Planning Guidelines for NB/Addition Projects

Architecture & Engineering

The design guidelines for Addition projects should be the same as the guidelines for new, stand-alone schools. However, the following **additional criteria** must also be considered:

A. **Minimize Impact on Existing Building Usage** – The following criteria should always be considered:

1. The dispersal of classrooms, offices and support spaces throughout the new and the existing building should be guided by the need to minimize construction and disruption of use of the existing building's spaces.

2. Conversion of existing building spaces to remain shall be scoped and designed to maintain the existing wall finishes; ceiling height and type; existing window height and existing MEP distribution in the room. This work should accommodate the existing building's architecture and MEP limitations similar to a CIP room conversion to the extent feasible. Specialty rooms may require acoustical or other functional requirements to be addressed. No work will be required if the function of the existing space remains the same even though the room maybe renamed/relabeled.

3. Relocating the existing school's main entrance, administration offices and custodian's office to the NB/Addition is the preferred method of reducing significant cost and phasing impacts. This allows the existing main entry and Custodian's office to remain operational until the New Building/Addition is complete.

4. It is usually preferable to locate the new Principal (and Administration) Office near what will ultimately become the main entrance to the school. However, exceptions may be made due to the Principal's preference, POR requirements and/or site constraints.

5. It is usually preferable to locate the new kitchen within the New Building/Addition. This allows for the existing kitchen to remain in service until the New Building/Addition is occupied. Exceptions may be made due to POR requirements.

6. New communicating doors providing access between the Addition and the existing building at every floor are designed to be self-closing. This is necessary not only to maintain fire separation between the two buildings but also to isolate the Addition's "conditioned" space from the existing building's "non-conditioned" space. Such doors should be equipped with vision panels and maximum glazing as permitted by Building Code. If the existing building is conditioned, it will be acceptable to have the doors on hold-opens that would close when triggered by the Fire Alarm.

7. Changes to permanent and temporary means of egress are usually unavoidable but should always be kept to a minimum (see note 3 below re: phasing impact).

8. Confirm with Capital Plan Management (CPM) whether or not any/all existing TCU's or Mini-buildings can (or cannot) be removed prior to construction of the new addition.

B. **Minimize Impact on Existing Building Systems** - Proposed designs should minimize impact on existing structural and mechanical systems. Items such as underpinning, modifying existing natural and mechanical ventilation systems can create significant additional cost due to their impact on project phasing. See paragraph H regarding Low Voltage systems.

C. **Existing Building Use Survey** – Upon receiving their Notice of Assignment, the Consultant is to immediately perform a comprehensive survey of the existing building to determine the current use of each and every room/space within the building. The DPM should accompany the consultant in performing this survey. The Consultant is to prepare existing building floor plans showing current room usage and present the plans to the SCA during the External Kickoff meeting. Capitol Plan Management will use this survey to finalize the POR for the NB/Addition.

D. **ADA Assessment Survey** – During the Schematic phase of design, the Consultant must perform a survey of the existing building to identify potential ADA non-compliances as identified in the "Program Accessibility for Existing Building" scoping guidelines. The Consultant is to prepare site plan and floor plans showing existing non-compliances and all proposed remedial work required to correct the condition. All ADA remediation work will typically occur during Phase 3 Work as described below.

E. **Filing Strategy** – Typically, Addition projects are filed as "NB – New Buildings". This filing strategy allows the SCA to obtain a Certificate of Occupancy (post construction) for the NB/Addition by avoiding complications associated with any violations or open applications related to the existing building. As such, the NB/Addition must meet all the "New Building" requirements of the Building Code in terms of egress, fire protection, independent structure, energy code, MEP design, etc. The SCA may consider utilizing alternative filing strategies for specific projects on a case-by-case basis.

F. **Phasing & Site Safety** – Even very early on in the design process, the design team must consider the impact that Phasing and Site Safety will have on the construction cost and duration of the project. Phasing meetings are held at every design milestone phase to address all phasing issues and site safety concerns. In general, the New Building/Addition project will be divided into three phases:

1. **(Phase 1) Work in the existing building or site required prior to construction of the New Building/Addition -** Identify work that interferes or prohibits the construction of the New Building/Addition and determine along with CM if an Early Work (bid) Package will be required to perform for this work. Capitol Planning will need to assign an LLW for any Early Work projects but they will need a "ballpark" cost estimate from A&E in order to do so. Such work may include:

   - Installation of temporary means of egress.
   - Demolition and excavation of existing structures and/or foundations.
   - Alternative means of ventilation for spaces that will be blocked-off.
   - Underpinning of existing structures.
   - Temporary "sealing-off" of existing corridors, louvers, doors or windows.
   - Temporary and/or permanent site drainage modifications
   - Utility relocations

2. **(Phase 2) Work in the existing building required prior to TCO of the New Building/Addition -** Identify work in the existing building that must be performed prior to obtaining the TCO for the New Building/Addition and/or to facilitate the use of both the new and existing buildings. Such work may include:

   - Utility feeds (gas, water, electric, etc.) from the existing building that will serve the New Addition.
   - Installation of new Fire Alarm system (if required).
   - Low voltage modifications including Fire Alarm System required to maintain temporary communications between systems.
   - Any room conversions that are required to be in place prior to the opening of the New Addition (such rooms are to be identified by the CPM team).
   - Physical, ADA accessible connection between new and existing buildings on all floors.
   - Removing the temporary egress construction and restoring former means of egress at the existing building.
   - Installing any required Areas of Rescue Assistance.

3. **(Phase 3) Work in the existing building that is not required prior to TCO of NB/Addition -** Identify work in the existing building that can be completed after the TCO of the New Building/Addition is obtained. The issuance of a separate CIP contract for this work will be evaluated, designed and planned as a CIP contract separate from the NB/Addition Bid package, and funded with a separate LLW.

   - Any and all room conversions not identified in item b) above.
   - ADA upgrades (toilet rooms, corridors, classrooms, etc.)
   - Low-voltage work required to permanently tie into the New Addition (other than the new Fire Alarm system which was installed under Phase 2).

G. **Early Work/Demolition Contract -** CM will often decide to award an "Early Work/Demolition" bid package that will facilitate the construction of the larger, New Building/Addition by reducing the overall construction duration. The procurement of an Early Work/Demo contract would allow CM to complete many of the items listed in Phase 1 above while the New Building/Addition project is still in design. If an Early Work/Demo package has been deemed necessary, the DPM must request a new LLW No. from the CPM. CPM will, in turn, require a ballpark cost estimate from A&E in order to provide the LLW No.

H. **Investigate & Analyze SCA Provided Resources**

1. Previous projects – Review SCA database (i.e., "E-Docs" and "PTS Reports") records to confirm original design drawings and subsequent CIP projects performed previously on the building.

2. Current or future projects - Obtain (from CPM) a list of all current or planned projects that might be impacted by the proposed New Building/Addition scope of work.

3. Test-Fit - Obtain copy of SCA Feasibility Study and/or "Test-Fit" reports.

4. IEH Reports - Obtain copies of all IEH Phase 1, 2 and/or Supplemental Reports.

5. Roof Warranties – access SCA SCAN to confirm existing roof warranty information.

6. SCA Specialty Testing Unit – Utilize SCA A&E's 'on call' requirements contractors to order test probes, test pits to confirm information not available on Alchemy. Test pits should always be performed in order to field verify the bottom of existing building footings. Probes should be performed wherever new construction will interface with existing construction (e.g., the "link" between buildings). Note that for accelerated projects, CM may arrange for their own 'on-call' contractors to provide such services.

I. **Low Voltage Systems**

1. Existing F/A - Determine that existing building has an FDNY approved (and functional) F/A system. Generally speaking, any existing F/A system that is beyond 20 years old (at the time the F/A work commences), should be replaced with a new F/A system. This will depend on if there is existing capacity still left on the system and it not an Acme System.

2. New F/A – if the New Building/Addition is being filed as an "NB", the new F/A system needs to be designed, filed and installed as a "Phased" system. This Phased F/A design will allow the existing F/A system to remain in operation until the New Building/Addition's F/A system is completely installed and approved by the FDNY. This is the only way to avoid an extensive and costly "Fire Watch" period.

3. All other Low Voltage systems - Consultant to survey condition of all existing LV systems, prepare and present the Low Voltage Matrix to all SCA stakeholders for review and approval.

J. **Utilities** – Careful consideration must be given to deciding whether or not to bring new utilities into the New Building/Addition versus "tapping-off" and/or reinforcing existing services. Seek to avoid creating a significant disruption in gas, electric, fuel oil, water or heating services to the existing building. Consultation with local utility companies must be made in order to determine street availability. Electric, gas and water service will almost always be new.

K. **Site Drainage/Detention** – the location of the New Building/Addition may significantly impact the existing site drainage/detention plan. As such, avoid siting the new Building/Addition in a manner that would require new site drainage and/or detention structures to be installed prior to construction of the New Addition. If such a condition cannot be avoided, installation of such systems or structures can be considered as part of an Early Work Package.

L. **Meetings w/DSNY** – Similar to any New Building project, NB/Addition projects will require coordination meetings with DSNY. DSNY meetings will need to address existing trash removal conditions, temporary trash removal conditions (during construction) and proposed final trash removal conditions. The Consultant will need to explain to DSNY how the existing school currently conducts trash removal. The Consultant will need to include combined (existing plus new) trash quantities in their calculations to be presented to DSNY. DOT should also be invited to attend any DSNY coordination meetings.

M. **Presentations to School Principal** – Similar to any New Building project, NB/Addition projects will require presentation of site plan, floor plans, finish colors and camera locations to the School Principal. However, NB/Addition project presentations must also include the proposed phasing plan and Room Numbering strategy.

N. **SHPO Applications** - Once a school has been identified as requiring a SHPO review (by SCA's SHPO Liaison), there will be (2) submissions made for each project as described below:
   1. The first submission would be a **"Footprint and Massing"** submission only and would be provided at the end of the Schematic (20%) design phase. This submission would include a site plan showing the relationship of the New Addition's footprint to the existing building footprint and also show all property lines and major site elements (i.e., paved and/or landscaped areas). This submission would also include 2D and 3D massing axonometrics showing the proposed bulk of the New Addition and the existing building including overall height, floor-to-floor heights and any major building setbacks. Aerial and street views from Google Maps should also be provided. This submission would not indicate any proposed fenestration or exterior cladding materials.
   2. The second submission would be a **"Detailed Elevations"** submission and would be provided early in the 60% CD design phase (approximately 2 months after the first submission). This submission would include all building elevations (and sections, if necessary) and would indicate all fenestration, exterior cladding materials and finish colors. The submission would also include photos and elevations of the existing building so that the architect's attempts to "pick up on" existing building elements can be demonstrated. It would also include detailed 3D perspective(s) showing the relationship of new and existing buildings as seen from the public right-of-way.

O. Packaging the Capacity (NB) and CIP Contract Documents for Turnover (TO) to CM - Typically, New Building/Addition (Capacity) projects are packaged with several related CIP projects for existing building work that is required to be completed during the NB construction phase (e.g., Fire alarm replacement, Removal of temporary egress conditions, etc.). The following is a description of how to format the final documents for Turnover to CM:

   1. The project title appearing on all drawings and specifications are to read "New Building" (<u>not</u> "New Addition", as the building is being filed as a new building). The overall "package" Title Sheet is to include both the NB LLW No. and all associated CIP project D Nos.

   2. All drawing Title Blocks are to include the NB LLW No. and all associated D Nos.

   3. All New Building drawings shall be included in Volume 1 for A and S drawings and Volume 2 for M/E/P/FP drawings of the drawing package.

   4. All CIP drawings shall typically be included in Volume 3 of the drawing package. If there is more than one CIP project as part of the project "package", each Design No. would be in its own volume.

   5. There shall be one specification book for the entire bid package. The book cover and every specification page shall indicate the NB LLW No. and all associated CIP project D Nos. in the header.

6. There shall be a separate cost estimate for the Capacity project (NB) and for each associated CIP project.

7. There shall be a separate TO Transmittal for the Capacity project (NB) and a separate TO Transmittal for each associated CIP project.

8. There shall be a separate TOBSS folder for the Capacity project and for each associated CIP project.

    - The Capacity TOBSS folder shall contain all the NB Drawings (Volumes 1 and 2) and the single specification book (for the NB and all associated CIP projects), as well as all supporting documents for the NB that includes the cost estimate, TO transmittal, checklist and all agency approvals.

    - The CIP TOBSS folder for each associated CIP project shall contain the Drawing Volume for that D No. and the supporting documents for that D No. that includes the cost estimate, TO transmittal, checklist and all agency approvals.

9. There shall be one QC meeting for the NB and all associated CIP projects held at the end of the DD, 60% and 100% and Compliance phases.