



CONSTRUCTION MEETING MINUTES

DATE: 5/29/12

Construction Meeting No.: 35
 Project Name: **Keystone Middle School**
 Meeting Location: Job site **2:00 PM**

| Present | Distributed | Name | Company |
|---------|-------------|--------------------|---|
| X | X | Jay Arbaugh | Keystone Local School District |
| X | X | Dennis Walter | Keystone Local School District |
| X | X | Michael Smith | Keystone Local School District |
| | X | Susan Bement | Keystone Local School District |
| | X | David J. Leach | The Cornice Company |
| X | X | David D. Leach | The Cornice Company |
| X | X | Brandilyn Fry | The Cornice Company |
| X | X | John Potter | The Cornice Company |
| | X | Mark Moore | FMD Architects |
| X | X | Robb Seders | FMD Architects |
| | X | Michael DiMaio | FMD Architects |
| | X | Melanie Friedman | FMD Architects |
| | X | Nick Baker | GE Baker |
| | | Dan Marrone | Marrone Construction (GE Baker) |
| | X | Roger Riachi | RFC Contracting |
| X | X | Brandon Shuster | RFC Contracting |
| | X | Matt Hileman | RFC Contracting |
| X | X | Frank Cimino | RFC Contracting |
| | | Dennis Radloff | Accurate Concrete (RFC Contracting) |
| | | Bob Bennett | Firelands Fabrication |
| X | X | Matt Birch | Giambrone Masonry |
| | | Gino DiPaola | Giambrone Masonry |
| | X | Thomas Gergye | Custom Fabricators |
| | X | Sue Relken | Custom Fabricators |
| | X | Doug Posa | Breckenridge Kitchen Equipment & Design |
| | X | John Jakuszewski | S.A. Comunale |
| | X | Tim Cerepak | S.A. Comunale |
| | X | Mike Purdham | S.A. Comunale |
| | X | Steve Hendricks | S.A. Comunale |
| X | X | Chris Buckholz | Suburban Process Piping |
| | X | Steve Shaver | Suburban Process Piping |
| X | | Karl Cloen | Suburban Process Piping |
| X | X | Mark Huston | Bay Mechanical and Electrical Corp. |
| X | X | Alex Weber | Bay Mechanical and Electrical Corp. |
| | | Ron Brown | Bay Mechanical and Electrical Corp. |
| | X | Mickey O'Grady | CCG Automation |
| | X | Anthony Grandstaff | CCG Automation |
| X | X | Phil Becker | STAN Engineers |



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I. GENERAL

1. Contractors are responsible for items discussed in the meetings whether they are present or not. Project Managers shall be present at meetings.
2. Safety – Follow all OSHA guidelines.
3. Hard Hat Use – All personnel on site are to wear hard hats. No exceptions. Notices to contractors will be issued if hard hats continue to not be worn.
4. Remember to use appropriate fall protection.
5. Steel erection is occurring. Use caution.
6. Safety rails need to be replaced when removed. Contractors are responsible for their own safety.
7. Rails to be installed at stairs for safety.

II. AMENDMENTS TO PREVIOUS MEETING MINUTES

1. None

III. RFI'S

1. Answered since last meeting: None
2. Outstanding: 105-01, **110-020 (discussed after meeting)**, 111-013

IV. SUBMITTALS

1. Outstanding submittals:

| Submittal | Responsible Contr. | Date Submitted | Return Due Date | Status |
|--|---------------------------|-----------------------|------------------------|------------------|
| 108-054: Metal Locker Shop Drawings | RFC | 5/24/12 | 6/7/12 | In Review |
| 108-054B: Metal Locker Color Samples | RFC | 5/24/12 | 6/7/12 | In Review |
| 108-057: Soffit Layout Drawing | RFC | 5/10/12 | 5/24/12 | In Review |
| 108-058: Elevator Signal Equipment | RFC | 5/11/12 | 5/25/12 | In Review |
| 108-060: Ceiling Grid System Samples | RFC | 5/16/12 | 5/30/12 | In Review |
| 108-061: Tectum Samples | RFC | 5/16/12 | 5/30/12 | In Review |
| 108-062A: Column Cover | RFC | 5/16/12 | 5/30/12 | In Review |
| 108-062B: Column Cover Color Chart | RFC | 5/16/12 | 5/30/12 | In Review |
| 108-062C: Column Cover LEED Information | RFC | 5/16/12 | 5/30/12 | In Review |
| 111-019: Sound System Cabling | Bay | 5/25/12 | 6/8/12 | In Review |
| 111-021: Student Dining Sound System Cable | Bay | 5/25/12 | 6/8/12 | In Review |
| 111-022: Music Room Sound System Cable | Bay | 5/25/12 | 6/8/12 | In Review |

2. Submittals requested from Contractors:

| Submittal Requested | Responsible Contractor | Date Requested | Date Anticipated |
|----------------------------|-------------------------------|-----------------------|-------------------------|
|----------------------------|-------------------------------|-----------------------|-------------------------|

3. Submittal Discussion Items

| Item No. | Description | Responsible Party | Open/Closed |
|-----------------|--|--------------------------|--------------------|
| SUB.1 | Color Selections | All Contractors | Open |
| | 11/1/11 All submittals requiring color or finish selections are required to have hard copy submittals. Color or finish selections cannot be made from electronic submittals. | | |

| SUB.5 | Submittal Log | Cornice | Open |
|--------------|----------------------|---|-------------|
| | 2/14/12 | Cornice is currently updating the submittal log to note outstanding submittals that have not been received. This will be distributed when complete. | |
| | 4/17/12 | Submittal log was distributed 4/16 to all contractors. All are asked to review the log and advise if there are corrections. | |
| | 4/24/12 | Comments received from RFC and CCG. | |

V. PROPOSAL REQUESTS / CHANGE ORDERS

1. Proposal Requests issued since last meeting: None
2. Outstanding Proposal Request Responses:
 - a. PR-011: Additional information was requested from Custom Fab has been reviewed and is awaiting additional response from Custom Fab.
3. Outstanding Change Orders: None
4. Change Orders prepared and awaiting signature: None
5. Proposal Request/Change Orders Discussion Items: None

VI. PROJECT SCHEDULE

| Item No. | Description | Responsible Party | Open/Closed |
|-----------------|----------------------------|---|--------------------|
| PS.1 | Schedules/durations | All Contractors | Open |
| | 4/3/12 | Revised schedule issued, but to be updated again with current truss information. | |
| | 5/15/12 | RFC to submit updated information for inclusion into the schedule. | |
| | 5/22/12 | RFC had questions pertaining to schedule: When will building systems start up? Requesting sign-off to start early or per schedule without building systems running in order to meet schedule. Bay's rough-ins need to be 100% complete for system start-up – both A/C and heat. | |

VII. COORDINATION DRAWINGS

1. Coordination Drawing Discussion Items: None

VIII. CONTRACTOR UPDATES

Contract 102 - GE Baker

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|--------------------------|---------------------|--------------------|
| 102.1 | Weekly Progress | | Open |
| | Work complete. Off site. | | |

Contracts 103 & 108 - RFC Contracting

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|--|--------------------|
| 103.1 | Weekly Progress | | Open |
| | 5/22/12 | Continuing installation of deck installation at academic wing. Truss installers are again on site and continuing to set trusses. Gable end walls are being built and mesh at underside of trusses is being installed. Truss installation will be complete over the weekend. Curtainwall is expected to arrive at the end of June or beginning of July. Windows are to arrive mid-July. Elevator installation is scheduled to begin the first week of August. | |
| | 5/29/12 | Trusses will be complete today or first part of Wednesday. Completing truss tops and bridging. The west roof overhang has begun. The decking at west side of the academic wing and shingle installation will be complete 5/30. Catwalk installation to begin week of 6/4. Flooring installation will begin before casework installation. | |

Contract 104 - Giambrone Masonry

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|--|--------------------|
| 104.1 | Weekly Progress | | Open |
| | 5/22/12 | CMU to be complete at the gym storage room by end of day Friday. Base course of stone veneer is being installed. Veneer is to be complete by end of July. Stone water table cap is being produced and will arrive next week. Will set all stone for the water table and then continue vertical with stone starting at the gym, proceeding to the academic wing, then south core and then finish at the north side of the core. | |
| | 5/29/12 | All CMU bearing walls are installed and working on other misc CMU walls. Working on veneer. Waiting on arrival of stone cap at water table and other specially formed pieces. Stone cap is expected to arrive next week. Currently installing stone horizontally and will start veneer after arrival of stone pieces. Cornice and RFC advised that veneer is to be complete by mid-July for window installation. | |

Contract 105 - Custom Fabricators

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|---|--------------------|
| 105.1 | Weekly Progress | | Open |
| | 5/22/12 | Have not mobilized. FMD and Cornice reviewing PR-011. | |
| | 5/29/12 | Have not mobilized. Cornice reviewing PR-011. | |

Contract 106 - Breckenridge

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|---------------------|--------------------|
| 106.1 | Weekly Progress | | Open |
| | 5/22/12 | Have not mobilized. | |
| | 5/29/12 | Have not mobilized. | |

Contract 107 - S.A. Comunale

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|--|--------------------|
| 107.1 | Weekly Progress | | Open |
| | 5/22/12 | Working on the second floor of the academic wing. | |
| | 5/29/12 | Installing piping where areas are available to work. | |

Contract 109 - Suburban Process Piping

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|---|--------------------|
| 109.1 | Weekly Progress | | Open |
| | 5/22/12 | Continuing kitchen and Mechanical Room 159 rough-ins. Finishing the second floor academic wing and installing piping at core restrooms. Requesting confirmation that the 6" gas line is acceptable to hang from the truss. Answer will need to be supplied by truss manufacturer. | |
| | 5/29/12 | Working in the core area, restroom rough-ins, gas line, and main water line installation. Discussed truss loading following meeting. | |

Contracts 110 & 111 - Bay Mechanical

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|--|--------------------|
| 110.1 | Weekly Progress | | Open |
| | 5/22/12 | Lightning contractor is on site and beginning installation of lightning protection system, focusing on the academic wing. By end of the week, insulation will be complete on 1 st floor of the academic wing; 2 nd floor will begin only after dried in. Rough-in is continuing at 2 nd floor academic wing and moving through core to east end as available. HVAC and copper installation on 2 nd floor of academic wing is continuing. AHU-4 & AHU-5 piping and duct installation to begin next week. Requesting roofing contractor to cut holes in decking. Chiller is planned to be set on 5/23. 2 nd floor | |

| | | | |
|--------------|------------------|--|-------------|
| | | academic wing duct is scheduled to arrive week of 5/28. Asked if permitted to install temporary plywood at catwalk for installation work. This is permissible. | |
| | 5/29/12 | Continuing branch and misc. service installation at academic wing. Taking installation as far as possible at this time in the academic wing. Installing duct at cafeteria and will begin spiral installation at gym. Chiller excavation to occur 5/30. Installing piping out of Mechanical Room 159. Pipe and duct insulation is ongoing in dry areas. | |
| 110.4 | Grounding | | Open |
| | 3/13/12 | Two locations will be required for tie-in for grounding the electrical system. FMD to advise on locations. | |
| | 3/20/12 | Bay will coordinate in field. Pricing will be issued for work for issuance of a change order. | |
| | 5/29/12 | Excavation will occur 5/30 with chiller line installation. | |

Contract 112 – CCG Automation

| Item No. | Description | Action Req'd | Open/Closed |
|-----------------|------------------------|--|--------------------|
| 112.1 | Weekly Progress | | Open |
| | 5/22/12 | Have not mobilized. | |
| | 5/29/12 | Needed control valves have been received by Bay. | |

IX. LEED

| Item No. | Description | Responsible Party | Open/Closed |
|-----------------|----------------------------|---|--------------------|
| LE.1 | Documentation | All Contractors | Open |
| | 10/25/11 | Refer to specifications for required LEED submittals. All contractors to be continuing to document LEED items as required. | |
| LE.2 | Dumpsters | | Open |
| | 11/1/11 | Dumpsters have been delivered and sorting and recycling will occur offsite. Documentation will be submitted as it comes for all construction waste. | |
| LE.4 | LEED Online | FMD | Open |
| | 5/8/12 | FMD will start a weekly summary for contractor submittals required for LEED to track what has been submitted and what is still required. RFC requested direction on information to be submitted (i.e., recycled content) and if it is to be estimate or actual. | |
| | 5/15/12 | RFC to proceed with estimated method to be able to submit as much information now. FMD will confirm. | |
| LE.5 | Commissioning Agent | | Open |
| | 5/29/12 | Phil Becker with STAN Engineers reviewed the commissioning agent's (CxA) scope and responsibilities. The CxA will be looking mostly at mechanical and electrical items and some of the building envelope (air barrier installation, insulation, etc.). Mainly concerned with verifying that the installation of systems matches that of the contract documents. They are not the engineers on the project and will not be making decisions or corrections to items on documents. If engineering questions arise, they need to be directed to the engineer of record. CxA needs to be notified in advance to witness testing for duct leakage, system startups, and domestic hot water system. Kyle Zepernick will be inspecting the building envelope and will make a warranty visit after occupancy. When the building is complete, mechanical and electrical systems will be tested by the CxA. Control installation will need to be complete and running user interface on operating system. This testing protects the Owner and Contractors that everything was operational as design at the time of start-up and occupancy. If issues are found, the CxA will suggest corrective measures. The CxA will also be present during the first year of operation and will create multiple reports during this warranty period. Attached is the Commissioning Checklist for CMs for everyone's reference. | |

Needs: IAQ Management Plan. Cornice to send monthly reports to STAN.

Today's visit: Installation of MEP and building envelope looks good to date. Stored duct and VAVs need to be protected better when stored on site.

X. ISSUES FOR DISCUSSION

A. Old Business

| Item No. | Description | Responsible Party | Open/Closed |
|-----------------|--|--------------------------|--------------------|
| OB.4 | All fill to be compacted and stabilized | All Contractors | Open |
| OB.9 | Smoking 11/1/11 Please remind those on site that there is no smoking permitted on school property. | All Contractors | Open |
| OB.18 | Gas Service Status 5/8/12 An email was received today by Cornice from Columbia to update status. Project still on track as discussed previously but work will not begin until June. There is a concern for finish installation. A plan will need to be developed. | | Open |
| OB.23 | Security Plan for Installed Materials 5/29/12 No serious security issues this week. | | Open |
| OB.26 | Street Cleaning 5/29/12 No issues this week. | | Open |
| OB.31 | Electrical Service Status 5/8/12 6/12/12 date to be held for service connection | | Open |
| OB.34 | Site Cleanliness 4/24/12 Masons need to clean 2 nd floor academic wing to permit lifts for setting trusses and also clean up masonry debris around the site. 5/29/12 Ongoing issue. | | Open |
| OB.41 | LaGrange Fire Chief 5/8/12 Fire chief visited site and requested fire extinguishers be placed on site. Cornice to verify who provides FE service to KLSD. 5/15/12 RFC has six extinguishers to be placed around the site. 5/22/12 Correction to previous week – RFC has six extinguisher stands for use. | | Open |
| OB.42 | Trusses at dormer 5/15/12 There is an issue with the way the dormer trusses were designed and installed as it blocks the entrance into the dormers for the exhaust ducts. 5/22/12 This will be looked at as framing is completed. Will need to be discussed on a case-by-case basis. 5/29/12 Issue resolved last week for first instance. Item will remain open for additional forthcoming issues. | | Open |
| OB.45 | Casework Field Measurements 5/22/12 Custom Fab needs to field measure for science casework this week in order to meet August delivery date. All rooms in the academic wing, including the science rooms, are ready to be field measured. The core is not 100% complete yet. Plastic laminate casework in all other areas needs to be field measured in the next couple of weeks as well. 5/29/12 Custom Fab was onsite on Friday, 5/25, to field measure science areas. | | Open |

B. New Business

| Item No. | Description | Responsible Party | Open/Closed |
|-----------------|--|--------------------------|--------------------|
| NB.47 | Site Tour 5/29/12 Construction management students from Bowling Green will be on-site Tuesday, July 10. KLSD will supervise. | | |
| NB.48 | Truss Loading 5/29/12 Loading of trusses (RFI 110-020) discussed following the meeting. Bay to provide assumptions and FMD to confirm with structural engineer. | Bay and FMD | |

XI. COMMENTS

- A. Architect** – Would like to establish a date for a cornerstone ceremony, possibly in July. FMD to coordinate.
- B. Owner** – None

XII. MEETING INFORMATION

Next meeting will be held on **Tuesday, June 5, 2012 @ 2:00 PM**

Pre-bid Meeting for Technology, Furniture, and Paving contracts will be held **Tuesday, June 5, 2012 @ 3 p.m.** at Keystone High School.

The above constitutes The Cornice Company's understanding of discuss which took place during the meeting. Requests for modifications, additions, or clarifications to these meeting minutes should be submitted in writing to this office within five business days. Submissions may be made via email to bfry@thecorniceco.com. Please include references by item number when submitting such requests.

STAN

Engineers

KEYSTONE MIDDLE SCHOOL COMMISSIONING CHECKLIST FOR CONSTRUCTION MANAGERS

The following checklist is intended to be used as an aid by the Construction Manager (CM) to help insure that the specified contractor responsibilities related to Commissioning are accomplished.

CONSTRUCTION PHASE

- 1 _____. Incorporate the functional testing periods into the overall construction schedule per the commissioning specification.
- 2 _____. Provide a set of submittals for CA review concurrent with the A/E's review for temperature controls, air handling units, boilers, chillers, switchgear, and the emergency generator. The CA will make recommendations to the A/E for acceptance or rejection of the submittals.
- 3 _____. All other submittals for systems being commissioned shall be reviewed by the CA for information after the submittal is approved by the A/E. This includes submittals for air terminal units, pumps, and lighting controls.
- 4 _____. Provide access to other approved mechanical and electrical submittals on-site.
- 5 _____. Provide the CM's Construction Project Air Quality Management Plan to the CA.
- 6 _____. Provide applicable Requests for Information (RFI's) for CA review.
- 7 _____. Provide Coordination Drawings to the CA after approval by the A/E and CM.
- 8 _____. Provide applicable approved Change Orders to the CA.
- 9 _____. Notify the CA at least 3 days prior to the Masonry and Roofing pre-construction meeting
- 10 _____. Notify the CA when the masonry mock-up is complete and ready for review
- 11 _____. Provide thermographic imaging of the building envelope (if specified) for CA review.
- 12 _____. Provide copies of all A/E and CM site inspection reports regarding building envelope.
- 13 _____. Notify the CA at least 3 days prior to the initial duct and pipe leakage tests.
- 14 _____. Provide copies of all duct and pipe leakage test results to the CA.
- 15 _____. Provide copies of all hydronic system flushing and water treatment test reports.
- 16 _____. Notify the CA at least 3 days prior to AHU, chiller, boiler, and generator start-ups.
- 17 _____. Provide copies of commissioned equipment start-up documentation.
- 18 _____. Provide the final Testing and Balancing (TAB) Report with the A/E signature to the CA for review and comment.
- 19 _____. Notify the CA when power distribution is complete and ready for functional testing.
- 20 _____. Notify the CA when the HVAC systems and controls are complete, tested by the contractor, and ready for functional testing.

FUNCTIONAL TESTING PHASE

- 1____. Provide O&M Manuals (including equipment warranties) for commissioned equipment to the CA for review.
- 2____. Provide a set of reproducible drawings indicating As-Built Conditions including temperature control schematics, piping, ductwork, electrical systems, lighting, and lighting controls incorporating all changes made during construction for review by the CA. As-Built Drawings shall be previously approved by the A/E.
- 3____. Assist in coordination of functional testing activities between mechanical contractor, controls contractor, electrical contractor, and the CA.
- 4____. Provide support for functional testing activities including access to the building, the use of ladders, keys, and other support as necessary.
- 5____. Distribute the functional testing reports to all affected contractors, architect, engineer, and owner.
- 6____. Coordinate the correction of all deficiencies by the various contractors and verify that written responses to all items are provided to the commissioning agent.
- 7____. Notify the CA at least 3 days prior to all owner training sessions related to the HVAC, Temperature Controls, and Electrical systems. Provide to the CA the written content of contractor provided owner training.
- 8____. Provide the approved Facility Maintenance Plan to the CA.
- 9____. Forward Owner generated reports (if available) for Lighting and Acoustics testing for review by the CA.
- 10____. Provide other documentation as defined by the CM and CA.

WARRANTY PHASE

- 1____. Notify the CA two months prior to the end of the one year warranty to schedule the warranty review site visit. Provide trend data and other relevant documentation as requested by the CA for review.
- 2____. Coordinate the correction of any deficiency found with the appropriate contractors.