

Gilbane/Savin Introduction to Comments on Bergmann PM Assessment

Gilbane Building Company and Savin Engineers have been privileged to be able to work as Program Managers (PM) of the Rochester School Modernization Program since early 2010 under a professional services contract that is unique among the New York State school programs since it defines the PM role in a different manner than what had been done in Albany, Buffalo, or Syracuse. Both Gilbane and Savin had previously worked as PMs and CMs on large NYS and other school modernization programs and initially brought many lessons learned from those programs. However, since the Rochester role was unique and there was no specific precedent for the service to be provided, and because it's important that the overall program and PM role respond to Rochester's unique program and building requirements, we would like to acknowledge that there has been a learning curve for establishing the appropriate role for the PM and how that service can best meet the overall goals of the RSMP. We believe that many of the comments in the Bergmann report recognize and call attention to this learning curve which we believe is helpful in promoting a policy of continuous improvement for the services we have been providing and hope to provide for future program phases. With the same goal of quality improvement, we recently conducted a series of lessons learned workshops with all of the Phase 1A program participants and the MWBE community and produced a comprehensive Lessons Learned Action Plan which is included as Attachment 1 to this response. We are in the process of implementing that Action Plan and have cross referenced some of our comments to the Lessons Learned Report since we believe that many of the recommendations from the Bergmann assessment are consistent with our findings and can be implemented in support of this Plan.

And, while we recognize the importance of this critical evaluation of the PM role and our services, we also believe it's important to acknowledge some of the important value-added services that the Gilbane/Savin team has provided over the last 4 years. Following is a list of some of the extra services that are beyond the technical requirements of our contract and that we believe demonstrate some of the unique capabilities we have brought to the PM role and our overall commitment to the success of the RSMP:

- Willingness to finance the first 16 months of our services (i.e. over \$1 million of billings)
- Overall management of the Master Planning and Swing Space process for all future phases of the program
- Implementation of a Building Advisory Committee process for meaningful community engagement--leading to significant project input and improvements
- Identification of the Maynard's building purchase option for the program office, training, warehousing, and future school and community recreational improvements.
- Identification and support of the ROAR pre-apprentice training program
- Development of an updated specification for the district building standards
- Development of creative funding strategies with the SED which allowed for incorporation of over \$6 million of added scope for building air conditioning without increasing local share
- Ability to keep pace with changing administrations at both the District and the City where new policies and personnel have had major impacts on project design and construction.

Following is the Gilbane/Savin response to the Executive Summary of the Bergmann report where we have been asked to provide comments and a response. We have provided our comments following each of the Bergmann comments and recommendations:

Bergmann Commentary

Before reviewing specific observations regarding PM performance, we believe it important to note several over-arching situations and circumstances that had a significant bearing on how stakeholders approached the evaluation process. These included:

- Unusual circumstances related to initiating the Program. A protracted delay in funding approvals and project start-up significantly affected project design and construction schedules.
- A major change in RCSD leadership resulted in the subsequent shifting of project design goals. This impacted philosophical direction, funding strategy, and design/construction schedule.
 - Several of the stakeholders interviewed thought that, while the new RCSD leadership appreciated the magnitude of the project, they were not acutely aware of the complexities residing in previous commitments to the Phase One projects. The previous administration focused on converting schools to a K-8 model. The new leadership changed direction, objecting to this model's functionality and cost. It seems that the new RCSD leadership would also have preferred to focus on fewer buildings, completing them top to bottom. To a significant extent, the PM was put in the middle of these shifting expectations which complicated their ability to perform.
- A sense of disenfranchisement on the part of RCSD Facilities staff that significantly impacted their participation in the design/construction process.
 - The staff, having been responsible stewards of RCSD Facilities over a long span of time, had misgivings about having the Program administered by the Joint Board. It was apparent that RCSD Facilities staff would have wanted this to be much more of an infrastructure project, making the necessary upgrades to existing buildings to improve their status and function.

We found that these over-arching factors have a significant effect on stakeholder perception of PM performance (depending on whether those interviewed made allowances for these project circumstances). With some of the issues being discussed, those interviewed felt that the PM could have controlled these circumstances more effectively. In these cases the comments reflected this.

In other cases, those interviewed made a judgment that these circumstances were beyond the PM's control. In these instances, the evaluation was more favorable due to the PM's ability to overcome these obstacles.

PM Response – Early cooperation and communication with facilities and other district staff was not as clear as it could've been probably due to a lack of understanding of the legislative mandate given to the RJSCB and the PM for addressing community issues as well as district needs. Despite this initial communication handicap, the PM Team included RCSD Facilities in all walkthroughs and decisions to set the framework for preparing educational specs for the program and there was an assigned representative from facilities that was invited to attend all design, Building Advisory Committee (BAC), and construction project meetings on the belief that they would be the communication link on project issues with the district. And, while this was generally helpful in obtaining input on building infrastructure needs, this arrangement was not an effective link for defining and prioritizing building changes to meet the ever-changing educational program needs. Only recently, with the help of monthly meetings with the Superintendent, his cabinet, and the assignment of Mike Schmidt to serve as the focal point for sorting out program versus facilities' issues has this situation been resolved. (See Section IIIA, Item 2: a&b, Development of Scope within MCA, pg. 43, Attachment 1).

Bergmann Observations and Recommendations

Independent Document Review

Observations:

- Independent review was not required by legislation; it was something the RJSCB valued and wanted performed.
- Due to a Variety of circumstances, this document review was delegated to the architects.
- For Phase 1A projects, the process was rushed.
- There was general agreement that the project did not see the intended benefit.

Recommendations:

- Provide language in the PM contract clarifying what is to be coordinated vs. actually performed (and by whom). If possible specify what entity would be expected to perform delegated tasks.

PM Response – We agree with recommendation, however, the need for IDC was originally suggested by the PM not the RJSCB. Because the PM was prohibited from providing design services, it was left up to the architect to provide the service from a third party. Agree that the services that were provided were rushed for the 1A projects because of delays in design completion that were a consequence of many last minute design changes. Consequently, the effectiveness of the Integrated Document Coordination (IDC) reviews for the 1A projects was limited and the projects incurred additional costs due to excessive change orders and coordination problems. Recently, the IDC services provided by Gilbane for School # 12 and Monroe were in the written form needed for receiving full value for the service since it is

possible to track the follow up corrections by the design team prior to bid. (See Section III B, Item 12, Front End Review, pg. 45, Attachment 1).

Bergmann -Review of Construction Documents for Errors and Omissions

Observations:

- It was generally felt that the CMs are best suited to do these reviews. They are experienced at taking into account things like construction sequencing, phasing, scheduling and coordinating the work.
- While the PMs did not need to have 100% understanding of all the details there was a sense that the PMs should have had a firmer overall understanding of the project allowing them to participate more fully in the review.
- Several stakeholders put the PM's review of CD's for E/O into context, noting that this review was rushed. The CM did not come in early enough.

Recommendations:

- Clarify the expectation that the CMs will provide this service. Anticipate this in the overall consultant fee scope/budget.
- Accelerate selection of CMs to be closely linked with architect selection.

PM Response – While the PM provided guidance to and worked with the CM and A/E to review the documents, an effective review of the Construction Documents for Errors and Omissions was compromised by the magnitude and extent of changes by the Owner, last minute decisions, and lack of decisions, which exacerbated the ability of the A/E, PM, CM, and IDC reviewer to do a complete and thorough review prior to bidding. Agree with recommendations, however, CMs were brought on board during schematic design for the 1A projects and at the beginning of design for the 1B project. One lesson learned is that the constructability review services were not adequately defined in the CM contracts so there was inconsistent performance by the CMs. This has led to development of a more defined scope of services for the CMs for all future constructability and document reviews. See Attachment 2 which includes an improved scope of services for the constructability reviews that will be included in all CM contracts.

Bergmann -Assistance and Coordination of Building Commissioning

Observations:

- The PM delegated this almost entirely to the CMs. During Phase 1A, the RFP for commissioning occurred too late in the process. The CM and the Architect for each school project pulled the
- Commissioning Agent (CxA) into wherever they were in process. This occurred whether the project was in the design or halfway through construction. It was apparent that the design of the first four schools was completed before the CxA's were hired.
- There was a general sense that having this be a part of the PM's scope, other than to monitor that it is being done, was not necessary.

- Different commissioning agents had different approaches, procedures, forms. CM's ended up taking on the coordination role.

Recommendations:

- Assign the Commissioning Agent at the beginning of the design process.
- Clarify in the PM contract that this service be delegated to the Architect and CM.
- Standardize commissioning agent expectations regarding approach and procedures.

PM Response – The PM delegated only the scheduling coordination of the CX role to the CM not the overall contract administration. The completion and approval of the RFP for CX was late during Phase 1A due to the PMs involvement with other design phase priorities and the questioning by District and some members of the Board on the need for the service. This delay prevented the CX from having any input during the Phase 1A design but allowed full participation during construction when the service is most critical. For the 1B projects, all of the CX's were hired during the design phase. Agree with recommendations # 1 and 3. For # 2, the overall contract administration needs to stay with the PM with the scheduling and submittal coordination with the CM and architect. (See Section III F, Commissioning Forms & Req. , Item 26, pg. 47 Attachment 1).

Bergmann -Constructability Reviews

Observations:

- The actual review work associated with this task was fully delegated to the CM.
- The PM role was limited to coordinating the review and distributing of comments.
- There were different levels of responsiveness and quality from the CMs.
- There could have been a more unified front coming from the PM in communicating what is specifically required the CM and the associated staff expertise.

Recommendations:

- Specifically assign the CM's associated with each project to perform this task; contractually designated it as part of their scope of work.
- Require that this review be done as early as practical.

PM Response – Agree with observations and recommendations. A more detailed scope of services and list of deliverables has been developed for use in future CM contracts and is included in Attachment 2. There is some question whether all of the CMs that have been working on the Phase 1 program have the in-house capability to meet the industry requirements for this service.

Bergmann - Standardization of Process

Observations:

- There was a general expectation that, since the PM had deep experience with this type of project, they should have brought their “process” with them. Instead, standard forms; standardized specs, etc. were slow to develop.
- RCSD Facilities staff spoke of their standards, but several of those interviewed found them to be incomplete and sometimes inconsistent.
- On several occasions RCSD Facilities Staff toured projects under construction and questioned why “non-standard” products are being used.
- The PM prepared the procurement RFP’s. They had to invent the process but once completed, it seemed to have served the Program well, with few modifications necessary and generating tight bids and well defined work scopes.

Recommendations:

- A comprehensive review of recognized Program protocols should be undertaken with the objective to create an easily referenceable resource.

PM Response – Both Gilbane and Savin brought significant program forms and documents to the process including forms approved and utilized in other NY construction programs (i.e. Syracuse & Roosevelt). This included standard architect, CM, move manager, Cx RFPs contracts, and most of the standard SED forms. With all of this early input, along with input from the District on their standard forms and contracts, and input from the architects and CMs, we were asked to develop a RSMP standard since this program had a different legislative mandate than the other large state building programs and there were changes occurring in SED processes and standards, and updated building codes. While this approach took more time and resulted in a learning curve, this effort produced a protocol of forms and procedures that is currently serving the RSMP very well. In terms of the district’s building standards, they wanted us to design to their standard rather than introduce another standard from another district. This wasn’t a problem except the district did not have a current or useable building standard’s specification that was useable for design or bidding purposes. In order to develop an updated standard specification, we facilitated a series of standard’s review and specification’s workshops over an 18-month period that resulted in an updated standard specification that was distributed to the designers. Where the designers utilized non-standard materials or equipment - sometimes due to budget constraints, this then allowed them to specifically document these items for review by the district. This review did not always result in defaulting to the district standard--many times for budget reasons--but it did allow for a more competitive bidding approach with the resulting savings being available for other priorities. This has also allowed for the development of an updated program protocol. (See Section III B, District Standards, Items 6-8, pg. 44, Attachment 1).

Bergmann - Coordination with RCSD Internal Groups

Observations:

- Coordination with some District internal groups ended up happening at the building level with principals, teachers and staff. The PM coordinated this through the Building Advisory Committee.
- During this process coordination with RCSD facilities staff seems to have been sporadic and inconsistent.
- Security coordination has been good. The PM's involvement in terms of placement and product has all gone well.
- Food Service – The changes to RCSD leadership resulted in design changes, which cost design time and increased cost associated with additional equipment. But overall this has gone well.
- Transportation – Coordination and review has been straightforward.
- RJSCB's technology consultant worked closely with District staff in specifying new phones, electronics, sounds systems, etc.
- Teaching & Learning – This is occurring at the building level. The District made some decisions without letting others know and this created issues for the PM and the Architects.
- The PM's management of the Building Advisory Committees has generally been found to be very effective. Some community groups have gone better than others.

Recommendations:

- Develop a mechanism for making sure decisions are being made globally at both the District and Joint Board level, not at the building level (in terms of needs, wants and desires).

PM Response – Agree with the observations and recommendations. Coordinating directly with RCSD Division Heads is working fine (i.e. Security, Transportation, Technology, Teaching and Learning, and in-house facilities specialists with paint, furniture, maintenance/custodial, food service, etc.). Also, having participation by Tom Keysa in the program development and design review process has helped identify and sort out priorities in a more timely manner. And, having Mike Schmidt as a central focus for non-standard requests by school staff and to balance priorities, has helped avoid some of the inconsistency that occurred in the Phase 1A design process. (See Section III A, Item 2, pg. 43, Attachment 1).

Bergmann - Establishment and Maintaining Dedicated Project Website

Observations:

- There was little original clarity regarding what RJSCB's expectations for this were.
- There was initially a web site set up early on, but it has not been substantively updated until recently. To date, it has not been used to manage the project, only as an informational site.

Recommendations:

- More thought should be given to this website for the next Phase. The project web page is currently maintained by RJSCB for Board operations. Possible uses include:

- Resolve where W/MBE firms can go to learn about the project or where contractors could download lists of bidders, schedules, etc.
- Resource for the Community inquiries.
- PR initiative utilizing YouTube video or internal video where we have people interviewed about the project.
- Project coordination via secure access.
- Updates portraying overall Program progress.

PM Response – Agree with the lack of clarity on the need or use of the website. While the Program website was initially set up and is still active, regular updates have not been maintained largely due to the district wanting more control on what is on the site and what can be posted. If some of the uses suggested are clarified and deemed worthwhile to support, this should be listed in the PM scope of services.

Bergmann - Quality and Timeliness of RFP's

Observations:

- Several stakeholders noted that the PM could have been more proactive in forecasting workable timelines for issuing RFP's and awarding contracts.
- Much of the actual work associated with this task has been shifted to RJSCB staff. It was anticipated that they would draft the RFP's and then pass on to RJSCB to proof read.
- The "lessons learned" from previous RFPs were not consistently carried forward.
- The timeliness and process for writing RFP's needs improvement. Reviewing submission and awarding contracts has gone well.
- In general there is a sense that the results have been good, but the process to get there could have been smoother and more consistent.

Recommendations:

- Assign a single person to this responsibility.

PM Response – All of the early RFPs were drafted by the PM with legal and final review by the RJSCB staff. Because of the variations of the different services and the simultaneous development of construction bid packages by different architects for the Phase 1A projects, there were a few cases where lessons learned were not carried forward. This, we think has been overcome, and recent RFPs have gone well primarily because of the consistent involvement of the same people in the process at the PM and the legal review staff along with the involvement of Tom Renauto on behalf of the RJSCB. (See Section III B, Item 12, pg. 45, Attachment 1).

Bergmann - Procedures Manual

Observations:

- A Project Procedures Manual was developed only recently. The PM understands that this task/activity was highly valued by RJSCB staff. It is unclear to many of the stakeholders how this is currently being utilized/implemented.

Recommendations:

- Undertake a general review of the existing procedures manual developed by the PM. Incorporate suggested improvements, by consensus, based on input from stakeholders.

PM Response – Even though this is not a contract responsibility of the PM, a Program Procedures Manual has been developed by the PM over the last year to capture the procedures that were developed for the Phase 1A and 1B projects. This Manual is a working document and is being updated on a regular basis as new procedures are developed and old ones are modified. As part of this process, we suggested the use of Expedition or I-Build, in conjunction with standard NYSED prescribed procedures, with procedures from our involvement in prior programs in other City School Districts. Despite resistance from local CMs, (i.e. still 2 CMs using their own forms or AIA), we have adopted and mandated standard procedures utilizing a combination of Expedition forms and specific RSMP forms developed over the past 2 years.

Bergmann - Front End Specifications – Standardization and Consistency

Observations:

- There has been a lack of consistency in the standardization of front end specifications.
- Development of front end specs was characterized by many as a struggle involving lots of legal review.

Recommendations:

- The PM established a “front end specification committee” which the Architects and CMs participated in.

PM Response – The District wanted the front end specifications started from scratch using the most recent CSI Masterspec format, segmented somewhat similar to military specs, allowing a separate spec section for each major work item for easier editing and referral. There was some inconsistency in the development of a standard front end specification because it needed to incorporate elements from the district’s standard, Savin’s experience, Gilbane’s experience, Harter Secrest, insurance consultants, and the architects and CMs that worked on the Phase 1A projects. Similar to the workshops for development of the standard building specifications, this was originally developed in a series of workshops, modified a number of times during and after bidding, and has finally culminated in a good standard that is currently in use - and functions as a working document. Key points in this important process included:

- ***RCSD Facilities participated in the preparation of the specifications (front-end and technical). Legal review of the initial draft eliminated some components of the general conditions that are commonly used in the industry, but viewed as being too stringent against certain provisions of general municipal laws. We were also subject to restrictions with regards to the new and improved set of front end documents involving several parties with different backgrounds and styles. These limitations and/or restrictions included compromises with the local CMs, Contractors; and dealing with RCSD Facilities***

long standing practices, PLA, bonding, insurance, and EEO requirements that are new to this area.

- *As is customary in the NYS K-12 industry, legal review of each project's front end specifications (to properly integrate different spec sections into Divisions 0 and 1 into the full set of contract documents) is highly encouraged, and is a requirement in several NYS City and non-city School Districts. Legal Counsel also needed to review general municipal requirements and new industry trends that have evolved since the RCSD standards and our newly developed front end specs. Some aspects of the new front ends were developed to be more germane to the Western NY area construction market, while they remained consistent with NYSED policies and procedures, newer CSI formats, recent construction case laws and opinions, and reaction to local needs and requirements.*
- *We have always shared our latest front end specs with RCSD facilities, which they are also using as part of their CIP project manuals. We will continue to merge and consolidate our experiences from the "Lessons Learned" sessions, and engage RCSD Facilities, A/Es, CMs, etc. more fully in the "front-end Committee." (See Section III B, Items 6-8, 12, pg. 44-45, Attachment 1).*

Bergmann - Project Closeout/Turnover

Observations:

- This process was taking place concurrent with the stakeholder interviews. At the time no manuals were ready to be submitted. It remains to be seen how this will play out. Because the projects are late, much of the base contract work is not yet complete.
- Separate punchlists were being prepared by the PM and RCSD Facilities staff. Given the time/schedule pressures, this has made the process less efficient and more costly.

Recommendations:

- Facilitate a better relationship between the PM and RCSD Facilities staff. One suggestion was for these two groups to meet once a week and walk the job together to form a common understanding.

PM Response – Agree, the number of changes to the Phase 1A projects resulted in a very tight finish--allowing for move-in and occupancy but with many items of base contract work remaining to be finished while occupied. This created a difficult closeout situation with punchlist work and all other closeout items being done simultaneously while the 1B projects were also getting started in construction with some of the same contractors, CMs, and designers. The separate punchlisting by facilities added to the complexity of coordinating the closeout process. So we don't confuse the contract responsibilities of the project architect for creating a complete punchlist, we have strongly recommended that the process be coordinated to include the timely input of facilities so the completion of the work and closeout of the contractors can be more efficiently managed. With the current process on the 1B projects,

where we are having more regular communication with facilities, we do believe that this coordination of the punchlisting effort will occur and allow more timely turnover and closeout. (See Section III G, Item 29, pg. 47, Attachment 1).

Bergmann - Management of Construction Schedule/Turning Over Schools on Time

Observations:

- RJSCB staff did not learn until June/July that there were significant problems with the Charlotte project. Corrective measures were taken so that substantial completion was done, CofO paperwork signed and sent to SED and the school opened on time. However, there was a sense that these problems should have been recognized and dealt with much earlier.
- The primary goals of the project are: to finish the school projects on time; stay within budget and to do this safely

Recommendations:

- Establish more stringent guidelines for key management staff experience and skills.
- Evaluate the viability of project schedule assumptions.

PM Response – Going forward, PM should revise and enforce Scheduling requirements for the CM and Primes to improve quality of the product since there was inconsistent performance on the 1A projects. PM to utilize Gilbane’s Schedule Recovery Analysis (SRA) on each project’s initial schedule and quarterly on updates. Alternatively, PM could take over the scheduling function and compel Primes to budget manpower for participation in schedule development and updates. In the meantime, the PM has been discussing with the RJSCB the projects where schedule has become an issue and needs remedial action. This occurred on School # 28 where it was possible to accelerate the schedule from 2 years to one year and has occurred recently on School # 12, School # 58, and Monroe where schedule delays have been recommended due to other problems associated with school operations and availability of swing space.

Bergmann - Construction Document Review for Accuracy and Completeness

Observations:

- This seems to have been fully delegated to the CMs. There was an expectation that the independent review would catch a lot and the CMs would catch a lot. There was a sense that the PMs should have known the drawings as well as the CMs and this was not the case.

Recommendations:

- Clarify expectations regarding the level of document familiarity in the PM contract.

PM Response – Because the responsibilities for design documentation and contract administration are with the CM and architect, they need to be more familiar with the details of the documents. If the PM could also function as the CM, this responsibility and detailed knowledge of the documents would expect to be with the PM. And, while this might have been

the case for the 1A projects, changes in PM personnel and more time allowed for the design reviews, for the 1B projects, the PM in some cases knows the contract documents better than the CM.

Bergmann - Incorporation of RCSD Standards into Specifications

Observations:

- Projects being complete have not strictly adhered to District standards.
- RCSD Facilities staff have 25+ years experience with the building stock. During the early design of the initial projects, RCSD Facilities were not consulted to the level they might have been.
- Stakeholders coordinated project review did not begin until some of the later designs. For these projects they did meet with Facilities throughout the Design Development Phase and CA Phase.
- There was a lot of contentiousness regarding the waiving of District standards in the interest of maintaining the project budget.

Recommendations:

- RCSD should review the procedures manual published by the PM for accuracy and completeness.
- The District should provide a specific set of standards for these projects that acknowledge the practical cost limitations of the overall schools modernization program. The recommended modifications should be reviewed by the PM and RJSCB followed by the incorporation of agreed changes.
- Establish a protocol for listing items that deviate from program standards and the reason for the deviation.
- There should have been much more communication and review and of the documents.

PM Response – Please see the comment on the previous item on development of standards and procedures. Agree with the recommendations, however, there was a protocol that was followed that resulted in some non-standard decisions as some standards do not reflect current best practices / regulatory codes. (See Section III B, Items 6-8, pg. 44, Attachment 1).

Bergmann - Scope of PM Involvement:

Observations:

- Many tasks that were outlined in the PM RFP were delegated to others. There is a sense that this may have added additional unanticipated extra cost to the Program. It is apparent that there should be tighter controls on what is in the PM's scope and how this specifically impacts their fee. The PM pushed much of what might have been expected to be their work down to CMs.
- The Joint Schools Master Plan was completed as part of Phase 1.
- The number of tasks delegated to CM's, Architects, specialists (such as Move Managers, etc.) may reduce the PM role to more "coordinate what is in place" vs. "self-perform."

Recommendations:

- Consider how each PM scope/task item should be modified, in subsequent phases, to capture efficiencies and acknowledge changing needs.

- A reduction in scope matching actual involvement would be appropriate in future phases.

PM Response – Not allowing the PM to provide either CM or design services (i.e. similar to either the Buffalo or the Syracuse programs) does result in added participants in the program. Gilbane/Savin have been diligent in trying to avoid duplication of services and continues to provide much guidance and structure to the A/E and CM during all project phases, however, there would seem to be some efficiency in having the PM also provide some or all of the CM services since this is an agency type of service and not an at-risk service where there might be a conflict of interest. Phase 2 should look at this possibility of combining the PM/CM role similar to Syracuse.

Bergmann - Insurance:

Observations:

- Very high coverage amounts driven down to subcontractor level. This decision came late, after project buy-outs. It became very burdensome in terms of enforcement and recordkeeping and ended up working in opposition. It apparently became impractical for some subcontractors to comply.

Recommendations:

- Reconsider insurance coverages in light of wide Program goals.

PM Response – Agree, while PM was involved in all early insurance discussions, the final approach and limits were recommended by the insurance consultant and legal counsel. For Phase 2, we would suggest possible reconsideration of an Owner's Controlled Insurance Program (OCIP) that might be beneficial for the remainder of the program.

Bergmann - The ROAR Program:

Observations:

- There were 1000+ applicants. Approximately 400 were accepted and 200 graduated. Those graduating possessed skills but not those needed at the time, given project circumstances.
- One of the CMs wanted to use ROAR graduates to build out their offices on Clinton, but was told by PM that this could not be permitted due to an insurance issue.
- Compliance w/NYS Dept of Labor regulations was an issue.

Recommendations:

- Review potential changes to this Program, adjusting expectations in accordance with practical constraints and allowing greater placement of qualifying graduates.

PM Response – Agree, the ROAR program was precedent- setting for the Rochester area with some limited success due to the timing of the graduations, restrictions in joining the unions,

and availability of jobs on the school program and for other local construction programs. The unions say they are taking over the pre-apprentice training so the expectations should be able to be better coordinated with the PLA. And, considering the disparity that existed in Rochester before the RSMP, this program should be viewed as a total success since the RSMP has been far more successful than the City, County, RCSD, the private sector, and the local universities in meeting high diversity employment goals.

Bergmann - MBE/WBE Goals:

Observations:

- Stakeholders indicated that the volume of projects and participation percentage exceeded local capacity. Some stakeholders noted that this does not actually help grow and nurture local small MBE/WBE businesses and may, to a certain extent, be destructive.
- COMIDA requirements limited resources to the immediate nine county area.

Recommendations:

- Review MBE/WBE goals based on Phase 1 experience. Adjust as necessary to reflect a workable balance.

PM Response – Agree. Our MWBE Lesson’s Learned has some additional recommendations that can help this review. See Section III A, Item 31, pg. 47, Attachment 1).

Bergmann - Schedule:

Observations:

- Unrelenting schedule pressure affected Phase 1 projects in several respects.
- The project schedule did not adjust when major scope changes initiated by RCSD (K-8, AC, etc.). This resulted in projects being delivered “on time” but not completed to anticipated standards.
- Projects were so rushed that many important parts of the process were not adequately completed, or were compromised.

Recommendations:

- In succeeding phases, allow sufficient time for comprehensive and strategic scheduling.

PM Response – Agree, owner changes and unforeseen conditions can have a dramatic effect on schedule completion when they are made late in design or during construction. Where this can be recognized early, we have made schedule changes for Phase 1B projects. (i.e. School 12 and Monroe). And for School # 58, when it became impossible to continue to accommodate scope changes and unforeseen conditions within the original schedule, we have recommended a delay in the completion date with sufficient lead time to plan for the later move.

Bergmann - PLA:

Observations:

- This was touted as success but several stakeholders noted shortcomings.
- The provisions contained in the PLA significantly limited available qualified bidders.
- One provision requiring that a second shift work at no extra charge ended up causing a significant schedule problem. Its result was that no contractors wanted to work a second shift because they would receive no premium.
- The PLA preserved the flexibility to have project construction issued as single prime contracts – but yet this was not taken advantage of in Phase 1.

Recommendations:

- Review the Phase 1 PLA based on Phase 1 experiences and Program goals and make adjustments accordingly.

PM Response – Agree except East HS was bid as a single prime. Also, a Lessons Learned on the benefits and costs of having a PLA should be scheduled with recommendations for Phase 2.

Bergmann - Task Management:

Observations:

- Given the structured assumptions about division of responsibility, and how this was reflected in both legislation and policy, several key work scopes may not have been performed by those best suited to the task.

Recommendations:

- Make adjustments to the PM scope of work directing, specifically, who is expected to deliver key elements of the Program.

PM Response – Agree. Separating the PM from the CM or combining some of their services needs to be reviewed.

Bergmann - Coordination vs. Execution:

Observations:

- There was a lack of clarity with regard to what the PM was responsible to make happen vs. do (with their own staff or with sub-contracted personnel).

Recommendations:

- Keeping in mind that the PM was hired for professional services (not construction), make very clear in the RFP for Phase 2 services what is being asked for and how any deviations will be measured/allowed.

PM Response – Agree.

Bergmann - RCSD:

Observations:

- The Phase 1 Program was significantly impacted by RCSD making large decisions/changes late in process (i.e., K-8, AC). Several stakeholders advised that the District needs to more fully understand their role in impacting Program cost.

Recommendations:

- Both RCSD Central Admin and PM should more closely consider RCSD Facilities advice and input regarding:
 - Decisions with a view to long term District interests.
 - Material/systems longevity.
 - Effect on operational costs.

PM Response – Agree. It would help if RCSD Central Office and their Facilities department are in agreement on the implementation of major changes before directing the PM to implement them. There were major changes and discontinuities on Phase 1A projects that resulted from this problem. An example was the District policy of converting to a K-8, 9-12 grade structure that was the basic tenet of the Phase 1 Master Plan along with a policy of not adding air conditioning in the renovated buildings. This dictated many of the original project selections and design decisions. When the leadership changed at the District, these policies changed and many of the Phase 1 projects were already designed and starting construction. The PM bore the brunt of these changes and the impact of budgets and schedules. (See Section III H, Item 9, pg. 44, Attachment 1).

Bergmann - SED Approvals:

Observations:

- Several stakeholders indicated that the PM did not exhibit the level of sophistication with NYSED funding mechanisms that RCSD and RJSCB management expected. This included the management of proposed construction scope with regard to maximum cost allowance (MCA) and incidentals.

Recommendations:

- With the completion of Phase 1, specific goal should be agreed upon and captured as a Basis for Design Strategy in future phases.

PM Response – Gilbane and Savin were both very knowledgeable of the MCA requirements and were assisted by Capital Markets and SWBR in the early planning of all projects with specific attention to the MCA and local share. To date, even with substantial unaided additions by the district to the projects, we have managed to keep the projects within the local share limits

originally established for the program. The previous RCSD administration was committed to certain projects and was mindful of the MCA limitations and local share impact. With regard to the benefits from this relationship, we brought SED to the table very early at our offices at 690 St Paul (175 Martin) to set expectations, commitments, and get favors for the RSMP. We had several follow up meetings with SED in Albany to confirm those commitments. With this effort, and the excellent relationship that Tom Keysa and the district had with SED, they have been extremely cooperative and have given Rochester latitudes/opportunities they have not given to other Districts. And, when SED could no longer stretch the finance procedures to the RSMP's favor, we have looked for other financing sources to help minimize the local share. In addition, Gilbane and Savin, and many of the early 1A Architects financed our own costs for more than a year until the program could make payment (i.e. so cash flow was our problem, not the RCSD). For Phase 2, there will be a different focus in trying to design all projects to stay within their MCA. (See Section III A, Item 2, pg. 43, Attachment 1).

ROCHESTER SCHOOLS MODERNIZATION PROGRAM

PHASE 1

LESSONS LEARNED REPORT



January 24, 2014

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I. Introduction & Purpose

The purpose of this report is to document the Lessons Learned sessions conducted with key stakeholders of the Rochester Schools Modernization Program (RSMP). Whose input and support was needed for the action plan to be implemented. The remaining phases of the RSMP will benefit from the documentation and guidance of all program team members that have participated in the workshop sessions.

Following each “lessons learned” session last October 2013, the Program Manager and its partners have already taken a variety of steps to correct deficiencies and weak points; but wanted to develop a comprehensive “Action Plan” for moving forward in the right direction. While this action requires additional input from all stakeholders, new elements of this plan will address avoidable issues and concerns raised by participants from all segments of the business community involved in the modernization program (Professional Service providers, Contractors, Vendors, trade unions, the Rochester City School District, the City of Rochester, and the Rochester Joint Schools Construction Board).

While there may still be several unavoidable challenges ahead; a critical component of this plan is to objectively analyze each lesson learned in the context of each party’s role and responsibility in providing 21st century educational facilities to Rochester students, and work together in implementing such lessons.

This report provides an opportunity to summarize the lessons learned for each of the phase 1a schools, and embrace the opportunities for improvement, and implement recommended action plan items. We have attempted to keep the statements captured by the Facilitator at the Lessons Learned Meetings in their original form. However, some slight revisions have been made for clarity. Where this has occurred the intent of the statement has been maintained.

II. Summary of Lessons Learned Action Plan

- a. Form an action plan Committee
- b. Set goals and structure for the implementation strategy
- c. Prioritize action plan items
- d. Assess current resources and capacities to implement action plan
- e. Engage staff to implement action plan
- f. Evaluate on-going communication strategy for additional improvement
- g. Seek input from stakeholders and advisory personnel outside the RSMP
- h. Create a process for engaging RCSD and City of Rochester more fully while implementing the plan
- i. Continue on-going monitoring of action plan implementation

RSMP Phase 1A Lessons Learned Session: Enrico Fermi School No. 17

October 24, 2013

Facilitated by Gilbane Building Company

Attendees:

Tom Roger, Gilbane

Wayne Hermanson, Gilbane/Savin

Dave Schlageter, Gilbane

Gail Perogine, Gilbane/Savin

Sebastian Ospina, Gilbane

Danyelle Greene, Gilbane/Savin

Todd Bruce, RCSD Facilities

Andy Wheatcraft, RCSD Facilities

Joseph Griffin, RCSD Facilities

Steve Rebholz, SWBR Architects

Mike Rogers, Pike

Michael Waller, OSO

Linda Roth, Roth Consulting

Christine Vargas, Vargas Associates

Casey Bernhard, LaBella Associates

A. DESIGN/PRE-CON PHASE: BAC

1. WHAT WORKED WELL

- a. Attendance was stable with regular participation and consistency especially with the principal and assistant principal.
- b. Good staff representation with good input throughout the design process.
- c. Strong community involvement from Charles Settlement House and JOSANNA Neighborhood representatives who were active participants. This worked well in some aspects and was also a challenge (see Opportunities below).
- d. K – 8 model program was efficient due to fact that architect for this school developed the model plan, which helped with the transition to Program Verification, and due to the input from teacher and learning staff.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Charles Settlement House influenced leadership outside of the BAC process. This created a disconnect between what was initially perceived as the scope of the project and what we could afford to do. (12,000 sq. ft. of new space planned vs. 48,000 sq. ft. actually built).
- b. Lack of a clear understanding of who had the authority to make decisions.
- c. Lack of BAC leadership from the principal. She was an active participant but was almost too flexible/willing to accept the wants of the Charles Settlement House.

- d. BAC created budget and schedule challenges as the community wanted more than the budget allowed.
- e. Decision to move forward with a design option strongly influenced by the community's desires and build a new gymnasium, etc. presented a struggle to bring the project into budget. Principal compromised by giving up classrooms.
- f. Decision made late in the process to expand the scope of the project significantly shortened the amount of time the architect had to design the project. The lateness of this decision also impacted cost estimates. Final construction cost estimates were late; went out to bid at almost the same time as estimates were received.
- g. Keeping the clinic open/in operation during the construction added to the cost of the project.

B. DESIGN PHASE

1. WHAT WORKED WELL

- a. Durable finishes provided by the architect and agreed upon by the District.
- b. Renovation of the existing building accomplished the goal of modernizing the entire facility especially regarding the modernization of the infrastructure (plumbing, electrical, and mechanical systems).
- c. Design by architect integrated the new building well with the renovated portions of the existing building: the entire building flows and looks to be one.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Tackable wall surface was problematic: did not adhere to the existing conditions; certified installer was required per the manufacturer, which was an issue as certified installers were difficult to find.
- b. The destructive testing completed was inadequate and deficient.
- c. Need to analyze District standards versus what was installed and determine what is working and what is not.
- d. Bring CMs in earlier in the design process.
- e. Utilize the RCSD's Facilities Department knowledge of the buildings by getting them involved earlier in the design process.
 - Action Plan: Proactively engage Tom Keysa (Head of Facilities) during concept phase while options are being considered.
- f. Entrance of the building was influenced by the City based on what they think might be future initiatives in the neighborhood. This caused challenges.
- g. Long term versus short term effects of select design elements, wish list items, and proposals need to be thoroughly examined and brought to reality.
- h. Confusion on expectations.
- i. Overlay furniture design with design drawings, millwork, electrical, IT, Smart Boards, etc. to ensure fully furnished and easily usable classroom space.

C. PROCUREMENT / BIDDING PHASE

1. WHAT WORKED WELL

- a. Good competition among MEP contractors which resulted in good coverage.
- b. MEP contractors knew the documents very well.
- c. Same Food Service Consultant that works with the District and then with the architect aided in the design process.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Only one GC bid the project due to the timing of the bid /other projects being bid at same time.
 - Action Plan: Bid the projects earlier whenever possible.
- b. Spread out bid dates for multiple RCSD schools going out at the same time.
- c. Time bids better with respect to other work being bid that is more attractive to bidders – especially other school projects that do not have the onerous requirements of the RSMP program.
- d. Add time into schedule to re-bid a project, if necessary.
- e. Large number of deduct alternates created a limited number of bidders.
 - Action Plan: Eliminate/minimize the number of deduct alternates by stepping back and value engineering the design to make sure there is a quality design out to bid.
- f. PLA requirements, paperwork required, and M/W/D/SBE requirements limited bidders.
- g. Getting contracts signed: needs to be more timely.
 - Action Plan: Research and establish DASNY pre-award meeting requirements.
- h. GC was delayed in starting the work which resulted in time lost and 45-day delay claim from GC.
 - Action Plan: Add requirements to bid for staffing to ensure firm is not over-committed.
- i. Bid of kitchen equipment versus bid/install was an issue.
 - Action Plan: Analyze having equipment package and installation of kitchen equipment as a separate prime contractor.

D. CONSTRUCTION PHASE

1. WHAT WORKED WELL

- a. School opened on time.
- b. CM (Pike) was a very good problem solver; collaborative, held the architect to the task, and was very focused on the project.
- c. Architect was very responsive to suggestions.
- d. MEP teams were all good contractors and very responsive.
- e. Weekly Principal-in-Charge meetings with GC firm worked well when they began 6 – 8 months into the process.

- f. Weekly CM/GC/PM/AE meetings on site followed by walkthrough improved the project overall, and its processes.
- g. CM developed relationships with 2nd and 3rd tier subcontractors which improved the process and communication among the lower team members.
- h. Pre-installation meetings/process: documented responsibilities and took away excuses.
- i. CCM managed schedule well; especially the numerous recovery schedules.
- j. Mock-ups and a mock-up finished classroom benefited the project.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. GC PM and Superintendent did not have the expertise required for this project.
- b. Limited ability of GC team on site to make decisions.
- c. GC personnel did not know and understand the documents.
- d. Special inspector was poor at reporting non-conformities; needed to clearly identify non-conformities.
 - Action Plan: Gilbane to improve protocol for special inspection reports and update forms.
- e. One avenue for submittals (Food Service preferred Submittal Exchange; other contractors preferred/used other software programs).
 - Action Plan: Standardize submittal process. Example: Submittal Exchange, FTP sites, etc.
- f. Research/review could sites and Newforma, which is an option used by Roth.
- g. Uniformity in transmitting information needed especially by food service.
 - Action Plan: Establish format for deliverables (forms, methodology to be used
- h. Documentation/photos of existing systems conditions needed.
 - Action Plan: Provide stronger language/stricter front end documents specifying requirements for contractors to document existing conditions.
- i. Protection of surfaces that would remain after construction completed was poor: protection of this needs to be improved moving forward.
 - Action Plan: Provide better definition of protection requirements and methods in front end documents.

E. FF & E / MOVE MANAGEMENT

1. WHAT WORKED WELL

- a. Bidding/bid process/ordering of FF & E effective when done for multiple schools at one time.
- b. Bringing in sample furniture from vendors provided the ability to reject some items prior to purchase and installation and having them fail.
- c. Taking advantage of warranties/“Beefed-up” warranties: many items purchased with lifetime warranty.
- d. Standardization process.
- e. Early inventory of FF & E.
- f. Having a point of contact at Central Office (Mike Schmidt).

- g. Meetings early in the process with building principals and Mike Schmidt to set the tone
- h. Assigning room numbers at the end of Schematic Design with input from facilities.
- i. Bidding versus buying off of State Contract.
- j. Standardization of furniture.
- k. Early inventory of existing furniture.
- l. Meeting with principals during pre-construction rather than later in the process to begin discussion on moving out of existing building and into swing space, etc.
- m. Appointing a single contact person in District central office to address FF & E and moving issues. Mike Schmidt's (from central office) role in the process was key.
- n. Multiple moving contracts awarded to multiple firms as opposed to only one firm allowed for flexibility to assign personnel and resources where most needed.
- o. Pack(ing) teams under the Move Manager's (Vargas Associates) control.
- p. Bi-weekly move meetings with building principals, District IT, Facilities, the PM and AE.
- q. Increased communication between involved parties regarding the warehouse facilities at 1776.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Changing classroom assignments in late august/early September.
- b. Re-purposing of spaces, especially storage areas being repurposed for classroom or office space is problematic with regard to ventilation, lighting, electrical outlets, and data.
- c. Added need for a significant amount of additional resources. Example: security film in the cafeteria/kitchen; motion detectors/security in 1st floor space that was initially ISS and now being used as a community resource with valuable items on display.
- d. Inability to develop clean/dirty process to avoid tracking dirt because of the extent of work that was still going on.
- e. Appliance decisions trailed design drawings making lack of/placement of electrical outlets an issue.
- f. Layout of FF & E was late.
 - Action Plan: Layout FF & E earlier in the process, preferably before out-to-bid to avoid reworking of space.
- g. Contractors and building occupants moving furniture after it had been delivered to other spaces without communicating/notifying movers. Use of the furniture by contractors for construction activities/materials was problematic.
- h. The disappearance of portable equipment (ex.: handcarts purchased for movers). It is believed these items were utilized by District personnel (i.e. to move computers) and then not returned. These items were difficult to secure.
- i. District involvement needed to determine if FF & E meets room function and requirements.
- j. Better planning by central office with regard to assignment of staff. Central office needs to have a better awareness of the impact late changes (especially large additions of staff) has on the RSMP projects, especially FF & E needs.*
 - Action Plan: Contingency staff planning during the design phase.
- k. Better staff planning from central office for building use.

- l. District help pre-culling the buildings prior to the movers coming in to avoid the labor and cost of moving FF & E to the warehouse that is then discarded.*
 - Action Plan: Move Manager to pre-plan and schedule clean-out of building well in advance of move out and start of construction.
- m. Space standards: appliances are variable.
- n. FF & E drawings need to be overlaid with electrical, technology and millwork.
- o. Pre-move staff meeting facilitated by Move Management consultant.
 - Action Plan: Move Manager to schedule and facilitate pre-move meeting for staff.
- p. Support from central office to require that staff members attend.
- q. Formal presentation by Move Management consultant demonstrating their needs and the means and methods for participation for everyone involved for use at future move meetings.
- r. Better sensitivity and stronger enforcement of OSHA/Safety Compliance requirements for workers on the job site.
- s. Increased awareness of expectations regarding the use of the warehouse at 1776 and the limitations of space.
 - Action Plan: Gilbane to specify use of warehouse space and track/update availability of space.
- t. Clear language and strict enforcement of Code of Conduct, including sexual harassment, needs to be included in the FF & E portion of the Front End documents.
 - Action Plan: Code of Conduct to be inserted into bid documents and PLA.

F. COMMISSIONING

1. WHAT WORKED WELL

- a. Cx meetings scheduled/held after contractor weekly meetings.
- b. Cx commissioning binders and document formatting was very good.
- c. Excellent communication with CM.
- d. MEP contractor (Day Automation) was very cooperative.
- e. Cx agent was very organized.
- f. Cx began pre-functional testing prior to occupancy; this added quality and levels of detail to the project.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. More detail for the controls spec was needed.
- b. Bring Cx in earlier.
- c. Contractors were unfamiliar with the commissioning function.
- d. More planning by Cx and CM in advance of the season for testing of systems and equipment: when do the commissioning activities happen within the timeframe: 2nd shift? After hours?

- Action Items: Add commissioning activities to the master schedule (Cx, CM, PM) and Include line item Schedule of Values for Commissioning (CM).

G. PUNCHLIST / CLOSEOUT

1. WHAT WORKED WELL

- a. CM drafted a list of incomplete work (pre-punch list) before the punch list was created. List was posted at each space. This was very effective as it gave structure to the process.
- b. Communication between the architect and CM allowed the architect to have the appropriate staff on site when needed.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Timing of punch list: doing punch list before the contract work was done was a problem.
- b. Double shifts of sub-contractors.
 - Action Plan: Include double shift in the front-end documents (CM).
- c. Turnover to the District needs to be improved.
 - Action Plan: Develop checklist for turnover to the District (PM).

RSMP Phase 1A Lessons Learned Session: Helen Barrett Montgomery School No. 50

October 23, 2013

Facilitated by Gilbane Building Company

Attendees:

Tom Roger, Gilbane

Danyelle Greene, Gilbane/Savin

Gail Perogine, Gilbane/Savin

Eric Hansen, RCSD – Facilities

Andy Wheatcraft, RCSD - Facilities

Joseph Griffin, RCSD - Facilities

Ray Wenzel, Clark Patterson Lee

Brian Trott, Clark Patterson Lee

Jennifer Takatch, Architectura, P. C.

Michael Waller, OSO

Steve Rebholz, SWBR Architects

Steve Rollins, Pike Construction Co.

David Teixeira, Kaizen Food Service

Christine Vargas, Vargas associates

A. DESIGN/PRE-CON PHASE:

1. WHAT WORKED WELL

- a. Handoff by SWBR of design options developed and included in the Master Plan to Clark Patterson Lee, the architect awarded the work for School No. 50.
- b. Model K – 8 program developed by SWBR provided the framework from which the assigned architect used to determine program and space needs.
- c. Program verification was essential as the model program delivered was a generic program.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Goal would be to have an approval from District administrative cabinet/curriculum leaders for the model program prior to moving forward with the design.
- b. All involved parties need to have a good understanding of the Master Plan goals, objectives, and initiatives for all facilities.
- c. All entities needed to be at the table at the same time for the decision-making with regard to existing programs and future program initiatives.
- d. Model program needed to be updated to reflect the District's initiatives.*
 - Action Plan: SWBR is updating/refining the model program which will be included in the updated Master Plan presently being drafted by them.

B. DESIGN/PRE-CON PHASE: BAC

1. WHAT WORKED WELL

- a. BAC representation on the committee was well defined. Principal recruited individuals and ensured representation from administration, staff, parents, community, and the city.
- b. Principal's involvement/ownership of BAC process.
- c. Committee was well-structured and roles were well represented: individuals represented their constituencies well and fulfilled their role of providing information and soliciting feedback.
- d. User input and feedback.
- e. Group was timely and meetings were well-attended.
- f. Cooperative process.
- g. Estimates, schematics, cost advisor and value engineering in the pre-construction phase worked well.
- h. Move Manager coming onboard early in the design process to aid in developing a standard for FF & E.

2. OPPORTUNITIES FOR IMPROVEMENT

None

C. DESIGN PHASE

1. WHAT WORKED WELL

- a. Program was verified early in the design phase with a generic K – 8 model program.
- b. Good input/good involvement by principal to begin the Program Verification process and determine what the program needed with respect to the K – 8 program and the program specific to the school.
- c. Good transition from Model Program to Program Verification.
- d. Architect was responsive to make the needs and desires work within the established budget.
- e. Meetings with the RCSD Facilities Group to review design/design changes.
- f. User input and feedback was obtained from the people who were actually going to use the spaces.
- g. Bidding FF & E versus purchasing from the state contract.
- h. Estimating: timing (before CM was onboard) and parties (PM, CM and independent).

2. OPPORTUNITIES FOR IMPROVEMENT

- a. District standards for what furnishings, equipment, etc. were needed for 7th & 8th grade specialty classrooms: Home & Careers, Science Labs, Technology/Computer Labs were not decided upon/clearly defined.

- Action Plan: Gilbane/Savin to maintain and update district standards on a regular, as-needed basis.
- b. Consistency of spaces was not achieved among the K – 8 buildings although this was specified as being a requirement to ensure equity among the school.
 - Action Plan: Get larger groups together to better understand the Master Plan initiatives of the District regarding program and space standards.
- c. PM to build defined project design review meetings into the milestone schedule.
- d. All parties need to be brought together for decision-making.
- e. Many deviations from district standards.
 - Action Plan: Gilbane/Savin to maintain and update district standards on a regular, as-needed basis.
- f. Architects to document deviation from District standards (re: materials) during the design process and review with RCSD Facilities personnel so they are aware and onboard with the decision to deviate from select standards.
- g. Get larger groups together to better understand the Master Plan initiatives of the District regarding program and space standards.
- h. Changed design standards to allow for completely updated/new furniture throughout the entire school building within existing budget.
- i. Review issues occurring in completed schools creating a list of furniture and finishes that need to be changed in the next phase.
- j. Carpet Main Offices and Library as this aids movers for earlier move-in. (Note: carpeting these areas is a District standard).
- k. Analyze operating resources after project is completed.
- l. “Page turn” design documents with Facilities Group.
- m. Difficulty in obtaining answers from District personnel/curriculum leaders regarding programs and how they are delivered (currently) and how they will be delivered in the next 5 years (future initiatives).
- n. Allotted time for design review was inadequate.
 - Action Plan: More frequent and more in-depth design reviews to be scheduled.
- o. Move Manager brought onboard later in the project phase.
 - Action Plan: Follow-up investigations after the design and new FF&E standards is needed.
- p. Value of IDC/Redi-Check review process.
 - Action Plan: Conduct analysis to evaluate the process to assess its value to the program.
- q. Addition of adding air conditioning to the entire building (existing and new) 6-months into construction.
- r. Review of kitchen shop drawings by 3 entities: Architect, Kaizen Food Service (design consultant), and the GC.
 - Action Plan: One (1) consolidated set of shop drawings needed.
- s. One (1) contract through one (1) food service firm if standards can be achieved.
- t. Allow adequate time/extra time to review shop drawings.
- u. Document coordination needs to be comprehensive.

D. PROCUREMENT / BIDDING PHASE

1. WHAT WORKED WELL

- a. Front End documents.
- b. Multiple primes.
- c. Scoping document.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. M/W/S/DBE requirements kept some prime contractors from bidding on the project.
- b. PLA requirements kept some prime contractors from bidding on the project.
- c. Timing of bid: this project was bid late.
 - Action Plan: Bid the projects earlier whenever possible.
- d. Spread out bid dates for multiple schools going out around the same time, which is currently being done now with Phase 1B projects.
- e. Daily and final cleaning was problematic.
 - Action Plan: Structure bid documents so that cleaning services are a separate prime contract allowing for an independent contract with a cleaning company as opposed to including in the GC contract.
- f. Put an Allowance in the CM contract for cleaning services for master clean-up agreement which would include means and methods of cleaning operation and equipment needed to complete this work adequately.
- g. Buy cleaning as 2nd shift work in the bid documents.

E. CONSTRUCTION PHASE

1. WHAT WORKED WELL

- a. CM management of communication process and documentation. RFI communication process with contractors worked very well.
- b. Quality of reports set the standard for others.
- c. Contractors worked well together.
- d. Pre-installation meetings.
- e. Architect on site frequently making corrections in the field.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Submittal process. Numerous delays to this process were experienced.
 - Action Plan: Extend 60-day submittal process to 120-days but increase penalties to protect against delays in the Front End documents.
- b. Tie submittals to contractors getting paid/schedule of values.
- c. "On-call" master agreement with GC and primes.

- d. DWT second-tier subcontractors did not function well/participate in meetings.
- e. District IT review of DWT drawings and participation of higher level IT staff in design.

F. FF & E / MOVE MANAGEMENT

1. WHAT WORKED WELL

- a. Bidding versus buying off of State Contract.
- b. Standardization of furniture.
- c. Early inventory of existing furniture.
- d. Meeting with principals during pre-construction rather than later in the process to begin discussion on moving out of existing building and into swing space, etc.
- e. Appointing a single contact person in District central office to address FF & E and moving issues. Mike Schmidt's (from central office) role in the process was key.
- f. Multiple moving contracts awarded to multiple firms as opposed to only one firm allowed for flexibility to assign personnel and resources where most needed.
- g. Pack(ing) teams under the Move Manager's (Vargas Associates) control.
- h. Bi-weekly move meetings with building principals, District IT, Facilities, the PM and AE.
- i. Increased communication between involved parties regarding the warehouse facilities at 1776.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. District involvement needed to determine if FF & E meets room function and requirements.
- b. Better planning by central office with regard to assignment of staff. Central office needs to have a better awareness of the impact late changes (especially large additions of staff) has on the RSMP projects, especially FF & E needs.*
 - Action Plan: Contingency staff planning during the design phase.
- c. Better staff planning from central office for building use.
- d. District help pre-cleaning the buildings prior to the movers coming in to avoid the labor and cost of moving FF & E to the warehouse that is then discarded.*
 - Action Plan: Move Manager to pre-plan and schedule clean-out of building well in advance of move out and start of construction.
- e. Space standards: appliances are variable.
- f. FF & E drawings need to be overlaid with electrical, technology and millwork.
- g. Pre-move staff meeting facilitated by Move Management consultant.
 - Action Plan: Move Manager to schedule and facilitate pre-move meeting for staff and Support from central office to require that staff members attend.
- h. Formal presentation by Move Management consultant demonstrating their needs and the means and methods for participation for everyone involved for use at future move meetings.
- i. Better sensitivity and stronger enforcement of OSHA/Safety Compliance requirements for workers on the job site.
- j. Increased awareness of expectations regarding the use of the warehouse at 1776 and the limitations of space.

- Action Plan: Gilbane to specify use of warehouse space and track/update availability of space.
- k. Clear language and strict enforcement of Code of Conduct, including sexual harassment, needs to be included in the FF & E portion of the Front End documents.
 - Action Plan: Code of Conduct to be inserted into bid documents and PLA.

G. COMMISSIONING

1. WHAT WORKED WELL

- a. Cx agent was precise and program was well-developed.
- b. Cx was “user-friendly” by allowing contractors to use their own forms which made Contractors more comfortable with the commissioning process.
- c. ICO (Independent Compliance Officer).
- d. Buying commissioning services under a separate contract.
- e. Training.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Contractor awareness/understanding of responsibilities.
 - Action Plan: Add commissioning as an agenda item on the pre-bid conference meeting.
- b. Engage Cx earlier in the process to allow for input of Cx in document review.
- c. Existing systems and equipment under the umbrella of the projects (but not part of the project scope) needs to be better defined regarding whether or not it relates to commissioning and if so, how it is related.
 - Action Plan: Include Pre-Functional Testing of existing equipment in the scope of work of the commissioning contract.

H. PUNCHLIST / CLOSEOUT

1. WHAT WORKED WELL

- a. School opened on time and students were occupying the building.

b. OPPORTUNITIES FOR IMPROVEMENT

- a. Bring district in for walkthrough during milestones of the project.
- b. Complete all punch list items prior to occupancy (walkthroughs and completion to be done in unoccupied building).

- c. A date for final submission of change orders needs to be established so the project can be closed out in a timely manner and does not delay the start of state aid.

I. MISCELLANEOUS

1. ACTION ITEMS

- Action Plan: Buy 2nd shift of abatement and demolition.
- Do manpower evaluation and write the manpower requirements into the scope of work for the 2nd shift.
- Gilbane/Savin to develop standard operation procedures and checklist and process/checklist for turnover.
- Need to determine and enforce “drop dead” date for Day 2 Changes.

RSMP Phase 1A Lessons Learned Session: Charlotte High School

October 23, 2013

Facilitated by Gilbane Building Company

Attendees:

- Tom Roger, Gilbane/Savin
- Pepin Accilien, Gilbane/Savin
- Windell Gray, Landon & Rian
- Terry Loconte, Gilbane/Savin
- Michael Furibondo, Erdman Anthony
- John Springer, Gilbane/Savin
- Michael, Waller, OSO
- Joseph Griffin, RCSD – Facilities
- Eric Hansen, RCSD – Facilities
- Wayne Hermanson, Gilbane/Savin
- Christine Vargas, Vargas associates
- Danyelle Greene, Gilbane/Savin
- Dave Schlageter, Gilbane
- Marc Zimmerman, Campus CMA
- Doug Rapatee, Pike
- Rory Zimmer, CJS Architects
- Craig Jensen, CJS Architects
- Gail Perogine, Gilbane/Savin
- David Teixeira, Kaizen Food Service
- Tom Renauto, RJSCB
- Gary Huffman, Campus CMA
- Gemma Humphries, RCSD School Food Services
- Charles Brown, Campus CMA
- Bob DiPaola, Gilbane
- Sebastian Ospina, Gilbane

A. DESIGN/PRE-CON PHASE: BAC

1. WHAT WORKED WELL

- a. Active community participation. Served as a good anchor and asset to the project.
- b. Alumni Association was involved and concerned about conserving archive items in the basement and preservation of paintings in the Auditorium to which they have invested money to ensure their restoration.

- c. Good participation from the District, City of Rochester (NW Sector Rep), and SBHC (School Based Health Clinic).
- d. Head building custodian on site throughout the construction provided additional benefit.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. BAC representation on the committee was not ideal (no parents, no principal for one of the schools until late in the process, no community members who want to see this as a neighborhood asset).
 - Action Plan: Gilbane/Savin and RJSCB need to raise the red flag if the participation is not there.
- b. Better participation of building staff.
- c. The school was in transition during construction with two new programs entering the building after completion of the construction.
- d. No principal for the co-ed high school until well into the design process caused lost time for architect to focus on the building as the schools didn't know what they wanted and the architect focused on what to give them rather than the building itself.
- e. Input was difficult to acquire due to lack of teacher and principal involvement.
- f. Teachers not involved when they were asked to be however they did confront the CM several times with question and concerns.
- g. Lack of input from parents of students who actually attend the schools because most students don't live in the neighborhood.
- h. Lack of input from community members directly involved with the school again due to the fact that most students do not live in the community but are bused in from other neighborhoods.
- i. BAC authority needs to be more clearly defined.
- j. Disconnect as to who was in charge and who is the decision-maker.
- k. Program verification was difficult to obtain because no decisions had been made when the program began.
- l. Lack of involvement from administrative/teaching-learning district leaders to determine, develop, and define the program.

- Action Plan: Teaching/learning administrative involvement needed early on in the process. District office needs to identify/appoint a key person from central office to participate in and ensure that the person remains involved.
- m. Program verification was a challenge well into design as the program was not clearly defined and a moving target. Program verification was done without a well-defined program and without knowing what the program was going to be five years from now. Design was done without knowing what to really design for.
 - Action Plan: Establish a better process that will provide more definition.
- n. District needs to drive the vision of the District for the building. The process needs the authority of the superintendent.
- o. Appoint person to ensure that the project definition is achieved throughout the project duration.
- p. Division/disconnect between infrastructure needs and program needs resulted in frequent changes in scope of work.
 - Action Plan: Find a way to convey the importance of both and balance infrastructure needs and program early in the process to avoid carrying work in the budget that, realistically cannot be done (ex. new gymnasium desired by principal was carried in the budget through Schematic Design).
- q. Administrative changes (i.e. superintendent of schools and administrative cabinet) and changes in vision for the District had huge adverse impact.

B. DESIGN PHASE

1. WHAT WORKED WELL

- a. SED involvement early in the design process. Face-to-Face review was valuable to process as SED input moved the design forward and reduced the amount of review time needed for final construction documents and approval.
- b. Kitchen design by Kaizen as they are the District's district-wide food service design consultant and therefore knowledgeable regarding the master plan for school kitchens and food service requirements.

- c. Input from the District's Instructional Technology Group regarding the technology program in the elementary and secondary schools and the vision for future technology.
- d. Utilizing the same district-wide technology consultant as the District uses for E-rate.
- e. Estimating process.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. More departmental input needed regarding instructional program and vision for future of school.
- b. Clear delineation/clearer definition of District Standards for capital projects. This was a moving target.
- c. More forensics/accelerated forensics needed. Better documentation of existing conditions and what we want to do with them was needed.
- d. HazMat survey needed more field investigation as well as destructive investigation.
 - Action Plan: A follow-up HazMat investigation after the design phase.
 - Develop a SOP (standard operating procedure).
 - Quantify (on the plans).
 - Gilbane/Savin to develop a standard for building surveys and drawings for what a proper HazMat survey should be and will provide to the design team at the beginning of the project.
 - Provide contingency for HazMat (not to be used as a crutch for not completing thorough initial investigations).
 - Provide allowance for HazMat with unit pricing.
 - Coordinate demolition drawings with HazMat and then final demo plans. Allot/build more time into the schedule to allow the design team to do more thorough and appropriate testing.
- e. Use of District's AHERA report was unproductive. HazMat documents are very general.
- f. More targeted investigations needed to provide better idea of any/all schedule and cost impacts.
- g. Investigations need to be linked to the design. This was not the case here because the program was decided on after the investigations were done.
 - Action Plan: Follow-up investigations after the design is decided on are needed.

C. PROCUREMENT / BIDDING PHASE

1. WHAT WORKED WELL

- a. Providing templates for the RFPs for procuring Professional Services with the requirements of the District and RJSCB clearly stated.
- b. One Food Service Consultant firm for all the schools under contract to the RJSCB.
- c. Standardizing equipment and design standard for future kitchens district-wide.
- d. FF & E services supplied through one firm (under contract to the RJSCB) allowed for a design standard that was much more manageable.
- e. ICO (Independent Compliance Officer) resulted in program goals being exceeded for both M/W/D/SBE and EEO requirements.
- f. ICO matchmaker sessions with minority firms/contractors.
- g. Interview process and committees/committee structure for hiring for Professional Services.
- h. Notices to bid, walkthroughs, and Questions & Answers tactics/process all received good participation and responses.
- i. Good response to bids.
- j. Bidding FF & E as opposed to procuring off State Contract saved a significant amount of money and allowed for the purchase of more furniture within the assigned budgets.
- k. Timing of bidding. Bidding earlier in relation to the start date of construction was beneficial: resulting in more bidders and better/tighter bids.
- l. Money for dumpsters included in the FF & E budget proved to be a huge benefit in terms of time.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Front end documents need to be standardized and more descriptive. Examples: insurance requirements have changed; diversity requirements changed, PLA, etc.
 - *Action Plan: Establish coordinated review of front-end docs for each project.
 - Gilbane and General Counsel to update and maintain Master Spec.
 - Incorporate Addendums into Master Spec.
 - Review option of a single prime contractor on a case-by-case basis.
 - Appoint a single contact person for the PLA (Gilbane).
 - Host workshops for: PLA, COMIDA, Insurance & Bonds, and Pay Reqs.
 - Procure all kitchen equipment through the GC (General Contractor). Have architect specify all equipment in the contractor's documents.
 - Ask for samples to be submitted (like what was done for FF & E) to allow acceptance or rejection before purchasing all equipment and then refusing it.
- b. Provide better explanation of PLA, COMIDA, Tag-along, etc. requirements to contractors early in the process.

- c. Consider single prime contractor as allowed under the PLA.
- d. Order dumpsters earlier in the project.
- e. Background checks needed for movers and construction workers.

D. CONSTRUCTION PHASE

1. WHAT WORKED WELL

- a. Availability of swing space in combination with the advanced planning/dissemination of the information and space usage.
- b. Good cooperation of the team.
- c. Willingness of contractors to proceed with extra work (until the end of the project).
- d. High level of trust and good will between all parties.
- e. Alternate for roof work was beneficial because the RSMP bid as an Alternate, the District was able to pick this up as CIP work.
- f. Architect was readily available and on site on a regular basis.
- g. Flexibility of the team and willingness to conduct meetings on weekend (Saturday OACM meetings).
- h. Building custodian on site during the entire construction phase.
- i. Security on site/pre-planned (under the GC contract) before construction began.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Field offices located outside of the building (trailer) versus using space inside the building amidst all the construction.
- b. Need better control of changes. The lack of control in the change order process impacted the budget and schedule.
- c. Single point of contact needed to accurately monitor and report who is on site on any given day/time. Especially difficult to track 2nd & 3rd tier sub-contractors as many work for more than one prime.
- d. Accurate monthly report of firms working on site and number of employees working each day is needed.
- e. Better enforcement of security measures to prevent the loss of equipment and materials. Example: Rolling dumpsters that were purchased to remain in the building after the construction was completed have “disappeared.”*

- *Action Plan: Store items (i.e. rolling dumpsters) that are not a part of the construction but are to remain in the school post-construction at the warehouse at 1776.
 - CM to coordinate security with the District's Road Patrol.
 - Logistics planning to include a site specific security plan.
 - CM to involve/coordinate with the Police Department to provide a police presence at the site.
 - Incorporate second shift requirements for certain scopes of work into Front End documents.
 - Include a more detailed schedule in the bid documents.
 - Better enforcement of the schedule: need to change the mindset of contractors that the substantial completion date is the date the construction needs to be done to allow the District the one month needed for them to do their work.
 - Earlier, more comprehensive review of documents to identify/recognize gaps in the documents.
- f. Mock-ups are needed from as many contractors as possible. Mock-up of a completed classroom with as much detail as possible as to what the actual classroom will look like needs to be done much earlier in the process.
- g. FF & E, Move Management, Commissioning, and DWT (District-wide Technology) need to be added/included in the original master construction schedule.
- h. Multiple entrances with free and clear access in/out of the building need to be provided for the move manager's deliveries. Site work cannot impede access.
- i. Better review of the drawings necessary to avoid the "holes" that were found in Charlotte's drawings.

E. FF & E / MOVE MANAGEMENT

1. WHAT WORKED WELL

- a. Bidding versus buying off of State Contract.
- b. Standardization of furniture.
- c. Early inventory of existing furniture.
- d. Meeting with principals during pre-construction rather than later in the process to begin discussion on moving out of existing building and into swing space, etc.
- e. Appointing a single contact person in District central office to address FF & E and moving issues. Mike Schmidt's (from central office) role in the process was key.
- f. Multiple moving contracts awarded to multiple firms as opposed to only one firm allowed for flexibility to assign personnel and resources where most needed.
- g. Pack(ing) teams under the Move Manager's (Vargas Associates) control.
- h. Bi-weekly move meetings with building principals, District IT, Facilities, the PM and AE.

- i. Increased communication between involved parties regarding the warehouse facilities at 1776.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. District involvement needed to determine if FF & E meets room function and requirements.
- b. Better planning by central office with regard to assignment of staff. Central office needs to have a better awareness of the impact late changes (especially large additions of staff) has on the RSMP projects, especially FF & E needs.*
 - *Action Plan: Contingency staff planning during the design phase.
- c. Better staff planning from central office for building use.
- d. District help pre-culling the buildings prior to the movers coming in to avoid the labor and cost of moving FF & E to the warehouse that is then discarded.*
 - *Action Plan: Move Manager to pre-plan and schedule clean-out of building well in advance of move out and start of construction.
- a. Space standards: appliances are variable.
- b. FF & E drawings need to be overlaid with electrical, technology and millwork.
- c. Pre-move staff meeting facilitated by Move Management consultant.
 - Action Plan: Move Manager to schedule and facilitate pre-move meeting for staff.
 - Support from central office to require that staff members attend.
- d. Formal presentation by Move Management consultant demonstrating their needs and the means and methods for participation for everyone involved for use at future move meetings.
- e. Better sensitivity and stronger enforcement of OSHA/Safety Compliance requirements for workers on the job site.
- f. Increased awareness of expectations regarding the use of the warehouse at 1776 and the limitations of space.
 - Action Plan: Gilbane to specify use of warehouse space and track/update availability of space.
- g. Clear language and strict enforcement of Code of Conduct, including sexual harassment, needs to be included in the FF & E portion of the Front End documents.

- *Action Plan: Code of Conduct to be inserted into bid documents and PLA.

F. COMMISSIONING

1. WHAT WORKED WELL

- a. Program was precise, on point with regard to what was needed and well developed. There was no lack of diligence.
- b. Pre-functional testing.
- c. Onsite visits throughout the course of the project.
- d. Good reporting and documentation; good formats for reports.
- e. Consistent participation by Cx agent at meetings.
- f. Good follow-up by Cx agent.
- g. CM ownership. CM ensured/enforced that commissioning was built into the project.
- h. Training of District personnel.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Clarify expectations.
- b. Tie milestones for commissioning to the contractor payments and schedule of values.*
 - *Action Plan: Include Cx activities in master schedule.
- c. Engage Cx earlier in the process to allow for input of Cx in document review.
- d. Existing systems and equipment under the umbrella of the projects (but not part of the project scope) needs to be better defined regarding whether or not it relates to commissioning and if so, how it is related.
 - *Action Plan: Include Pre-Functional Testing of existing equipment in the scope of work of the commissioning contract.
 - Provide better definition of Pre-Functional Testing in the Cx contract.
- e. Better management of changes in design intent: need to close the loop.
- f. Better and increased communication with Cx agent needed to ensure that he has adequate information.

G. PUNCHLIST / CLOSEOUT

1. WHAT WORKED WELL

- a. School opened on time and students were occupying the building.
- b. Deficiencies lists were developed early on in the project, which were then rolled into punch lists.
- c. Each contractor generated their own punch list that was then integrated into one comprehensive list at the end of the project.
- d. Contractors were cooperative.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Include the District earlier to allow for better coordination of punch list items with them and to avoid the District developing their own punch list.*
 - Action Plan: One punch list from the CM with the support of PM and District.
- b. PUNCHLIST / CLOSEOUT (CONT.)
 - OPPORTUNITIES FOR IMPROVEMENT (cont.)
- c. Earlier/better coordination of walkthroughs by all parties needed. One walkthrough as opposed to multiple.
- d. Punch list and walkthroughs completed prior to occupancy to avoid “finger pointing” of items that need to be addressed in relation to what items were construction items and what items may be new damage caused by students/staff occupying building or wish list items from occupants.*
 - *Action Plan: Master Schedule to show completion dates at end of July.
 - More aggressive rolling completion list provided by CM.
- e. Clear understanding/definition of scope of work versus what was wanted in the project from the community stand point.
- f. Late delivery of equipment and materials.*
 - *Action Plan: Better management of procurement and delivery by CM.

H. MISCELLANEOUS

- More frequent OACM meetings: these meetings were very productive.

- More flexibility on the part of the RJSCB to accommodate requests for award of contracts. Meeting only once a month often made it difficult to move items forward in the most timely manner and in some cases delayed the action from several weeks to a month.

Phase 1A Lessons Learned Session: Franklin Educational Campus

October 24, 2013

Facilitated by Gilbane Building Company

Attendees:

Wayne Williams, Gilbane/Savin
Gail Perogine, Gilbane/Savin
Alexandra Fleischer, RSMP/Savin
Danyelle Greene, Gilbane
Todd Bruce, RCSD Facilities
Eric Hansen, RCSD Facilities
Rishawn Sonubi, Young & Wright Architects
Gary Huffman, Campus
Charles Brown, Campus
Linda Roth, Roth Consulting
Jeff Long, Kaplan Schmidt Electric
Lousie Kuipeas, Erdman Anthony
Bill Vasciannie, SGC
Torry Butler, Millennium

A. DESIGN/PRE-CON PHASE: BAC

1. WHAT WORKED WELL

- a. Engaged all principal's (3 schools housed at this facility) in the BAC meetings, as well as the Zone Chief (Central Office) which ensured that all principal's had equal input opportunities.
- b. Facilities group participation.
- c. The scope developed was based on a compromise of all entities.
- d. There was a balance between program and infrastructure needs: what was needed and what was desired.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Community participation was lacking.
- b. There was a disconnect between the principals and Central Office: they were not getting direction from Central Office.
- c. The Zone Chief changed 2 or 3 times during the process.
- d. There was a disconnect between RCSD Facilities priorities and those of RCSD Central Office and the City of Rochester. The final scope of the project was expanded to accommodate RCSD Facilities (loading dock) and RCSD Central Office (auditorium renovation including air conditioning the space). The scope of work was affected by the fact that this facility would be used as Swing Space for 2 years by World of Inquiry School No. 58. Franklin scope was impacted by the work required to tailor the space to the needs of WOI.

B. DESIGN PHASE

1. WHAT WORKED WELL

- a. There was good guidance from the RCSD Facilities Group based on design plans that had been previously developed.
- b. Access to as-built drawings and existing reports.
- c. Strong architect.
- d. CM involvement added value to the design phase.
- e. Architect responded well to CM input.
- f. Good collaboration between the CM and architect.
- g. PM and RCSD Facilities input was beneficial to the project.
- h. City input regarding the renovation of the Auditorium was of great value.
- i. Consistency of food service equipment across the District.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Defining scope was difficult: final definition of scope took too long to reach consensus.
- b. Delay in defining scope compressed the design time: designs developed with conflicting goals and design of swing space contributed to this.
- c. Program changes due to personnel change at the District level (Zone Chief).
- d. Room finishes schedule from the architectural team to the Food Service team needed better coordination.
 - Action Plan: Room finishes schedule to be provided.
- e. More accurate review by the DOH during the initial design was needed: they reviewed drawings, approved them, then further into the process, rejected some of what they had previously approved based on code (some of these items were “gandfathered” but they wanted them brought up to code)
 - Action Plan: PM to formalize DOH review/approval process and documentation to ensure all renovations meet code and PM to request the copy of formal approval letter from the DOH be sent directly to the RSMP versus sending it to the District only.
- f. Comparison of District standards with what is designed needs to be performed.
 - Action Plan: PM to institute/implement a “page turn” and on-site visit that includes the food service consultant.
- g. Changes/updates of District design standards needs to be maintained and communicated/provided to design professionals.

C. PROCUREMENT / BIDDING PHASE

1. WHAT WORKED WELL

- a. Base bid project: 4 prime contractors.
- b. Complete set of front end documents were reviewed by legal counsel to ensure completeness.
- c. CM expedited the 4-prime contract process well.
- d. Re-bid of the Auditorium worked well when it was let out-to-bid in the Fall of 2013 as it resulted in more competition/competitive bids.
- e. Bidding the project as multiple primes as opposed to a single prime (which had previously been done) worked better.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Timing of bids: need to bid projects when there are fewer projects being bid to get more competition and more competitive bids.
 - Action Plan: PM to take responsibility for the timing of bids.
- b. Timing of when information about requirements needed from the contractors and subs needed to be earlier to allow adequate time for obtaining background checks, drug tests, M/W/D/SBE, and insurances.
 - Action Plan: PM to provide notification to the Unions regarding the additional requirements for trade craft working on RSMP projects well in advance of bids being let so they are aware and can begin to get the necessary items and paperwork in order.
- c. Requirements for RSMP jobs deferred contractors from bidding on the job because there were so many (PLA, Diversity Plan Goals, Back Ground Checks (Aud. Project only)) and there was no relief (waiver) for any of the requirements.

D. CONSTRUCTION PHASE

1. WHAT WORKED WELL

- a. Interior and exterior spaces/areas were completed when needed. Example: bus loop, parking lot, kitchen.
- b. District approval for an earlier start of construction (while students were still in school) in the kitchen by allowing the provision of a temporary kitchen able to serve hot foods and operate during early construction activities allowed for an on time completion.
- c. Accelerating the removal of asbestos/HazMat in the kitchen was very helpful.

- d. Card Trick (interactive planning session) was very effective.
- e. CM coordinated all prime and sub-contractor schedules effectively and efficiently.
- f. Schedule was planned and developed area by area.
- g. The architect resolved contractor issues in a timely manner expediting approval. This kept the job moving smoothly.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Coordination of multiple jobs/contractors that was taking place on site for both the RSMP project work and the District's CIP work was a challenge.
- b. Shared access to work areas by both RSMP personnel and District personnel was a challenge.
- c. Delays in the CIP work delayed the schedule for the loading dock which resulted in
- d. RSMP contractors incurring costs due to the District's delays.

E. COMMISSIONING

1. WHAT WORKED WELL

- a. CM supportive of the process.
- b. Good efforts/successful efforts at getting contractors involved and active in the process.
- c. Transmittal of submittals from CM was thorough and timely.
- d. Cx agent conducted periodic visits to the site and participated in numerous meetings.
- e. Commissioning activities were included in the master schedule by the CM.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Getting contractors to complete the last 10% of the commissioning process.
- b. The mechanical contractor replaced personnel three times during the process causing the need to re-educate each new hire assigned each time there was a change in personnel. This presented a challenge.
- c. Documentation of changes was poor and not communicated well to the Cx.

- **Action Item:** PM to bring Cx onboard for additional work through and Amendment to the contract.

F. PUNCHLIST / CLOSEOUT

1. WHAT WORKED WELL

- a. The District was an active participant in punch list even during construction.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. Completion of the punch list by contractors.
- b. Having only one master punch list (finalized) for the contractors rather than having multiple lists for multiple contractors that keep changing.

RSMP Phase 1A Lessons Learned Session: M/WBE

November 6, 2013

Facilitated by Gilbane Building Company

Attendees:

Ton Renauto, RJSCB
Tom Roger, Gilbane
Wayne Hermanson, Gilbane
Garrett Gruendike, Gilbane
Gail Perogine, Gilbane/Savin
Wayne Williams, Gilbane/Savin
Pepin Accilien, Gilbane/Savin
Charles Brown, Campus Construction Management
John Kane, OSO, Inc.
Martha Gomez, OSO, Inc.
Michael Waller, OSO
Patrick Crandall, Home Guard Environmental Services
Clyde Williams, Home Guard Environmental Services
Mary Bly, Safety Zone
Nick Laurro, Safety Zone
Kristen Taddeo, SRS
Mary Ellen Bel, SRS
Ryan Van Alstyne, Journee Construction
Orville Dixon, Journee Construction
Cecil McClary, Jr., HP State Interior, LLC
Leta Griffin, Environmental Services Unlimited
Erich Seber, US Ceiling
Tom Stephan, RRA, LLC
William Vaccianne, SGC
David Vaccianne, SGC
Torry Butler, Fox Wire USA
Tony Scott, Scott's Unlimited
Rictina Scott, Scott's Unlimited
Terence Brown, STF
Clinton Downing, C. Downing Enterprises
Christine Vargas, Vargas Associates
Lenora Paige, FCMSC
John Greene, United Electric

1. WHAT WORKED WELL

- a. Utilization by the program of Professional Services/Professional Services goals was helpful to firms getting work.
- b. Procurement process worked well (generally).
- c. Firms were provided adequate time to review numbers to put together dollars for the bid.
- d. Program aided in building capacity/helped to grow the company. Although they felt it increased capacity it did not necessarily increase the bottom line/profit.

2. OPPORTUNITIES FOR IMPROVEMENT

- a. M/WBEs felt that the individuals provided by the Union were not qualified to do the work, replacement workers were not available, and poor work had to be corrected. Questioned who was responsible and the expense incurred by the M/WBE firm.
 - Tom Renauto reiterated that it is the subcontractor's responsibility to correct any/all deficient work.
 - One M/WBE stated that when the workers don't perform, he does the work himself. It's about getting the job done and doing whatever it takes to get it done, but non-qualified workers and no qualified replacements, was a hardship.
 - **Action Item:** Tom Renauto will follow-up/discuss the concern regarding the quality of workers sent by the Union with the Unions.
 - **Action Item:** Utilize "48-Hour Notification" option. Tom Roger stated that if the worker can't perform the job, the subcontractor can send them back. If a replacement is not available within 48 hours, the contractor can bring in their own person provided they have completed the "48 Hour Notification Form."
 - Many of the M/WBEs were not aware of this. The ICO to address educating subcontractors and providing them with the form.
- b. Subcontractors are not prepared for the types of paperwork and the volume of paperwork required by the RSMP program. Many don't understand the front end documents.
 - **Action Item:** Program Manager to suggest ICO to facilitate training sessions/workshops to educate by example, reporting requirements such as pay reqs, certified payrolls, forms, contracts, insurances, PLA, etc.
- c. Outreach sessions were not helpful, useful, or productive. ICO Matchmaker Forums were "rah rah" sessions that did not prepare the M/WBEs and subcontractors for the work.
 - **Action Item:** Program Manager to suggest ICO that Matchmaker Forms include items of importance (ex: required paperwork) that will give M/WBEs and sub contractors a

better understanding of the expectations of the program and better prepare them to do the work and be successful.

- d. Insurance requirements were onerous and costly.
- e. Increasing insurance requirements/coverage's for subcontractors are costing them a lot of money. Some were unable to secure the amounts of coverage required.
- f. No waivers for insurance requirements.
 - **Action Item:** An OCP could be considered for future phases. If RSMP chooses to do this, contractors would not need to carry insurance requirements. Downside is that doing so, will cost money and will require someone to administrate.
- g. M/WBE stated that sub contract agreements are "predatory, at best." One-way contracts that are not in the best interests of the M/WBEs and subcontractors and/or favor the prime contractor. Many attorneys advise not to sign the contract.
- h. Prime contractors are putting onerous language into the contracts. Some M/WBEs cross out items in the contracts and don't sign until language has been approved by their lawyer; however other subs don't know what they are signing or feel pressured into signing the contract, which is a bad contract for them.
- i. M/WBEs would like to see a standard contract in the documents: using the AGC-ASA was suggested as a baseline subcontract to begin with.
 - Tom Roger stated that we may lose some Primes by requiring a standard subcontract.
- j. M/WBEs object to Prime contract with subcontractors stating their contract supercedes the Owner's contract.
- k. The Owner's contract follows NYS laws: the M/WBEs questioned if some of the primes contracts with subs violates NYS laws.
- l. M/WBEs object to clause in contract stating they can be terminated for any reason, prime can keep their equipment, and they can be fined \$1,000.
- m. M/WBEs would like to see a subcontractor fund established that Primes have to pay into to help subs pay for legal costs to review the contracts.
 - Tom Roger stated that doing so would add to the burden of paperwork and payments already excessive on the project and may cause some firms not to bid future work.
 - **Action Item:** Tom Roger suggested that the subs set up a subcontractor association.
- n. Protection for subs on payments and retainage. Currently, Primes can hold any percentage for any period of time.
- o. M/WBEs would like MBE language to be expanded to include dispute resolution. Examples: 30-day payments as opposed to 60 or 90-days; early payment; retainage of 5% as opposed to the 10% that many GCs are now holding.

- p. Award of contracts: several M/WBEs felt contracts were awarded under fraudulent information.
- q. The DP/legislation states that subcontracts are to be filed with the RJSCB and the ICO: this was not done.
- r. Project appeared to be designed to benefit the GC.
- s. Focus of the Program appears to be on the GC, not the subcontractors and M/WBEs.
- t. Program did not seem to take the needs of the subcontractors into consideration. They felt there was no one available to assist them or provide help when needed. They did not know who to contact to submit a complaint if there was an issue or to help resolve an issue.
- u. DP-1 process was problematic. No openness or transparency regarding who is listed on the DP-1.
- v. ICO is not allowing firms to see the DP-1 following the bid.
- w. When the DP-1 should be required was questioned: some felt it should not be required with the bid, but 48-hours after the bid; while others felt it should be required with the bid.
- x. DP-1 requirement is difficult to fulfill.
- y. M/WBEs are being listed on DP-1 without their knowledge and signature, and without having given a price. Prime did not contact them. Feel they are being used to “get the job.”
- z. Communication from Primes and ICO following bids was lacking/non-existent. Primes did not call back following a bid; no feedback on the bid was provided to the subs.
- aa. Firms were listed on DP-1s and DP-2s, then removed without any notification from the ICO.
- bb. Firms were notified about getting the work and then they never got any work.
- cc. Removed from the work after awarded, after approval of ICO although they met all the requirements and everything was in order (i.e. insurances).
- dd. Removal by the ICO for no apparent reason: firms met the four criteria for which they could be removed. No reason given why they were removed. This was occurring 6 – 8 weeks after the contract was awarded.
- ee. DP-2 form did not indicate reason for removal/why they were not hired.
- ff. Too much negotiation after the bids: contractors “shopped price” after the bids were received and tried to get M/WBEs to lower their price. If they did not lower their price, they were removed. The understanding was that there was to be no negotiation after the contract was awarded and there was. ICO and PM did nothing to prevent this from happening.
- gg. ICO was non-responsive. No communication and no follow-up from ICO. ICO did not return phone calls or e-mails.
- hh. ICO was not helpful to EBEs. Felt there was no one to help them.
- ii. ICO had too much authority/too much power. They can help or hinder an EBE. Most felt they hindered them. ICO did not work.

- jj. M/WBE firms hired/approved to work on the project from outside the Rochester area when Paragraph 23 clearly states that local M/WBE firms and firms with a “local business presence” must be hired. Why was this allowed?
- kk. Low number of Primes bidding on the RSMP projects was of concern: why aren’t more Primes bidding? What is the PM doing to rectify this?
- ll. Paperwork needs to be rev-visited as it was inconsistent (consistency needed).
- mm. Limitation of 15% on Change Orders was problematic. Sharing the 15% left subs with very little and in some cases, nothing.
- nn. SBEs falsifying information so they can qualify as an SBE.
- oo. Verification process to determine if really an SBE was questionable.
- pp. Penalties for SBEs who are not really SBEs and Primes who listed M/WBEs on their forms, and then don’t use the firm listed because they never bid the work.
- qq. Minority Utilization Plan changed for most recent Franklin Auditorium bid.
 - Program was edited twice: (1) in the document specs, (2) by Addendum.
 - Documents were changed, which changed the intent:
 - i. DP 1, 2, and 3 forms were changed
 - ii. A SBE Certification form was included
 - iii. COMIDA requirements were changed from within 9 counties to only 5 counties.
- rr. SBE form added due to Union concern (per Tom Renauto) is the RJSCBs response as to how we know the size of the M/WBE to determine if they qualify for the PLAs side letter of agreement which states that M/WBEs can bring their own people to the project first in accordance with the ratio based on the size of the firm.
- ss. SBE form does not request a firm’s financial statements. M/WBEs questioned why not? Why can’t the RSMP verify this information through Dunn & Bradstreet? Landon & Rian (ICO) requires financial statement from M/WBEs.
- tt. Fundamental problems with this program need to be fixed.

Summary

- a) Although the general, “Lessons Learned”, section applies to these contractors there were some specific concerns they expressed that merit a separate category.
- b) Utilization of these goals in the procurement of professional services was helpful to the firms in securing work in the program.
- c) Firms were provided adequate time to prepare bids and proposals.
- d) The program aided the firms by growing their volume of work and increasing their capacity to perform future work.

- e) There was a general consensus that the paperwork requirements and forms were too difficult and time consuming to fill out.
- f) They felt the insurance requirements were too complicated and costly.
- g) The PLA caused problems with their work crews productivity and the quality of their work.
- h) They were not aware of or know how to use the 48hr notification rule.

III. Action Plan Process & Timeline

#	Component	Action	Timeline
A. BAC			
	BAC Function	Item 1; a - j	Immediately
	Development of Scope within MCA	Item 2; a - b	
	Manpower Availability & Capacity	Item 31	
B. Design Phase			
	Hazmat Investigation	Item 3; a - c	
	Building Envelope	Item 4	
	Design Testing/Investigation Allowance	Item 5	
	District Standards	Item 6 - 8	
	Operation Costs	Item 9.a	
	Front End Review	Item 12	
	Product Samples	Item 15	
	Commissioning Schedule	Item 25	
C. Procurement/Bidding Phase			
	Kitchen Equipment	Item 10, 11	
	Pre-Project Workshop	Item 14	
	Define Pre-Award Meeting Requirements	Item 17	
	Notifications To Unions	Item 18	
	Submittal Schedule	Item 21 - 23	
	Review Cx In Schedule Of Values	Item 28	
D. Construction			
	Hazmat Monitoring		
	Construction Site Cleaning Services	Item 16	
	Site Security	Item 20	
	Documentation Of Existing Conditions	Item 24	
E. FFE/ Move Management			
	Purchase Order Review	Item 19	
F. Commissioning			
	Commissioning Forms & Requirements	Item 26	
	Pre-Bid Walkthrough	Item 27	
G. Punch List/Close-Out			
	Use Of Master GC Agreement	Item 24	
	Punch-List Coordination	Item 29	

H. Miscellaneous			
	Analyze Operation Costs	Item 9	
	PLA Point Of Contact	Item 13	
	Frequency Of OACM Meetings	Item 30	

ACTIVITIES/ACTIONS TO BE IMPLEMENTED FOR FUTURE PROJECTS

1. To assure that there is adequate participation of constituent groups on the Building Advisory Committees (BAC), Program Manager will guide the process, working closely with the principal on the representation and make-up of the committee.
 - a. Program Manager for Monroe HS will push to re-convene the BAC committee.
 - b. The suggested make-up of individuals to serve on this committee outlined in the BAC packet will be provided to the principal and assistant principals as a resource for the selection of individuals desired for establishing the committee.
 - c. Once formed, PM will assess the representation with that suggested to assure that all constituencies are included or that there is a more balanced make-up than current.
 - d. Program Director will request that an individual from Central Office (Mike Schmidt) be assigned to serve on BAC committee (for Monroe, 12 and all schools moving forward). This individual will primarily be responsible for addressing teaching/learning/administrative issues such as district vision, curriculum, grade levels, and swing space.
 - e. PM, architect, and consultants for Monroe HS to identify possible work that can be done in the summer of 2014 if the project is delayed one year. Confirmation needed that summer school will not be held at this facility in 2014.
 - f. PM for School 12 to pursue issue regarding reducing the number of strands from 5 to 4.
 - g. Separate meetings will be scheduled with the PM, architect and Tom Keysa. Intent is to proactively engage Tom Keysa during the concept and schematic design phases to vet options being considered earlier in the process as oftentimes Tom Keysa might have additional insight/input on issues that are seemingly acceptable to the Facilities reps serving on the BAC.
 - h. PM will track program and infrastructure needs early in the process to ensure they are balanced and to avoid carrying work in the budget that realistically cannot not be done due to budget limitations, or that is not in line with the District's vision/initiatives for the individual school and/or district-wide.
 - i. PM will be responsible for ensuring that the project definition is achieved throughout the project duration.
 - j. PM to raise red flag with RJSCB and District Central Office if there is a lack of adequate representation and/or participation to achieve the above-mentioned goals.

2. PMs will use the framework provided by Master Plan Architect in the Master Plan and the MCA (Maximum Cost Allowance) established by SED for the option in the Master Plan to determine the scope of work for a specific building.
 - a. A phased development plan will be utilized.
 - b. For Phase 2, every project will be considered a two- phase project (A & B) with the same architect designing the work for both phases, keeping in mind that work designed/done in A is not torn out/replaced in B similar to how the work has been planned for Monroe.
 - i. PMs, architects, CMs and project team will look at how two phases can cut down project costs. Example: do "x" amount of work in unoccupied building; 5 years later go back and do additional "x" amount of work while building is occupied.

3. PM will develop a standard operating procedure for HazMat investigation assigning the task to the design team or a separate consultant (sub to architect).
 - a. PM will review Change Orders for HazMat to determine if there is a pattern.
 - b. PM to develop procedure that incorporates any finding of a pattern to HazMat change orders and is compliant with Code Rule 56 requirement for a full HazMat survey.
 - i. Standard for building surveys and drawings for a proper HazMat survey to be provided to the design team at the beginning of the project.
 - ii. Standard to include destructive testing.
 - iii. Additional time to be built into the schedule to allow for more thorough, appropriate, and destructive testing well in advance of start-up.
 - iv. Quantities to be included on the plans.
 - v. Contingency specifically defined/named for HazMat survey to be provided.
 - vi. Allowance with unit pricing to be included.
 - c. Include copy of Code Rule 56 in contract.
4. A third-party Building Envelope Specialist (i.e Bell & Spina) will be retained to conduct a survey of the building envelope as this is a PM requirement.
5. An allowance will be carried in the architect's contract in the Schedule of Values for testing of the building after the design has been decided on to avoid having to go back to the RJSCB for approval to do more testing as a result of significant changes in the design and/or scope added in areas not previously tested because it was not part of the initial design.
6. District standards to be updated on a regular, as-needed basis by PM personnel. Meetings with Facilities personnel will resume to review and update the standards by CSI divisions. Revised, updated standards will be posted as a "Read Only" file to a site that will be accessible to all involved parties.
7. Architects will document deviations from District standards (re: materials) during the design process and review with Tom Keysa so he is aware and onboard with the decision to deviate from select standards. If deviations are not acceptable, architect can make the changes, if approved by Central Office.
8. PMs will review issues occurring in completed schools to avoid repeating the mistakes on the current and future projects. Example: Some new furniture is not functioning as needed due to poor quality or poor design (i.e. chairs whose shape does not allow them to sit on top of desks and therefore preventing clear access to clean the floor).
9. PMs will work with Tom Keysa/Facilities personnel after the project is completed to analyze operating costs and staffing requirements and associated costs.
 - a. Implement lessons learned from previous projects regarding operating cost and staffing requirements.

10. PM will continue to research and weigh the pros and cons regarding having one kitchen equipment contract through one food service consultant firm/prime.
 - a. An arrangement similar to that of HYE electrical contractor with Millennium (re: DWT) for the procurement of fixed and free standing kitchen equipment (versus multiple contractors as was done in Phase 1 will be reviewed.
 - i. As an example: Main Ford would be the prime versus a sub to the GC.
 - ii. Main Ford would have to coordinate with all prime contractors.
 - b. Procuring all kitchen equipment through the GC and having the architect specify all equipment in the contractor's documents will also be explored.
 - c. PM will determine if standardization of the kitchen equipment can be achieved; the downside to this type of arrangement, and if the positives outweigh the negatives.
11. If it is determined that the procurement of the kitchen equipment remains as is, adequate time for review of the shop drawings by all parties will be built into the schedule.
12. A coordinated review of the front-end documents for each project will be done by the PM as the front ends will continue to evolve.
 - a. PM will develop for School 12.
 - b. PM will review all front ends specs before they are sent to legal counsel.
 - c. A template (the most current version) of the Master Spec (revised/approved by legal counsel) will be created for future use by PMs and CMs on future projects.
 - d. Addendums will be incorporated into the Master Spec.
 - e. Master Spec will be available online as "Read Only."
13. An individual from PM will be appointed as a single contact person for questions, etc. regarding the Project Labor Agreement (PLA).
14. PM to coordinate consultant workshops prior to project start-up.
 - a. Workshops will be included/announced in the bid advertisement as pre-bid, non-mandatory information sessions.
 - b. Workshops will be held in the evening (beginning at 5:30 p.m.).
 - c. Topics will include:PLA, COMIDA, Insurance & Bonds, and Pay Requisitions. Landon & Rian to schedule a Meet & Greet.
 - d. A representative from Lawley will be asked to facilitate the workshop on the requirements for contractor insurances and bonds.
 - e. PM Accountant will facilitate workshop on Pay Reqs.
 - f. PLA : Facilitator TBD.
 - g. COMIDA : Facilitator TBD
15. Samples of items will be requested to be submitted during the design phase (similar with what was done for FF & E) to avoid rejection of items due to poor quality, etc. after purchased.

- a. This could include items such as ceiling tiles, lockers, questionable items, etc.
16. Assess assignment of cleaning services with the GC rather than having cleaning as a separate prime contract as was brought up at the Lessons Learned workshops.
 - a. Buy final cleaning as 2nd shift work in the bid documents.
 - b. 2nd shift cleaning requirement will be included in the bid specs for School 12.
17. Define pre-award meeting requirements published by DASNY as recommended by Master Plan Architect to help with establishing a better method/criteria for the RSMP to ensure that staffing included in the bid is real and the firm is not over-committed.
18. The PMs will provide notification to the trade Unions regarding the additional requirements for each trade craft working on RSMP projects well in advance of bids being let so the Unions can get the necessary items and paperwork in order and minimize delays at the start of construction waiting for this paperwork.
19. All purchase orders will be reviewed by PM Accountant before they go to the RJSCB to ensure that the purchase orders match the billing.
20. PM will develop a security plan.
 - a. Team members will review plan with input from the Facilities Group for securing items that are not part of the construction/not being moved out of buildings but are to remain in the school post-construction to minimize and hopefully eliminate items going “missing.”
 - b. The CM will coordinate security with the District’s Road Patrol.
 - c. The CM will include a site specific security plan as part of the overall logistics plan.
 - d. The CM will coordinate with the Police department to provide a police presence at the site while the building is under construction.
21. A more detailed schedule will be included in the bid documents.
 - a. A list of critical submittals with appropriate time required for specific submittals will be included in the schedule. Example: Submittal might be needed in 30-days versus within 60-days or 120-days.
22. The overall submittal process will be extended from 60-days to 120-days in the Front End docs.
 - a. Penalties will also be increased to protect against delays in the Front End documents.
 - b. Submittals will be included in the Schedule of Values (as Pike is currently doing)/tied to contractors getting paid.
23. PM to explore options for standardizing the submittal process.
 - a. PM will ask vendors to do presentations on:
 - i. Submittal Exchange: being used at 58, 28, East and Edison.
 - ii. Master Library: being used at 5 & Franklin; recommended for Monroe HS.
 - iii. Newforma: used by SWBR for School 17

24. Requirement for documenting existing conditions prior to the start of construction and throughout the entire project, including photo documentation, will be included in the Front End documents.
 - a. Possibility of hiring (bid or buy) Multi-Vista or an equivalent to perform this task will be explored further as this was successful at School 58.
 - b. Level of detail required/final deliverable will be specified to ensure that if different vendors are awarded the work at different schools, they are all delivering the same quality and level of detail in their reports.
 - c. Cost to hire an outside contractor, if it is determined that this should be done, will be included in the contract as part of the scope of work.
 - d. A better definition of protection methods will be included in the Front End Documents.
 - i. Material will be included in the spec as the basis of design.
 - ii. Tom Roger will bring in a sample of floor protection used at School 17 for PMs to review.
25. Commissioning activities will be added to the Master Schedule.
26. A better definition of pre-functional forms and requirements will be provided in the commissioning agent's contract.
27. Commissioning will be added as an agenda item on the pre-bid conference walkthrough.
28. PM will confirm prime contractors include commissioning as a line item on the Schedule of Values.
 - a. If not a line item on Schedule of Values, procedure will be changed to include it.
 - b. If additional work is required from the commissioning agent, the PM can bring the agent onboard through an Amendment to their contract.
29. One punch list will be developed by the CM with the support of the PM and the District. The intent is to avoid Facilities giving the RSMP a punch list of deficient items in the building versus what was deficient in the project; and to avoid the contractors having to call back their personnel to complete the District's punchlist items after they think they are done.
 - a. A more aggressive rolling completion list will be provided by the CM.
30. Additional OACM meetings may be scheduled at a critical time if deemed meetings are needed more frequently than monthly.
31. PM will conduct a manpower evaluation on the availability of manpower from the Unions.
 - a. Manpower requirements for 2nd shift will be written into the scope of work.

IV. Conclusion

1. The protracted delay in funding approvals and project startup led to accelerated design and construction schedules which affected IDC, building surveys and the entire planning process.
2. A more intensely coordinated effort between the Design Team, RCSD, RCSD Facilities, CM, and PM will result in a more complete and final product going forward to bidding and construction.
3. This seamless team relationship between the RCSD, RCSD Facilities and the PM will be helpful to all in making the projects more successful.
4. Suggestions to maintain this ongoing dialogue are welcome and the PM can be flexible as to the structure used to maintain communication.
5. The program would further benefit from improving decision making accountability based on specific project timelines.
6. Additional contractors bidding the work would also bring value to the program.
7. The PLA, insurance requirements, MWSD/BE goals and the nine county geographic area limit contractor participation.
8. We had glimpses of the consequences of maxing out local capacities in Phase 1 and would like to strive for increased competitiveness in Phase 2.

Proposed CM Scope of Services Constructability Reviews

CM will perform constructability reviews when directed and within the required time frame requested by Owner. Review the contract documents will be for the purpose of ensuring an accurate and well-coordinated set of plans and specifications for bidding and construction. The review shall encompass information from the plans, technical specifications, appropriate special provisions and appendices and information gained by site inspections. The review shall identify risks including conflicts, errors, omissions and any unorthodox construction requirements that could impact cost, schedule or quality of the work. The review shall provide specific recommendations to improve the quality of all documents. CM shall participate, or if directed, host spec-reads and perform back-checks. Cost and schedule impacts shall be estimated for major review comments. CM will not be held accountable for items missed; however, CM shall use due diligence to meet the standard of care commensurate with that of the construction document review industry.

Prior to providing this service, CM shall provide a written approach explaining how he intends to perform constructability reviews and shall advise if specialty consultants are required. Receipt of the documents from the Owner shall indicate the Owner's permission to proceed with the review. CM shall distribute contract documents to other stakeholders in a timely manner for their review and collect and combine all comments. CM shall review all contract documents to suggest corrections in order to help ensure an accurate and well-coordinated set of plans and specifications. Consultant shall suggest construction phasing, identify important milestones, overall duration of construction, provide recommendations for liquidated damages, contingency, budget, contracting mechanism and provide an opinion of particular project risks.

CM shall determine the adequacy and completeness of documents for bidding, construction, inspection and management during the construction and the warranty phase. Review shall consider information from the proposed plans, specifications, and appropriate appendices including, but not limited to, required permits. Review shall include comments from mandatory inspections of the proposed jobsite.

Review shall identify risks including conflicts, errors or omissions that could impact schedule, cost or quality of the work. Coordinate with operations and maintenance personnel, as needed. CM shall maintain a database of all comments and their resolution. Reviewer shall specifically flag any comments that the Owner should consider for explanation with the Designer.