detail dates of work items in progress, or anticipated, see attached short term schedule. This schedule is contingent on weather conditions.
- MAM**     ▪ Area A. Installation of air-handling unit ductwork continues. Installation of exterior louvers will proceed through the month of December. Installation of heating lines on the second floor continues this week and next. Installation of heat lines on the ground floor continues through the month of December. Framing and sheetrocking on the ground floor corridor has started this week. Framing of the first floor walls continues this week and next. Framing of the mock-up lab is scheduled for the first week of January. Testing of the mains on the first and second floors of Area A and B is continuing this week and next. Mechanical branch lines for ground floor corridors continues through the month of December. Installation of electrical panels on second floor, Area A & B, will start next week. Electrical branch lines on the second floor continues this week through the end of next week.
- MAM**     ▪ Area B. Installation of air handling unit fans and ductwork continues. Installation heat and cooling lines, ground and first floors, continues this week and next. Installation of exterior louvers is proceeding. Lab waste for second floor, Area A & B, will start next week. Mechanical branch lines on the first and second floors continues through the month of December. Roofing work on the penthouse to line 9 continues through this week and into the middle of next week with the same work continuing from 9-line to 14-line from the middle of next week through the first week of January. Electrical feeders will start on the first and second floors next week. Installation of exterior curtain wall on one line continues this week and should be complete by the end of next week. Installation of skylight curtain wall will start the first part of January. Louver framing at C line and the penthouse will be complete the end of next week. Structural steel lower lintels at C line and penthouse will start the first week of January.
- MAM**     ▪ Area C. Mechanical mains on the first floor, C&D, continues this week and next. Installation of penthouse door frames will be complete by the end of this week. Roof blocking, 9 – 14 line, continues this week and should be complete by the end of next week, keeping ahead of the roofer. Installation of heat on the first floor will start the first week of January.
- MAM**     ▪ Area D. Structural steel erection from Bridge to Stair #4 continues through the first week of January. Detailing of Stair #4 will start the first week of January. Placing of concrete on Stair #4 will be done after detailing is complete. Concrete masonry unit work on the ground level walls continues this week through the end of next week. Exterior brick masonry will start around Stair #4 starting the first

week of January. Electrical switch gear will be received and set, contingent on deliver,

**MAM** 6. During the review of the short term schedule A.G.O'Brien was doing testing of mains on the first and second floors, Areas A & B. It is assumed that these will be the Contractors self-test. It is not the official acceptance test unless the University witnesses the testing after proper paperwork notification routing by the Contractor.

**MAM** 7. Relative to item no. 6 of the previous meeting minutes concerning the sequence of construction for window installation, Architect has issued a letter to Mortenson of November 3, 2003. Architect is requesting a letter from HKL of acceptance of the sequencing, and the additional plates were the recommendation of HKL. Also Architects email to Dan Pennington of October 30, 2003 requests re-submission of the revised window sill detail addressing the configuration of the stone sill as well as the through wall flashing. Architect also asked that this revised detail indicates acceptance of either hard plastic or treated plywood shims.

Architect reviewed the two details submitted by the Contractor and asked for them to be revised and resubmitted, specifically noting the plastic or treated wood shims as well as revising the flashing locations.

8. Relative to item no. 8 of the previous meeting minutes concerning submittals, architect is still awaiting the following from the contractor.

**MAM**

- Coordination drawings. Ground floor, first floor, and second floor, all areas, drawings have been completed and are being reviewed by Mortenson. Sets need to be distributed to owner and Design Team for review only, they will not be resubmitted approved since these are coordination contractor use drawings. They will be distributed to all trades by Mortenson. Still needed is the remaining floor levels as soon as possible.

Re-routing of the cable tray was discussed and the Contractor is aware that if there are any pricing implications they are not authorized to proceed with this work until this has been reviewed and approved by the Design Team and Owner.

**MAM, RBJ**

- Mock-ups and color samples. Reference architects letter to Contractor of July 1, 2003. The Contractor expects to have the Lab rough-in mock-up ready the second week of January. As soon as that has been approved by Owner, Engineer and Commissioning Agent Team then the finishing work will begin.

**MAM**

- Regarding the wood samples for the project, the casework samples as submitted are acceptable for the mock-up only. It will again be reviewed after the mock-up is in place. The door sample is approved, as submitted (this was a specified door color). The wood panel mock-up is rejected. The supplier is to match the wood door color and resubmit his sample.

**MAM**

- Architect is waiting a mock-up on the intumescent paint.

**John Rashid**

- Consideration is to be given for the Contractor to supply a typical research wing and teaching wing fume hood for Owners review. Since these hoods are repeated many times throughout the Facility, this is strongly encouraged. Bret indicated that there is a cost increase for delivery of the two typical fume hoods of approximately \$2,200. This item is to be reviewed and approved by Mr. Rashid prior to authorizing Contractor to order and receive these two hoods.

**MAM, SJA**

- The Contractor is working on a re-submission of the elevator shop drawings. Shop drawings should also address the issues brought up by Dave Stringfield and responded to by AEI in their letter of December 3, 2003.

Greg also had a question on sprinkling requirements for the generator room as well as the adjacent mechanical room.

A proposal request for providing interior two-hour rated walls around all of these rooms has been issued by the Design Team as PR#64, but needs to be clarified regarding these sprinkling issues.

- MAM**
- Sun screens. Dan reported that his sub-contractor has received the sample and is not satisfied with the color match of the welding. Architect requested that the sample be forwarded to MAM so that the Design Team can also inspect the sample.
- MAM**
9. Relative to item no. 11 of the previous meeting minutes, when corrective work is anticipated by MAM on Stair No. 1 stringer they are to notify MJB for their inspection of the contemplated procedure.
- MAM**
10. Relative to item no. 12 of the previous meeting minutes regarding AEI's Field Report #4, and all subsequent reports. Reports will be in accumulative format and items will only be taken off after they have been addressed by the Contractor and reinspected by the Engineer. .
11. Relative to item no. 14 of the previous meeting minutes with respect to the Commissioning Agent, Greg has communicated to them that they have three options at this point if they wish to have copies of the approved shop drawings. They are as follows.
- They can inspect the Architects shop drawings, in their office, but the drawings must be retained in the Architects office.
  - They can inspect the Contractors shop drawings, in their trailer, but the drawings must be retained in the Contractors trailer.
  - They can use Facilities Managements shop drawings, contingent that they are returned in tact to Facilities Management.
- MAM**
12. Relative to item no. 15 of the previous meeting minutes, the Contractor has been authorized to proceed with exterior brick work this winter. They are tentatively planning on starting brick work around Stair #4. Contractor needs to put forward a PCO to Architects office immediately.
- MAM**
13. Relative to item no. 16 of the previous meeting minutes concerning the exterior stone veneer, Dan reported that they have worked out all issues with the new stone supplier. He will be issuing a Purchase Order/Contract immediately to the new supplier. Architect asked that Dan send to undersigned a zero cost PCO outlining the pertinent information, including the new supplier, etc., so this can be officially incorporated into the Contract Documents.
- MAM**
14. Relative to item no. 17 of the previous meeting minutes, discussion was held concerning the Elevator Shop Drawings. Architect expects to see a "final review shop drawing set" supplied by the Elevator Sub-Contractor incorporating all of the revisions and corrections previously noted. Typically the elevator manufacturer will not go into fabrication until this final step has been taken.
- SJA,  
Facilities  
Mgmt.**
15. Relative to item no. 19 of the previous meeting minutes, discussion was held concerning the Furniture package. The proposal language from the Design Team needs to clearly indicate the requirement by the quoting vendors that wall attachment fasteners will need to be provided that will **not** require additional blocking within the wall cavity since these walls are now being constructed without any blocking provided. Providing blocking now would not be practical since a) the design is not totally complete and b) whatever blocking might be anticipated at this time most likely would be in the wrong place or blocking would be missed in the proper locations since, again, the final design is not yet complete and a vendor has not been selected by the Owner since this issue is still in the Design phase. This requirement is necessary so that MAM's framing schedule is not impacted.

- MAM** 16. Concerning item no. 20 of the previous meeting minutes with respect to the SM-4Z fusing, the Contractor is to issue a PCO direct to the Architect regarding this issue. The Contractor has been authorized to proceed with this revision assuming the credit indicated on Square D is reflected.
- MAM** 17. Greg underscored to the Contractor the importance, and the requirement, that they put forward the paperwork for request for inspection prior to covering up any work.
18. SJA forwarded to Mr. Rashid recommendations from RBJ on interior window treatment. It is assumed that this will be an Owner provided and installed item unless SJA is notified by the Owner to the contrary. This item was also sent to Greg Ewald by email on December 16, 2003.
- MAM** 19. Relative to item no. 25 of the previous meeting minutes, the Contractor is requiring from the roofing sub-contractor complete submittal of shop drawings indicating roofing details. The shop drawings for the insulation, of course, already has been received and approved as noted by Architect.
- AEI, SJA** 20. The Design Team has received the Contractors PCO for the addition of the flash tanks. AEI needs to set up a meeting time with undersigned and John Rashid to review this issue.
- Greg Ewald, Mike Austin** 21. Architects office has received Contractors response to PR #52 for revisions to the compressed air and nitrogen system testing requirements. In Architects discussion with Mike Austin he indicated that he would be open to a request for exception to the Standards on this issue. Greg indicated that he is discussing this with Mr. Austin. Architect awaits University decision on this issue.
- MAM** 22. Architect is awaiting Contractors re-submission of CIC #15 concerning the CD-7 diffusers in lieu of CD-6 diffusers.
- MAM** 23. Concerning CIC #16 for the additional 6" DI water main in the RHDC tunnel. Architect is awaiting Contractors submission of credit in the reduction 6" DI water main indicated on the civil drawings which equals 165.65 lineal feet, down to 30 lineal feet.
- All Contractors** 24. Discussion was held regarding the Retro-Plate concrete floor finishing system. **All contractors are advised that the concrete slabs on grade, concrete slabs on metal deck, as well as the concrete stair treads and landings, is the final floor finish for this project! Therefore no damage to the floor finish will be tolerated. This includes no cutting oil, no tobacco products or spitting of tobacco products, no dragging or dropping of materials, equipment, etc., etc. Damage to these slabs will be permanent and cannot be removed, therefore all contractors are to treat these slabs as if they were finished terrazzo floors!!!**
- All Contractors** 25. The next construction meeting will be held **Tuesday, December 30, 2003 at 1:30 p.m.**, in the Construction Trailer.

The preceding is assumed to be a complete and correct account of the items discussed, directions given, and conclusions drawn, unless this office is notified to the contrary immediately.



Rickard A. Stanius, AIA, CSI  
bsa

cc: John Rashid, UMD  
Jim Riehl, UMD  
Stephanie Goke, AEI  
Michael Ross, RBJ  
Tiffany Nash, RBJ  
Dan Murphy, MBJ  
Bob Leonard, MAM  
Rick Stanius  
File

Bruce Gingerich, UofM – (mail)  
Scott Holm, UofM – (mail)  
Ken Kornberg, KKA  
Tom Oslund, O&A  
Chris Rousseau, MSA  
Paul Johnson, MBJ  
Eric Edlund, GME  
Brian Morse  
Sebesta Blomberg

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**Field Report  
No. 4**



**Affiliated Engineers, Inc.**  
5802 Research Park Boulevard  
Madison, WI 53719  
Tel 608.238.2616 · Fax 608.238.2614

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UMD – Swenson Science Building

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01329-00

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Name of Project

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Project No.

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Duluth, MN

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December 5, 2003

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Project Location, City, State

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Date of Visit

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Paul Stasiewicz

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Report By

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1 of 4

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Typist

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**Time of Visit:** 12/05/03~1:00PM to 4:00PM

**Weather Conditions:** 32°F & Cloudy

**Contacts:**

Greg Ewald	UMD
Bret Woodland	Mortenson
Joe Kolodge	Jamar

**General Comments:**

- 1) The specifications referenced on this field report are from the electronic version and may differ from the hard copy version (page and line references).
- 2) All of the MEP's being installed at this time look to be in good quality.
- 3) This field report is not all-inclusive and does not relieve the contractors from the contract documents.

# Field Report

No. 1  
00830-00

Page 2 of 4

- 4) Walked the site with Greg Ewald to review status of installation. Most of the primary air distribution primary equipment has been installed. Ductwork is proceeding well with many of the main runs completed. Piping is likewise proceeding. In general installation workmanship looks good.
- 5) Reviewed issues identified in the Commissioning Agent Trip Report dated 11/25/03 (reissued). The following are comments regarding the issues identified in the report:
  - a. Hangers adjacent to AHU-2 may obstruct pulling of coils for AHU-2. There is one specific hanger that does appear to be in the path of the coil pull and may have to be relocated. Pipe routing paths may also be an issue. Design Engineers reviewing.
  - b. Drawing shows piping being routed behind AHU-5. This does not appear to be an issue.
  - c. There could definitely be a problem with pulling the motor covers off for: SF-9 where there is a steel beam within 6" of top of cover and EF-7 and SF-8 both mounted fairly close to top of structure. It appears from the shop drawings that a minimum of 24" clear distance above the cover is necessary to remove the cover. The manufacturer has indicated that the fans can be rotated.
  - d. Shaft pull capability for EF-1,2 and 3 was reviewed by Paul Stasiewicz and Greg Ewald. It appears that there is adequate space to pull the shaft. Will check with manufacturer on the minimum clear distance required to pull shaft.
  - e. Access doors are required for the OA plenums for access, inspection and cleaning of any debris that may collect in the plenum. Section details in the drawing show the adjacencies and layout for the duct in this area to ensure there are no conflicts.
- 6) Shop Drawings for the Heat Recovery Units show coil pulls on both sides of the unit. Project Drawings indicated coil pulls to be from one side of the unit due to obstructions and restrictions on the other side. Discussions with the manufacturer indicates that the far coil banks can be pulled through the access door on the opposite side of the unit thus achieving the same side coil pull requirement. Manufacturer indicated that in doing so, this would eliminate the need to remove piping connected to the header as would be required if the coiled was pulled in the normal manner.
- 7) Observed Jamar installing ductwork on the ground floor level. Observed tradesmen wiping interior of ductwork prior to installation. Also noted all open ends of installed ductwork were capped. This practice is noteworthy and I made a point to meet with Joe Kolodge to comment on this installation effort.

# Field Report

No. 1  
00830-00

## Observations:

Item	Observations	Date Observed	Date Completed	Comments
1	The curb heights for the AHU's and the HRU's are not high enough to accommodate the condensate drains. Refer to job documentations. Specification 15730.2.2.B and 15735.2.3.B. Drawing M-504, detail #1.	09/30/03	09/30/03	09/30/03~During the owners meeting it was asked of me what could be done to resolve this issue. I informed the group of the following 2 ideas. 1) Raise the curb heights. 2) Cut the floors out. The foundation floor would be cut out. The upper floors would be cored drilled. The group decided to use option #2.
2	The fan guards in the AHU's need to be painted Yellow. Refer to job specifications, 15000.3.6.B.	09/30/03		
3	The HRU on building A, the wood shims between the house keeping pad and the HRU need to be removed.	09/30/03		
4	SF-8 and SF-9 located in chiller room (Rm. 31) have the filters installed downstream of fan. Filters should be located upstream of fan.	10/22/03		
5	Jamar's pipefitter was directed to install condenser (tower) water supply piping to suction side of pumps (P-5 and P-6) as low as possible (minimum 6'-0" clear below) to maximize suction head pressure on pumps.	10/22/03		
6	Cooling tower vibration isolators are to be removed. These were not required by the specs, are unnecessary since towers are not mounted on the building, and the way they are installed appears to excessively point load the tower structure.	10/22/03		
7	The ground floor toilet room has a vent pipe which is supported by strut from the waste pipe. Refer to Specification 15020 3.1E.	11/06/03		
8	All Sanitary piping shall be properly protected with end caps and stored above grade per section 15100 1.5A.	11/06/03		
9	Section 15550 requires ductwork in mechanical spaces to have vibration isolation hangars under certain specified conditions. Did not observe any isolation hangars being installed on ductwork in mechanical spaces in the penthouse area. Contractor needs to confirm hanging methods are meeting specification requirements.	12/05/03		

# Field Report

No. 1  
00830-00

Item	Observations	Date Observed	Date Completed	Comments
10	M-505 Detail 3 specifies the number of fasteners required on duct risers. Contractor using stitch welds to fasten ductwork to angle support. However, in several of the locations observed in B Section, duct was being supported on short side and the number of fasteners did not comply with Detail 3.	12/05/03		

**Prepared by:** Paul Stasiewicz  
Field Services Rep 608-236-1184  
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**UMD Science Building Project #031007**  
**3 Week Schedule**

<b>MORTENSON<sup>®</sup></b>		December							Dec - Jan							January						
		M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
<b>Contractor Responsible</b>	<b>ACTIVITY</b>	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11
	Area A																					
Jamar- Tinnars	Install AHU ductwork	x	x	x					x	x	x					x	x	x	x	x		
Jamar-Tinnars	Install louvers	x	x	x					x	x	x					x	x	x				
Jamar- Fitters	Install heat 2nd flr.	x	x	x					x	x	x											
Jamar- Fitters	Install heating ground flr.	x	x	x					x	x	x					x	x	x	x	x		
Minute-Ogle	Frame & rock gr. Flr. Corridor	x	x	x																		
Minute-Ogle	Framing 1st flr walls	x	x	x					x	x	x											
Minute-Ogle	Frame mock-up walls															x	x	x	x	x		
AGO	Test mains 1st, & 2nd A-B		x	x					x													
AGO	Branch grd.flr. Corridors	x	x	x					x	x	x					x	x	x				
API	Install panels 2nd flr. Area A-B								x	x	x					x	x	x	x	x		
API	Pull branch lines 2nd flr area A	x	x	x					x	x	x											
Ter & conc Rest.	Retroplate gr. Flr.								x	x	x											
	Area B																					
Jamar-Tinnars	Install AHU fans, & duct	x	x	x					x	x	x					x	x	x	x	x		
Jamar - Fitters	Install heat & cool gr. & 1st.firs.	x	x	x					x	x	x											
Jamar - Tinnars	Install Louvers	x	x	x					x	x	x					x	x	x	x	x		
AGO	Lab waste 2nd A-B								x	x	x					x	x	x	x	x		
AGO	1st, & 2nd flrs. Branch	x	x	x					x	x	x					x	x	x				
Com Roofing	Install pent.roof to 9-line	x	x	x					x	x												
Com Roofing	Install pent.roof 9-line to 14-line										x		x			x	x	x	x	x		
API	Pull feeders 1st, & 2nd								x	x	x					x	x	x	x	x		
HKL	Install curtain wall, 1-line	x	x	x					x	x	x											
HKL	Install skylight curtain wall															x	x	x	x	x		
Minuti Ogle	Louver framing at C-line, pent.								x	x	x											
N. Erectors	Lower lintels at C-line, pent.															x	x	x	x	x		
	Area C																					
AGO	Install mains 1st C-D	x	x	x					x	x	x											
Minute-Ogle	Install pent. Door frames.	x	x	x																		
Mortenson	Roof blocking 9 to 14-line	x	x	x					x	x	x											
Jamar- Fitters	Install heat 1st flr.															x	x	x	x	x		
	Area D																					
N. Erect.	Erect bridge-str. #4 to pent.		x													x	x	x				
N. Erect.	Detail stair # 4																	x	x	x		
Mortenson	Place conc.str. # 4																					
Harbor City	Block ground level walls	x	x	x					x	x	x											
Harbor City	Brick stair # 4															x	x	x	x	x		
API	Switch gear del.- set equip.								x	x	x					x	x	x	x	x		