



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: **August 19, 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
Dan Pennington - M.A. Mortenson
Mike Braun -M.A. Mortenson
Mike Pierson -M.A. Mortenson
Bob Braun -M.A. Mortenson

OBSERVATIONS AND DISCUSSIONS:

A construction meeting was held at 1:30 p.m. on Tuesday, August 19, 2003. There was a review of the previous construction meeting minutes dated August 12, 2003.

The following items were discussed and observations made:

Stanisus Johnson Architects

www.staniusjohnson.com

■ Duluth: 1831 East 8th St. Duluth, Minnesota 55812-1396 Phone 218-724-8578 Fax 218-724-8717
□ St. Cloud: 2035 15th St. N. St. Cloud, Minnesota 56303 Phone 320-253-2100 Fax 320-253-2269

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 as of August 1st they are back on schedule.

SJA

2. Attached to these meeting minutes are the contractor's short term schedule, RFI log, and current Submittal log. Architect stated that he will email to the contractor his roster so that they can coordinate with their logs.

On the Submittal Log, metal fabrications 05500 and metal stairs 05510 need to be reviewed and forwarded to contractor as quickly as possible. Contractor acknowledges that they were delivered to architect August 12, but they do need them as soon as possible. 15735 heat recovery exhaust units and 15850 stainless duct at biosafety/fume exhaust.

3. Relative to item no. 3 of the August 5 meeting minutes 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 architects review of the proposal request prior to approvals.

MAM

Architect is in receipt of PCO's # 11, 14, 15, 16, 18 and 22 which will be incorporated into Change Order No. 2. Also incorporated into the same change order are CIC's #10, 11, 9, and 8. PCO's # 12, 17, 19, 20, 21, 25, 26, 27 and 29 are being reviewed by the Design Team at this time. Architect is awaiting responses to PR's # 6.1, 10, 12, 14, 17, 31, 32 and 33. **Contractor is to respond to these proposal requests as soon as possible.**

4. Disruption avoidance issues:

MAM

- The 6" waterline is tentatively scheduled for installation on August 25, 2003. Contractor has issued an RFI regarding the connection detailing. There is a conflict between civil and mechanical. This needs to be resolved immediately since this work is scheduled for this coming Wednesday or Thursday.

Greg Ewald requested a secondary meeting after this construction meeting with the direct subcontractors to be sure that the work in the tunnel will be accomplished as per our requirements and within the timeline for the outage that the contractor has specified and requested.

5. Progress to date:

- For detail dates of work items in progress, or anticipated, see attached short term schedule.

MAM

- Structural steel frame for Area A is nearing substantially completion. Structural steel frames for Areas B and C are proceeding...
- Steel decking for Area A is substantially complete proceeding and is proceeding on Area B at this time.

MAM

- The contractor is proceeding on cooling tower and footings are complete. Structural steel columns are being installed at this time and the walls are being formed in anticipation for pouring.
- The suspended floor slab pour has been placed, first level Area A, first and second levels. The slab on grade for Area A is complete. For Area B, first level, suspended floor slab has been poured. Second level is scheduled for August 20.
- Mechanical and electrical rough-in is proceeding.
- Underground plumbing and piping is proceeding at Area B, slab on grade area.

MAM, Greg Ewald

- Sod site work restoration as well as top soil is substantially complete for the areas disturbed to this point. Mike Pierson indicated that the total cost for the site restoration work is approximately \$20,000. The contractor has established the

quantities.

- Regarding the re-use of the existing top soil, GME and Mortenson are discussing options for making the material comply with the specifications. This may require the input of the landscape architect. GME has submitted a report on this issue. The extent of restoration has been marked on the site so the contractor can identify quantities. This work is to be done as soon as possible.

Regarding the re-use of existing top soil, Mortenson is having a second import sample tested in anticipation of site mixing with the stock piled soil for future re-use.

Mortenson is also anticipating top-dressing the sod that has been placed to bring that up to acceptance. Both of these top soil issues need to be reviewed by a landscape architect contracted by Mortenson.

- GME, MAM**
6. Relative to item no. 6 of the previous meeting minutes, architect stated that he has contacted GME and instructed GME to document all cases where over excavation for footings are required to achieve the designed soil bearing pressure. This report needs to be location specific and give quantities of additional excavation out, additional backfill in, and additional cubic yards for concrete mud slab, and additional cubic yards of concrete footings. These will be reviewed and concurrence needs to be reached between GME and Mortenson.
 7. Relative to item no. 7 of the previous meeting minutes concerning submittals, architect is still awaiting the following from the contractor.
 - Coordination drawings. Bret Woodland indicated all ground floor, for all areas, coordination 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.
- MAM**
8. Relative to item no. 8 of the previous meeting minutes regarding the site lighting revisions, this has been reissued by architect today and delivered to contractor as PR No. 33.1.
- MAM**
9. Relative to item no. 9 of the previous meeting minutes regarding the design review meeting for the landscape design work, this meeting is rescheduled for September 5, 2003 in Chicago.
- MAM**
10. Relative to item no. 10 of the previous meeting minutes regarding Elevator No. 1 shaft size, Brian Morse will contact elevator advisory group to discuss the issue of ADA compliance of the elevator size. Since Minnesota Elevator has indicated that their car will meet ADA, architect strongly recommends that they meet with Jerry Saarenpaa, State Elevator Inspector, at this point to be sure that there aren't any problems in Jerry approving the car as anticipated. This needs to be coordinated through Otis Elevator. Also, architect strongly recommended that the contractor sit down and review the shop drawings with Saarenpaa so that there aren't any unforeseen changes that could be averted before this work starts.

- MAM** 11. Relative to item no. 11 of the previous meeting minutes regarding the review of the concrete floor finish mock ups, the review date will be August 20, 2003.
- A brick mock-up has been laid up for the architects review. Mike Pierson indicated the siding samples will be ready for review with the louver colors at the August 20th meeting also. Suspended slab polishing mock-ups are also ready for review. Mortenson is pursuing whatever other mockups they can put together for that same review time.
12. The Design Team met on August 13 at Cold Springs Granite to review the aged taconite samples. RBJ is reviewing alternate materials for this application. This item needs to be addressed as soon as practical.
- MAM** 13. Discussion was held concerning the box culvert. The contractor is pursuing options at the guidance of design team regarding this issue. Dan will be forwarding this information as soon as he gets it put together. He is pursuing precast lidded culvert similar to a previous job that he was involved with.
- MAM** 14. Mortensen indicated that they are exceeding their take-off quantities on suspended slab pours. This item was addressed by Meyer, Borgman and Johnson on a letter of August 13 which Dan has copy of. He will be responding to that letter.
- All Contractors** 15. **The next construction meeting will be held Tuesday August 26, 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
sbr

attachments

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
Ken Kornberg, KKA
Tom Oslund, O&A
Chris Rousseau, MSA
Paul Johnson, MBJ
Eric Edlund, GME
Brian Morse

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Request for Information Log

Date: 8/21/03

Mortenson Job No: 031007

Page: 1 of 1

Issue	To	From	Number	Description	Status	Dated	Responded	Required	Days Held
15-058	ARCH	MORT	00197	Rated Ceiling Height, Cor. 50 @ J	NEW	8/11/03		8/18/03	10
05-106	ARCH	MORT	00199	Field Verify Wing Wall Dimensions	NEW	8/11/03		8/18/03	10
08-026	ARCH	MORT	00202	Glass Type Summary	NEW	8/12/03		8/19/03	9
16-015	ARCH	MORT	00203	Photocell Part/Manuf. Clarification	NEW	8/12/03		8/19/03	9
15-063	ARCH	MORT	00205	3" Floor Drain Piping, 1st Floor D	NEW	8/15/03		8/22/03	6
15-065	ARCH	MORT	00206	Access Doors at Coils	NEW	8/15/03		8/22/03	6
07-010	ARCH	MORT	00207	Wall Detail Between E and F on 17?	NEW	8/18/03		8/25/03	3
05-116	ARCH	MORT	00208	Steel Railing at Roof Bridge	NEW	8/18/03		8/25/03	3
16-016	ARCH	MORT	00209	Pumps/Electric Gear in Room #31	NEW	8/19/03		8/26/03	2
05-121	ARCH	MORT	00210	L208 Lintel Elev. at Bridge Angle	NEW	8/20/03		8/27/03	1
05-117	ARCH	MORT	00211	Wall Gaurd Finish Clarification	NEW	8/20/03		8/27/03	1
05-120	ARCH	MORT	00212	Kwik Bolts at TS Bridge Support	NEW	8/20/03		8/27/03	1
06-003	ARCH	MORT	00213	Cabinet A Clarifications	NEW	8/20/03		8/27/03	1
15-057	ARCH	MORT	00214	Valves serving the laboratory	NEW	8/20/03		8/27/03	1
05-119	ARCH	MORT	00215	Stair #4 Framing at Skybridge	NEW	8/20/03		8/27/03	1

Open RFI's: 15

Submittal Log

Date: 8/21/03

Page: 1 of 2

Mortenson Job No.: 031007

Submittal	Rev.	Title	Status	Submittal Date	Current Dates				BIC	Days Held By Architect
					Rcvd.	Sent	Return	Forward		
05120 Structural Steel										
05120-SD-015	001	Area "C" & "D" 2nd Tier	SUB		8/14/03	8/14/03			ARCH	7
05500 Metal Fabrications										
* 05500-SD-002	001	Misc. Ladders, Angles, Brackets: Drawings 502-504	SUB		8/7/03	8/11/03			ARCH	10
05510 Metal Stairs										
* 05510-SD-002	001	Stair #1 & Interior Bridge Complete: E708,E709,E712,E713,705	SUB		8/8/03	8/11/03			ARCH	10
* 05510-SD-003	001	Stair #2 Complete: E710-E711, 710-718	SUB		8/7/03	8/11/03			ARCH	10
* 05510-SD-004	001	Stair #5 Complete: E715, 732, 733	SUB		8/7/03	8/11/03			ARCH	10
* 05510-SD-005	001	Stair #6 Complete: E714, 730, 731	SUB		8/7/03	8/11/03			ARCH	10
* 05510-SD-006	001	Three Roof Stairs: E716, 734	SUB		8/7/03	8/11/03			ARCH	10
05716 Fabricated Helical Stairs										
05716-PS-001	001	Helical Stairs Prelim. Load Values	SUB		8/21/03	8/21/03			ARCH	0
07270 Air Barriers										
07270-PS-004	001	Air Barriers Install Instruc. Mason: Air Barriers Install Instruct -	SUB		8/5/03	8/6/03			ARCH	15
07270-PS-003	001	Air Barriers Spec - Mason	SUB		8/5/03	8/6/03			ARCH	15
07550 Mod. Bituminous Membrane Roofing										
07550-PS-001	001	Bituminous Membrane Roofing Specs	SUB		8/5/03	8/6/03			ARCH	15
07550-CE-002	001	Mod. Bituminous Membrane Roof Qual: Mod. Bituminous Mem	SUB		8/5/03	8/6/03			ARCH	15
07550-WA-001	001	Mod. Bituminous Membrane Roof. War: Mod. Bituminous Mem	SUB		8/5/03	8/6/03			ARCH	15
07620 Sheet Metal Flashing & Trim										
07620-SA-002	001	Sheet Metal Flashing & Trim Samples	SUB		8/5/03	8/6/03			ARCH	15
07620-PS-001	001	Sheet Metal Flashing & Trim Specs	SUB		8/5/03	8/6/03			ARCH	15
07811 Intumescent Mastic Fireproofing										
07811-PS-001	001	Intum. Mastic Fireproofing Specs	SUB		8/1/03	8/4/03			ARCH	17
08970 4-Sided Structural Glazed Series										
08970-QA-001	001	4-Sided Structural Glazed Calcs	SUB		7/31/03	8/1/03			ARCH	20
08970-SD-001	001	4-Sided Structural Glazed Shops	SUB		7/31/03	8/1/03			ARCH	20
09910 Exterior Painting										
09910-PS-001	001	Exterior Painting Specs	SUB		8/1/03	8/4/03			ARCH	17
09920 Interior Painting										
09920-PS-001	001	Interior Painting Specs	SUB		8/1/03	8/4/03			ARCH	17
09920-SA-001	001	Interior/Exterior Painting Samples: Interior Painting Samples	SUB		8/1/03	8/4/03			ARCH	17
10210 Fixed Metal Wall Louvers										
10210-SA-001	001	Fixed Metal Louvers Color Samples: Fixed Metal Wall Louvers	SUB		6/23/03	6/25/03			ARCH	57
15084 Mechanical Systems Firestopping										
15084-PS-001	001	Mechanical Firestopping Specs	SUB		8/12/03	8/13/03			ARCH	8
15180 Equipment By Others										
15180-SD-001	001	Equipment By Others Shops	SUB		8/14/03	8/15/03			ARCH	6
15530 Piping Specialties										
15530-SD-001	002	Steam Traps: Armstrong Steam Traps	SUB		8/4/03	8/5/03			ARCH	16
15630 Pumps										
15630-SD-001	002	Spirax/Sarco Cond. Press. Pumps	SUB		8/14/03	8/15/03			ARCH	6
15700 Packaged Air Handling Units										
15700-SD-001	002	Air Handling Units: Ventrol / McQuay	SUB		8/15/03	8/15/03			ARCH	6
15730 Custom Air Handling Units										
15730-SD-002	002	Custom Air Handling Units: AHU-3 and AHU-4 Resubmittal	SUB		8/14/03	8/15/03			ARCH	6
15735 Heat Recovery Exhaust Units										
* 15735-SD-001	002	Heat Recovery Exhaust Units: HRU-1 & 2	SUB		8/14/03	8/15/03			ARCH	6

Submittal Log

Date: 8/21/03

Page: 2 of 2

Mortenson Job No.: 031007

Submittal	Rev.	Title	Status	Submittal Date	Current Dates				BIC	Days Held By Architect
					Rcvd.	Sent	Return	Forward		
15850 Ductwork										
15850-PS-006	002	Stainless Duct @ Biosafety/Fume Exh	SUB		8/7/03	8/11/03			ARCH	10
15902 Control Valves & Dampers										
15902-PS-001	001	Control Valves & Damper Specs	SUB		7/11/03	7/28/03			ARCH	24
15904 Lab Temp & Airflow Control Systems										
15904-PS-001	001	Lab Temp & Airflow Control Specs	SUB		7/28/03	7/28/03			ARCH	24
15910										
15910-SD-002	001	Temperature Control Drawings	SUB		8/7/03	8/11/03			ARCH	10
15910-SD-001	001	Temperature Controls Sequencing	SUB		8/4/03	8/4/03			ARCH	17
16075 Electrical Identification										
16075-PS-001	001	Electrical Identification Specs	SUB		8/13/03	8/14/03			ARCH	7
16250 Automatic Transfer Switch										
16250-SD-001	003	Automatic Transfer Switch Shops: Shop Drawings Resubmitter	SUB		8/15/03	8/15/03			ARCH	6
16420 Secondary Unit Substations										
16420-SD-001	002	Secondary Unit Substations	SUB		7/30/03	7/31/03			ARCH	21
16425 Switchboards										
16425-SD-001	002	Switchboards	SUB		7/30/03	7/31/03			ARCH	21
16450 Grounding System										
16450-PS-001	001	Grounding System Spec	SUB		8/13/03	8/14/03			ARCH	7
16490 Fuses										
16490-PS-001	001	Fuse Specs	SUB		8/13/03	8/14/03			ARCH	7
16510 Lighting Fixtures										
16510-SD-002	001	Lighting Fixture "G1" (Missed)	SUB		7/30/03	7/31/03			ARCH	21
16510-SD-003	001	Linear Fixture Construction Dwgs	SUB		7/30/03	7/31/03			ARCH	21
16594 Lighting Control Devices										
16594-PS-001	001	Lighting Control Specs- Tork: Lighting Control Device Specs	SUB		8/14/03	8/15/03			ARCH	6
16620 Standby Electrical System										
16620-SD-001	003	Standby Electrical System Shops: Shop Drawings Resubmitter	SUB		8/15/03	8/15/03			ARCH	6
16746 Communication Room Provisioning										
16746-PS-001	001	Communication Room Provision Specs	SUB		8/13/03	8/14/03			ARCH	7

Submittal's +21 Days: 7

**UMD Science Building Project #031007
3 Week Schedule**

MORTENSON[®]		August							August							September						
		M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
Contractor Responsible	ACTIVITY	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7
	Area A																					
Minute-Ogle	Fire-proof str. Stl.				x	x																
Minute-Ogle	Frame ext walls								x	x	x	x	x				x	x	x	x		
Harbor City	Block walls	x	x	x	x	x			x	x	x	x	x				x	x	x	x		
Mortenson	Place SOMD 3rd level								x	x	p											
	Area B																					
N. Erectors	Set str.stl.- upper levels																					
N. Erectors	Detail str. Stl.																					
N. Erectors	Decking																					
AGO	Underground plumbing	x	x	x	x	x			x													
API	Underground elect.	x	x	x	x	x			x													
Mortenson	SOG		x	x	p																	
Mortenson/Sowles	SOMD	x	x	p																		
	Area C																					
N. Erectors	Set str. Stl.	x	x	x	x	x			x													
N. Erectors	Detail stl.				x	x			x	x	x	x	x									
N. Erectors	Decking										x	x	x				x	x	x	x		
	Area D																					
Ulland Bros.	Exc.ftgs. & ductbank									x	x	x	x				x	x	x	x		
Ulland Bros.	Install 6" waterline	x	x	x	x	x			x	x												
Mortenson/ Sowles	FRP ftgs.										x	p	x				p					
Mortenson/ Sowles	FRP walls												x				x	x	p	x		
Jamar/ Ulland	Waterproof-Backfill																			x		
N. Erect.	Set str. Stl.																					
N. Erect.	Detail str.stl.																					
N. Erect.	Decking																					
	Cooling tower																					
Mortenson/Sowles	FRP walls		x	x	p	x			x	p	x											
N. Erect.	Set str. Stl.		x			x																
Ulland Bros.	Backfill SOG											x	x									
Mortenson/Sowles	SOG																x	p				



August 13, 2003

FIELD TRIP MEMORANDUM

To: Brian Morse - Stanius Johnson Architects

Project: James I. Swenson Laboratory Science Building - UMD
UM project number: 581-98-1221
Duluth, Minnesota

Representative Contacted: Mike Pierson – Mortenson
Bob Braun - Mortenson

Date of Field Trip August 13, 2003

Written By: Paul A. Johnson, P.E.

A site visit was made to review concrete placement at the second floor, area A (in progress at the time of my visit) and review the (in-place) results of the previous slab placement in area A at the first floor. The following summarizes our observations and the items discussed with the project representatives:

1. The concrete placing crew was using a “wet screed” method of placement. (A mound of plastic concrete is set to the correct elevation with a laser level and verified for depth prior to placing the infill concrete, which is then struck off to match the established “wet screed” elevation. Subsequent areas are then placed using previously placed concrete as a reference elevation). With the exception of the slab edge form, no fixed screed supports were used (the placing crew indicated none were used in the first pour either). Concrete was being placed in “lanes” approximately 12 to 15 feet wide in an east-west direction beginning at the northwest corner of area A. Maximum concrete depths for the first pour were quoted by the placing crew as 7” (only slightly in excess of the +3/8” tolerance recommended by ACI). The crew also indicated that they were attempting to hold closer to the specified slab thickness of 6 ½” with the second floor pour. No exceptions were taken with the contractor’s method of concrete placement.
2. MBJ reviewed our calculations of predicted beam deflections under the wet weight of concrete in area A. We confirmed the cumulative effect of girder and purlin deflections under the weight of the specified slab (less specified camber) should not exceed 1” to 1 ¼” at the worst-case condition (mid span of mid bay purlins). It should also be noted that anticipated deck deflection (relative to supporting members) should not exceed ½” for a 10 foot span. These anticipated deflections are within acceptable limits for this type of floor construction as established by AISC and the Steel Deck Institute. The contractor indicated they were taking measurements of the top of slab and bottom of beam elevations at several locations at first and second floor to verify in-place deflections, camber and slab thickness. MBJ may have additional comment on these conditions once we have had an opportunity to review this data.

Field Trip Memorandum

James I. Swenson Laboratory Science Building - UMD

UM project number: 581-98-1221

Page 2 of 2

3. The special inspector had reviewed the placement of reinforcing steel for area A at the second floor. It appeared top steel over deeper beams was properly placed and that reinforcing steel mesh had been supported in accordance with approved shop drawings. I requested that hooked top steel at grid 18 south of grid L (at the post supporting the exterior wall lintel) be moved closer to the slab edge. This work was completed prior to concrete placement. The contractor expressed concern that the mesh was too close to the slab surface. It was noted that high chairs supporting reinforcing steel mesh were being systematically shortened by force (with a maul) to lower their elevation just prior to concrete placement. The contractor was cautioned to discontinue this practice immediately in favor of additional ties to hold reinforcing steel mats (especially their ends) at the required elevation. The ironworker on site agreed to place additional ties to improve the "lie" of the mesh. MBJ noted that the chair height and support bar configuration indicated on approved shop drawings results in approximately 1" clear to the reinforcing steel mesh (as specified). Double layers of mesh may need to be tied more frequently to prevent the ends from being exposed. Triple layers may require trimming of excess material to reduce the bulk at laps. It was agreed that the specified chair height might (solely as a contractor's option) be reduced by 1/4" in future pour areas for all top bar and mesh support to facilitate placement. The contractor may also place top steel over deeper beams (reference detail C2/S701) above the mesh (rather than below) in future pour areas.
4. Several slab cracks were observed on the first floor between grids 15 and 16. Each crack appeared to correspond with the location of the support beam below. The cracks were not observed between grids 16 and 18 (the floor slab in this area was essentially crack free at the time of my visit). The presence of these cracks is not unusual for this type of construction. However, we recommend the following to minimize the potential for future cracking:
 - 4.1. Maintain specified top cover to reinforcing steel.
 - 4.2. Carefully monitor concrete consistency; immediately notify the supplier for correction of changes observed between loads.
 - 4.3. Maintain proper curing and protection from weather.
 - 4.4. Eliminate excessive vibration from power floating and power troweling during finishing.

These notes reflect the writer's observations and understanding of the items discussed. Please notify MBJ (in writing) if there are exceptions with any item and if clarification or additional information is required.

PAJ/

Email Cc: Dan Murphy - Meyer, Borgman and Johnson, Inc. (Minneapolis)
Mike Pierson - Mortenson