THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

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Office of Facilities Planning
Newsletter #105 – November 2010

Housekeeping reminders
Web Site
We are in the ongoing process of updating information contained on our web site. From time to time if you click on a link and get 'Page Not Found', it may be because the item has been removed from our site due to being outdated. Please try using the 'Search' box at the top of the web site page to search for the information, as it will most likely take you to the updated location of the information you are looking for. If you still cannot find what you are looking for, please contact us via the link at the bottom of the web site pages.

Post-bid addenda
We have recently noted a great increase in using the post-bid addendum to attach work to approved projects for purposes of spending remaining funds from a bond referendum. This is causing difficulty in that we have no way of tracking addenda and the review of the documents is causing the backlog to get even longer. We are also concerned that some districts are using this process to bypass the backlog or attempt to extend the time constraint for the submission of final cost reports.

Post-bid addenda require the same review process here at Facilities as a regular project. It is frequently assumed that a post-bid addendum will be reviewed quicker than a normal project submitted to our office. This is not necessarily the case. A post-bid addendum may require as much review time as a regular project. It is suggested that designers make liberal use of bid alternates in original projects.

All post-bid addenda must be approved by the project manager before submission of documents. Districts and their designers who find themselves in a situation where they would like to continue work in a building using unspent funds should please consider the following:

- Work must have been included in the bond referendum for the project.
- A written request to utilize a post bid addenda will be required from the superintendent of schools along with an appropriate rationale.
- Work must have been included in the SEQR resolution and must have received SHPO clearance.
- If the proposed post-bid addendum work is part of an EXCEL project, has the SA-139 already been sent to the State Aid Unit. If it has, it may not be possible to add work to the project. In this case work would need to be submitted as a new project.
- Work included in an addenda must be publicly bid.

The Office of Facilities Planning discourages the use of post-bid addenda as a method to liquidate unspent funds from a bond issue. We encourage districts and their designers to make full use of bid alternates in the original project submission. Bid alternates are approved at the time of project approval and, therefore, no further submission to our office is required to perform additional work. It is then simply a matter of awarding the alternate.

Some addenda are clearly inappropriate. Some examples are: too much time may have passed in relation to the original permit, the dollar value may be excessive as compared to the original project, certificates of substantial completion for the original project may have been issued, etc. We will continue to monitor the flow of post-bid addenda requests and, should we find the process overused, will revise our procedures accordingly. Please call your project manager with any questions.

Reorganization Incentive Building Aid

For many years, legislation (3602.14(c)(VI)(B) has extended reorganization building aid for new projects undertaken by districts whose effective date of reorganization extended back as far as 7/1/65. This extension was not included in the 2010 legislation. Projects with contract signing dates after 6/30/10 will not receive this additional aid. Please refer to the attached chart to see if your district will be impacted: https://stateaid.nysed.gov/build/html_docs/reorgincval_080808.htm

Significant Change to the Historic Preservation Project Review Process

The Department has reached an agreement with the Office of Parks, Recreation and Historic Preservation (OPRHP) under which the State Historic Preservation Office (SHPO) will streamline the submittal process for projects on historic facilities or those facilities that are deemed eligible for the national register.

The agencies signed a Letter of Resolution detailing the agreement in May of this year. Effective immediately, districts and their consultants may submit projects to SED in accordance with this letter of Resolution. The resolution details those conditions under which projects no longer have to be submitted to SHPO.

There are some important points to remember:

Section 1 of the agreement states that the agreement applies only to undertakings subject to section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. This is the law under which SED is required to consult with SHPO and which most district projects fall under. If a district has a project that is subject to Federal review in accordance with Section 106 of the National Historic Preservation Law, it must still be reviewed by SHPO on behalf of the Federal Government.

Section 2 identifies specific resources exempt from further review.

The first category includes buildings or structures that are 50 years old or less at the time the scope of the SED project is developed, *unless* the building was the work of a recognized master architect, designer, builder, or are associated with persons or events significant to the history of New York State.

Another exempt category consists of buildings or structures that are over 50 years of age that have been previously evaluated by OPRHP and found not to meet the criteria for inclusion in the State and National Register.

The final category is the one that may provide the biggest benefit over the current process. This category consists of various types of work that have been determined to have little or no impact to the character of the historic resources and are therefore exempt from further review. These categories of work are detailed in appendix A of the agreement, and include systems and work items of site work, exterior, interior, mechanical, electrical, and plumbing systems, and health and safety hazards.

The entire resolution and appendix A can be viewed on our website at:
http://www.p12.nysed.gov/facplan/documents/SHPOLtrOfResolution_062010.pdf

Please remember that this resolution does not cover archeological resources. Where the project involves site work or any other activity that will lead to ground disturbance (other than those items included in appendix A), those portions of the project shall be submitted to SHPO for review of impacts to archeological resources.

The actual work of projects exempt from SHPO review under Appendix A on historic facilities must still be conducted in accordance with the Secretary of the Interior's standards for rehabilitation, and preservation briefs 1 and 2. These documents may be obtained by following the links contained in the letter of Resolution.

Future projects therefore must either:
be submitted for review under the current process with SHPO if they do not qualify for the referenced exemptions (initiated by the standard OPRHP Project review Cover Form available on our website):

OR

They may be submitted directly to SED with the following new form that details that the project work is exempt from further review under the appropriate category.

WEB ADDRESS FOR NEW FORM: http://www.p12.nysed.gov/facplan/documents/OPRHP-MOA_checklist_110510.doc

Please direct any questions to your project manager.

Addenda
We receive many addenda on a weekly basis. Timely review of addenda can be critical to project startup for our school district clients. In an effort to help reduce the amount of time from when the addendum reaches our office to when an architect/engineer reviews the addendum, please keep in mind the following:

1. Address transmittals to the SED architect/engineer who reviewed the original project submission, NOT to the SED project manager. If you address the transmittal to the SED

project manager, this may delay review of the addendum, as it will take extra time to get to the architect/engineer.

2. Include the SED review number on the transmittal and the addendum. This will assist the SED architect/engineer to quickly locate their project comments and reduce the time to review the addendum.

Electronic Review Addenda

As part of the electronic project review process, it is important for SED that all project record documents are kept together. Effective immediately, all addenda documents for electronically approved projects, whether issued to SED during the initial electronic project review and approval process, issued to contractors during the bid process, or issued post-bid, must be submitted to SED through the Dataflow system. This will assist SED in keeping all project approval and addenda documents archived together.

At this time, if we receive paper copies of addenda for a project that was reviewed or approved electronically, you will be requested to re-submit the information electronically.

Change Order Certification:

We have updated our Change Order Certification Form in an effort to obtain a better description of the project changes from design professionals. Please provide information for the following items for each change listed in Part Two on the certification form:

1. Requested by (Who initiated the change request)
2. Relationship to Project Scope (How is this change related to the original project scope)
3. Basis of Need (Describe why the change is needed)
4. Description of Work (Provide a detailed description of the work or services provided in the change order. Provide text, a drawing or both as necessary to demonstrate code compliance and the individual cost of each item.)

You can find the new Change Order Certification Forms on our web site at:
Excel version:
http://www.emsc.nysed.gov/facplan/documents/change_order_certification_042010.xls
PDF version:
http://www.emsc.nysed.gov/facplan/documents/change_order_certification_042010.pdf

Evaluating Ventilation Air:

Ventilation air (outside air) systems are evaluated as part of the Building Condition Survey and the Evaluation of Existing Building (Form FP-EEB).

It is the intent of this article to provide some guidance in evaluating ventilation air systems in existing school buildings.

All buildings required to receive a “Building Condition Survey” must evaluate ventilation air systems. All buildings required to receive an “Evaluation of Existing Building” must evaluate ventilation air systems.

Buildings required to receive a Building Condition Survey are all occupied, public, school buildings.

Buildings required to receive an “Evaluation of Existing Building” are as follows. The “Regulations of the Commissioner of Education” (Section 155.7 (d) (5)) requires all existing, public, education buildings, regardless of date of original construction, in school districts (other than city school districts in cities having 125,000 inhabitants or more) to be evaluated for ventilation air. “Ventilation with fresh air shall be available in all occupied spaces.” An evaluation of the existing instructional building (“Evaluation of Existing Building”) must be performed where there is a capital project for that building submitted to Facilities Planning for review.

Ventilation air systems have a means to bring outside air into a space, and a means to relieve air from the space. All occupied spaces must have an operable means (system) to bring outside air into the space and relieve an approximately equivalent amount of air from the space. The systems do not necessarily need to comply with current code, but they must operate in accordance with the original design; and the design must have met the standard/code/law at the time of construction. The requirement for providing ventilation air in occupied spaces as part of school construction goes back to at least the year 1904. It is likely any standard for construction of school buildings, prior to that date, called for ventilation air.

There have been many different types of ventilation air systems installed in schools over the years. For example there are ventilation systems, consisting of open windows with gravity or mechanical relief that met the requirements at the time of original construction. As long as these systems have not been compromised, and operate in accordance with the requirements at the time of original installation they are not considered non-conformances.

When evaluating ventilation air for a Building Condition Survey or an Evaluation of Existing Building the following criteria must be met:

- Program use of all spaces must be evaluated to determine which spaces are occupied.
- All occupied spaces must be evaluated.
- All portions of the ventilation system(s) serving each space must be evaluated.
- All occupied spaces must have an operable means to bring outside air into the space and relieve air from the space.
    - The term, operable, means all portions of system operate in accordance with original design. All equipment in the system run. There are no blockages to air flow. All control devices operate in accordance with original sequence of operations.

Some examples of non-conformances for ventilation air:

- Use of spaces that were not originally designed for occupancy. These include storage areas, and locker rooms. It was never permissible to deliver outside air to an occupied space through a corridor. Thus former storage rooms that open off a corridor and now are

occupied, and have only an exhaust with makeup air pulled from a corridor are non-conformances. Locker rooms, converted to occupied space(s) may be acceptable for occupancy, if there is sufficient outside air delivered to the space for the occupant load, and the relief (exhaust) system is not tied in with any toilet room exhaust.

- Spaces originally designed for occupancy that have been modified, resulting in blockage or no ventilation air. An example of this is a classroom that has been modified by adding partitions to the space, creating multiple spaces. Partitions may block off the path for either outside air to enter or be relieved from the space(s). If the ventilation system has not been modified to ensure proper amounts of ventilation to all spaces then the system is non-conforming.
- Inoperable or missing equipment. Supply fans, exhaust fans, and relief (or return air fans) must be present and operable.
- Blockages in ventilation air systems. Outside air intakes blocked, dampers disconnected or inoperable, blocked supply air paths, blocked relief** (or exhaust) air paths to the exterior are non-conformances. Roof work where existing structures for outside air intake, exhaust, relief openings (or equipment) have been removed, but not replaced are non-conformances.

**Please note: For the purposes of the Building Condition Survey, there are situations where the blockage of the relief air path would not be considered a non-conformance. However those situations must be identified for correction. There are buildings where the originally designed relief air paths included corridors (or spaces above corridor ceilings) and stairwells. These paths may have been blocked by the installation of smoke control devices (smoke doors in corridors and stairwell enclosures) that were installed at a later date in compliance with NYS Education Department smoke control requirements. Relief air paths that have been blocked due to the smoke control requirements of the NYS Education Department should not be evaluated as Non-Functioning or Critical Failure solely for this reason. However, systems that have been compromised in such a manner must be identified to the school district so that the situation may be corrected. In the case where a project is submitted for a building permit these situations must be indicated as non-conformances on the "Evaluation of Existing Buildings" form. The non-conformance must either be corrected as part of the project, or an acceptable plan for correcting the non-conformance must be provided.

Air quality is compromised by dirty or missing filters, and dirty coils. These items must be identified to the school district for correction as part of the "Building Condition Survey".

Exhaust systems for all toilet rooms must be evaluated as part of the Building Condition Survey. All toilet rooms must have an operable means to bring makeup air into the space and relieve air from the space. Toilet rooms where louvered doors have been replaced with solid doors (or solid doors installed in locations were no doors were originally designed) must be identified to the school district for correction as part of the "Building Condition Survey".

Exhaust systems for all toilet rooms that serve as part of the required relief air path for occupied spaces (occupied spaces relieve to corridor and corridor provides makeup air to toilet rooms) must be evaluated as part of the Building Condition Survey and the Evaluation of Existing Building.

Outdoor Air (Ventilation Air) and Student Performance:

The study referenced below has been out for a while, but we thought it might be beneficial to draw attention to it at the time school districts are performing Building Condition Surveys.

There have been studies concerning the health benefits associated with the use of bringing outdoor air into buildings to improve indoor air quality. As far as we are aware, the study summarized below, is the only one to date that has compared elementary school student test data with volumetric flow rates of outside air delivered to the classrooms. The study supports the proposition that ventilation air has a positive impact on student achievement.

The results of a study by Dr. Richard Shaughnessy, et. al., was published in the "Journal of Indoor Air" (December 2006). This study was done with 55 fifth grade elementary school classrooms. Student performance was based on standardized math and reading tests. Other factors such as male/female ratios, free lunch program, limited English, gifted student percentage, absenteeism rate and ethnicity were all neutralized.

The study showed that increased ventilation rates had a positive impact on math and reading test scores of students. Mean math scores were 56.32 and the mean reading scores were 47.73 in classrooms with a ventilation rate of less than 5 cfm per person. Mean math scores were 64.46 and reading scores were 54.27 in classrooms where ventilation rates were over 10 cfm per person. This represented a 14.7% increase in math scores and a 13.7% increase in reading scores with improved ventilation.

There are a number of ways where how schools are constructed and operated have a demonstrated impact on student achievement. Providing sufficient ventilation air is one of those. We need to keep in mind that the school environment (thermal comfort, ventilation, acoustics, lighting quality, and cleanliness) as well as the students, parents, and school staff need to be in concert to achieve the best educational results in schools.

Preliminary Project Review:
We encourage firms with complex projects to come in for a preliminary face to face Code review. We have found this may help avoid costly changes to final documents and should help reduce the amount of time needed for SED final review and project approval.

Project Review Reminder:
At this time, when the architectural reviewers are so far ahead of the engineering reviewers, we ask A/E firms to consider the following: when you receive architectural review comments for a project, please submit an addendum addressing the comments without waiting for the engineering review. Please ensure the addendum includes all engineering revisions associated with the architectural changes. Frequently the architectural corrections impact engineering work, and by having a coordinated addendum correcting the documents included with the design package when it is picked up for engineering review, engineering comments may be reduced. This will help reduce the time needed for final review and project approval.

Stadium Light Pole Recall
Please see the following Consumer Product Safety Commission (CPSC) recall for stadium light poles that may crack and fall over:

http://www.cpsc.gov/cpscpub/prerel/prhtml10/10295.html

If your district has these light poles, action should be taken immediately.

The CPSC recommends that all outdoor steel stadium light poles, not just those identified in the recall, be routinely inspected by a professional.

Please send any general comments, requests, or questions to FacPlan at emscfp@mail.nysed.gov or 518-474-3906.

An Index of our Newsletters is available on our website at
http://www.emsc.nysed.gov/facplan/NewsLetters.htm