Draft Report Project Labor Agreement Benefits Analysis

Rochester Joint Schools Construction Board Comprehensive School Facilities Modernization Plan Phase II Rochester, New York

April, 2016

Seeler Engineering, P.C.

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Draft PLA Benefits Analysis – RJSCB Comprehensive School Facilities Modernization Plan Phase II

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Section 1 Executive Summary

1.1 Background

Project Labor Agreements, which have been utilized in the private sector for many years, are a recognized tool for assisting in cost effective and timely completion of major construction projects. They serve these objectives by providing uniform working conditions, cost savings, a stable labor environment, and comprehensive protection against work disruptions arising out of labor disputes.

In March of 1993, the U.S. Supreme Court held that a governmental entity, when it is acting in its proprietary capacity as owner or manager of property and is participating in the construction industry marketplace much as a private employer, can utilize a PLA without conflicting with federal law. On March 28, 1996 the New York Court of Appeals approved, under State Law, the use of PLAs on publicly owned projects. In that case, which involved the repair and refurbishing of the Tappan Zee Bridge, the Court emphasized the need for the PLA to foster one or both of the dual purposes underlying the State's various competitive bidding laws: (1) protecting public [fisc] and (2) avoiding favoritism, fraud or corruption. See *New York State Chapter, Inc. v. New York State Thruway Auth.*, 88 N.Y.2d 56, 643 N.Y.S.2d 480 (1996) (sometimes referred to as the "Tappan Zee" case). The importance of potential cost savings to the public through the use of a PLA was emphasized by the Court's rejection of a PLA in a companion case, involving the Roswell Park Cancer Institute in Buffalo. There, in the absence of sufficient evidence that the Dormitory Authority approved the use of the PLA as a cost saving device, the use of a PLA was struck down by the Court.

PLAs have a long history in both public and private construction in the United States, dating back 80 years or more. Notable projects on the national level that have been constructed under a PLA include the Grand Coulee Dam, the Shasta Dam, Disney World, the Trans-Alaska Pipeline, Boston's Central Artery and Harbor Clean Up projects, the Tappan Zee Bridge Refurbishing Project, the Onondaga County Resource Recovery Agency Resource Recovery Facility, Cape Kennedy Space Center, and the new Tappan Zee Bridge Project, to name a few. PLAs have been used successfully on a number of projects in Western/Central New York over the last decade. Projects include the Public School Reconstruction Programs in Rochester, Syracuse, and Buffalo, the MCWA Eastside Water Supply project, the City of Rochester Marina Redevelopment Project, the Rochester Intermodal Transportation Center, the Rochester Train Station, and the Lakeview Amphitheater Project in Syracuse.

Recognizing the ability of PLAs to "achieve economy and efficiency in Federal construction projects," President Barack Obama issued an Executive Order to all Executive Departments and Agencies on February 6, 2009 encouraging consideration of PLAs on Federal projects (a copy is attached as Appendix A). Also aware of the potential benefits PLAs can bring to public construction projects, Governor Cuomo issued Executive Order No. 2 in 2011 extending previously issued executive orders to New York State agencies to establish guidelines for the consideration of PLAs on State projects (a copy of this Executive Order is attached as Appendix B).

Further, as set forth in Section 222 of New York State Labor Law, a state agency or any political subdivision thereof having jurisdiction over a public work may require a contractor to enter into a project

labor agreement when the agency determines that its interest is best met with application of a PLA that:

- 1) obtains the best work at the lowest price in the construction process;
- 2) prevents favoritism, fraud and corruption; and
- 3) is based on such other factors such as the impact of delays, the possibility of cost savings advantages and history of labor unrest in the area.

The Rochester Joint Schools Construction Board (RJSCB) is in the planning stages of Phase II for the Comprehensive Schools Facilities Modernization Plan. Total project costs including professional services and construction costs are estimated to be \$435 million. Based upon the scope and schedule for this project and consistent with Section 222, the RJSCB is considering the use of a PLA.

To investigate the use of a PLA, the RJSCB retained Seeler Engineering, P.C., an independent consultant experienced in the development and implementation of PLAs, to conduct a thorough analysis of the costs/benefits of a PLA. A PLA has not yet been negotiated for this project. As such, in preparing this report, Seeler Engineering P.C. evaluated the key aspects of the project scope to assess areas of potential costs/benefits against PLA terms and conditions which were successfully negotiated in an agreement for Phase I and in other agreements previously negotiated in the region. The results of this independent study will serve as the basis for a decision whether to enter negotiations for a PLA for the Project. If the decision is made to proceed with negotiations, this study will have to be supplemented to account for final negotiated terms.

What follows is a study designed to assist the RJSCB in determining whether to use a PLA for the Project consistent with Section 222 of New York State Labor Law and the RJSCB's enabling legislation.

1.2 RJSCB Comprehensive School Facilities Modernization Plan Phase II

This study analyzes the Project. The enabling legislation allows for up to twenty-five buildings, but the approved Phase II master plan includes thirteen buildings with fourteen projects, including district-wide technology upgrades. The RJSCB's planning level programming includes varying levels of:

- Alterations and renovations;
- Additions to address space adequacy; and
- Site modifications.

For the RJSCB to continue its public service mission, it is critical to have a timely completion of the Project. Because of the extended construction period, the Project must stay on schedule to prevent interference with planned school and community activities. In particular, the RJSCB will need to make careful scheduling of work and relocation of educational activities into swing space because construction will happen concurrently with regular school operations. Any labor disputes or work stoppages will likely interrupt and interfere with other aspects of school operations. In addition, all construction work is tied to the opening of the school year, and one delay could cascade into many others. For all of these reasons, the construction work must be done in an efficient and economical manner without any significant delays.

1.3 Study Scope

This study includes an assessment of the economic and non-economic considerations of a PLA. To assess economic considerations, Seeler Engineering, P.C. developed a comparative analysis of the existing fourteen applicable area collective bargaining agreements (CBAs) for the thirteen labor craft unions likely to work on the Project. The review sought to identify areas where a PLA could improve on the existing CBAs and reduce the Project's total labor cost.

Given the nature and size of this Project, even without a PLA we would expect, on a dollar basis, a minimum of approximately 75 percent of the successful contractors and sub-contractors to be unionized contractors covered by one or more of the applicable CBAs. We base our projections on our review of recent projects and an understanding of construction labor supply and demand in the Western New York region, the size of the project, the nature and makeup of local contractors who routinely execute projects of this nature, and previous local projects constructed under PLAs.

1.4 Summary

Using the proposed PLA would result in savings of \$5,073,400 or approximately 6.0 percent of the projected labor cost for the Project (estimated at \$85,147,609). The projected savings are based upon terms and conditions negotiated successfully into past PLAs. The following shows the cost savings attributed to each potential change in current CBAs. Detailed calculations are included in Appendix E.

Item #	Cost Savings	Amount Saved
1	Flexible Start Times	\$ 448,200
2	Industry Funds	\$ 353,200
3	Apprentice Ratios	\$ 525,300
4	Non Union Apprentices	\$ 529,000
5	Guaranteed Pay	\$ 61,100
6	<u>No Holiday Pay</u>	\$ 31,600
7	Offsite Fabrication	\$ 224,600
8	Workforce Development	\$ (256,000)
9	Management Rights	\$ 2,235,000
10	2nd Shift	\$ 921,400
Total		\$ 5,073,400
	Total Construction Cost	\$ 298,000,000
	Total Labor Cost	\$ 85,147,609
	Total Savings Percentage	6.0%

In addition to direct labor cost reductions, we anticipate significant project cost savings from increased efficiency by avoiding the Wicks Law. We project cost reductions of \$8.9 Million.

PLAs generally benefit projects with very challenging schedules by permitting flexibility in work scheduling and shift times to potentially increase productivity. Other benefits not easily translated into economic savings include enhancing workforce diversity and training objectives, and providing significant opportunities to Minority/Women/Small Businesses to participate in the Project. One of the

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most important benefits comes from avoiding costly delays from strikes and other labor disruptions.

In summary, a PLA would:

- 1) provide economic savings and obtain the best work at the lowest price through, among other things, uniformity in work rules and practices; mechanisms for improved productivity, safety, and efficiency; and timely completion of construction; and
- prevent favoritism, fraud and corruption by ensuring access to the benefits of the PLA to all successful bidders (including open-shop contractors), and guaranteeing that all successful bidders can utilize a portion of their regular work force on the Project.

We conclude, therefore, that using a PLA will satisfy the requirements of Section 222 of the New York State Labor Law because the Rochester Joint Schools Construction Board will be able to obtain the best work at the lowest possible price and realize many additional benefits. Seeler Engineering, P.C. recommends that the Rochester Joint Schools Construction Board proceed with negotiations for a PLA to try to realize the projected benefits discussed herein.

Section 2 Project Description

2.1 Scope

The Rochester City School District (District) operates numerous Elementary, Middle and High School buildings around the City. The RJSCB's Comprehensive School Facilities Modernization Program is a comprehensive capital improvement program for the District. The Project, the second phase of a multiphase plan, calls for renovations, alterations and additions to accommodate District programs and projected enrollment, eliminate the use of transportable/modular classroom units, and eliminate or minimize the use of leased space. The extent of the improvements to each building space will vary, but may contain asbestos abatement, replacement of interior finishes, lighting improvements, upgrades to communications and IT systems, HVAC improvements, interior space demolition and modification, and improvements to the building envelope for classrooms, athletic facilities, auditorium, administrative, and lunch room areas. The RJSCB will complete the projects while maintaining school operations in an uninterrupted and safe manner.

2.2 Schedule

Although the Rochester Schools Modernization Program has multiple Phases, this report evaluates only Phase II from 2016 to 2021. A preliminary construction schedule is included as Appendix C and shows the individual Phase II projects. All construction work is to be completed by the end of August 2021 (59 months).

Several key factors influence the construction schedule and require effective schedule management. First, schools must remain in full operation from September through June. In compliance with Part 155 of the Regulations of the Commissioner of Education, the District and its contractors can complete certain construction activities only after the end of the school day, during summer recess, and/or through temporary relocation of certain activities.

Second, the RJSCB must start by constructing "swing" space to service four school projects at any given time. Accordingly, several projects that cannot use swing space will require significant use of second shift or other special schedule work. Also, modifications, improvements or changes to mechanical systems must typically be done during summer months.

Finally, certain site (athletic fields) work will be constrained by weather and use considerations.

The 59-month scheduled construction period, while not lavish, is reasonable and allows construction to proceed in a relatively benign manner using six summer construction seasons. In particular, the RJSCB will need to make certain that all interdependent work stays on schedule.

2.3 Construction Costs

The RJSCB has prepared a project cost estimate for Phase II of the Rochester Schools Modernization Program, a copy of which is included in Appendix D. The following lists the individual projects by phase, offers an estimated cost for each project and presents a total construction cost estimate of \$298 million in 2016 dollars:

Contract/School Name	Construction Cost							
Phase II-A James Monroe High School (Part A)	\$20,000,000.00							
Phase II-A Virgil L. Grissom School No. 7	\$19,000,000.00							
Phase II-A John Walton Spencer School No. 16	\$23,000,000.00							
Phase II-A East High School	\$41,000,000.00							
Phase II-A District-Wide Technology Project	\$6,000,000.00							
Phase II-B Dr. Freddie Thomas High School	\$4,000,000.00							
Phase II-B Martin B. Anderson School No. 1	\$17,000,000.00							
Phase II-B James Monroe High School (Part B)	\$21,000,000.00							
Phase II-B Edison Technical High School	\$23,000,000.00							
Phase II-B School Without Walls	\$7,000,000.00							
Phase II-B District-Wide Technology Project	\$8,000,000.00							
Phase II-C Dag Hammarskjold School No. 6	\$22,000,000.00							
Phase II-C Dr. Walter Cooper Academy School No. 10	\$22,000,000.00							
Phase II-C George Mather Forbes School No. 4	\$22,000,000.00							
Phase II-C Clara Barton School No. 2	\$25,000,000.00							
Phase II-D The Flower City School No. 54	\$18,000,000.00							
<u>Construction Cost Total</u> = \$298,000,000.00								

Section 3 Estimate of Craft Labor Needs

3.1 Craft Labor Breakdown

Table 1 presents a complete listing of the union agreements. Of the eighteen craft labor unions in the region, thirteen (with fourteen CBAs) would likely work on the Project. [The work is subject to Building Agreements only.]

Table 2 includes work area labor breakdowns for the Project. This analysis estimates that it will take approximately 1,706,656 craft labor hours to complete construction work for the Project. Demand for craft labor will be immediate upon commencement of construction. Even without a PLA, given the history of similar projects in the region, we would expect, on a dollar basis, a minimum of approximately 75 percent of the project contractors/subcontractors to be unionized contractors covered by one or more of the craft labor agreements. We base our projections on our in-depth knowledge of construction labor supply and demand in the Monroe County area, the size of the project, the nature and makeup of local contractors who routinely execute projects of this nature, and previous construction projects constructed under PLAs in the Monroe County area. For a project of this size, we would not expect to see a significant number of new contractors/subcontractors from outside the Western New York Region.

This report evaluates one potential scenario - where unionized contractors perform approximately 75 percent of the work. Union participation greater than 75 percent will increase the savings from using a PLA above the projections included herein.

3.2 Projected Labor Costs

Using applicable journeyman wage and benefit rates, we projected labor costs for the Project at \$85,147,609 or 28 percent of the anticipated construction cost, with the actual percentage varying on individual components from 20 to 60 percent.

Section 4 Summary of Existing Agreements

4.1 Existing Agreements

Seeler Engineering, P.C. has developed a comparative analysis of CBAs for the thirteen craft labor unions (with fourteen CBAs) likely to work on the project. [The work is subject to Building Agreements only.] Table 3 summarizes significant aspects of each agreement. We have tried to identify areas of potential labor cost reductions through the proposed PLA. The following presents a brief synopsis of the existing agreements.

4.1.1 Contract Duration/Expiration Date

Contract durations range from three to six years, with the majority of the agreements covering five years. Due to the lengthy timeline for Phase II (fifty-nine months), all fourteen agreements are set to expire either just prior to the anticipated construction start date or during the construction period.

4.1.2 Regular Work Hours/Regular Work Day

Regular work hours/work day are not consistent between agreements. Although all of the agreements standardize on a 5 day, 40 hour work week, some crafts allow 4 ten hour days as an alternative with union consent. The majority of the agreements set normal work hours from 8 a.m. to noon and 12:30 p.m. to 4:30 p.m. with an unpaid one-half hour for lunch. Several unions do not state specific start and quitting times, but state that the hours must be consecutive with a $\frac{1}{2}$ hour lunch. Other unions specifically state that the starting and quitting times may be changed, but require notification to or agreement of the union.

4.1.3 Guaranteed Pay

All of the agreements except Ironworkers require two or more hours pay for reporting in at their designated hourly rate. Ironworkers require \$30 per hour for the first two hours if the employee shows up and no work is provided due to weather or other means not controlled by the employer. The detailed requirements vary. Some require the pay regardless, while others require additional compensation if weather conditions permit work, but no work is provided. The Operating Engineers guarantee a minimum of three full days of pay once the work day starts, regardless of the hours actually worked. Sometimes, these guaranties can be as much as 40 hours. Most of the unions allow Saturdays as a make-up day for weather related delays at straight time.

4.1.4 Shift Work

The agreements vary widely. Shift differentials range from a 10 to 17.3 percent premium for second shift to a 15 to 31.4 percent premium for third shift. In addition, many agreements shorten the hours worked for second and third shift (7.5 hours for second shift and 7 hours for the third shift), but require 8 hours of pay.

4.1.5 Overtime

Most agreements provide for time-and-one-half for overtime for weekdays and Saturdays. For Sundays and holidays, two-times base salary is typical.

4.1.6 Holidays

All unions except for Operating Engineers Tech. standardized on 6 unpaid holidays: Christmas, New Years, Thanksgiving, Labor Day, Memorial Day and Independence Day. Operating Engineers Tech. receive a paid day off if they performed work before and after their designated holidays.

4.1.7 Apprentice Ratios

The ratios vary and change with the number of Journeymen at the site. For example, many unions allow the first Apprentice with the first Journeyman. Once staffing grows beyond a small labor force, however, the following ratios have been established:

<u>Journeyman/Apprentice</u> <u>Ratio</u>	<u>Number of Agreements</u>
1/1	0
2/1	1
3/1	8
4/1	3
5/1	0
6/1	0
3/2	2

4.1.8 Off-Site Fabrication

Off-site fabrication rules vary from agreement to agreement. Some do not address the issue. For example, electricians define certain work elements and require them to be union. Several other crafts have similar language that could restrict flexibility in the use and selection of off-site fabricators.

4.1.9 Mileage and Parking

Some unions require payment for parking in downtown areas. Rules also vary for mileage. Most agreements do not require payment of mileage within Monroe County if the worker reports directly to the job-site. Compensation for parking ranges from \$0 to \$9 per day, while travel ranges from \$0.00 to \$0.54 per mile.

4.1.10 Management Rights

Most of the existing agreements do not contain a "Management's Rights" clause. This gives the contractor the assistance and/or flexibility required for necessary control and management of the Project work, including control of the level of staffing and control/selection of key personnel such as the foreman (including the foreman's compensation).

4.2 Labor Unrest

In accordance with Section 222 of New York Labor Law, we reviewed the general labor climate in the

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Central/Western New York region over the last ten years. Our review revealed a mixed picture. Evidence of labor unrest includes recent organizing activities in the service industries in Central and Western New York by (i) the Bricklayers in Rochester, (ii) threatened job actions in the manufacturing sector, and (iii) recent demonstrations by local construction trades at the MCC Rochester campus related to a proposed housing project. As recently as February of 2010, IAM Local 1555 employees went on strike for twenty-two (22) weeks in Westfield, New York, Chautauqua County. A strike, just settled several years ago, by Mott's employees at the Williamson, New York facility is now the longest in the Company's history, lasting five months. Recently, demonstrations took place at the Muller Quaker Dairy project in Batavia over employment of out of town non-union workers.

The unemployment rate in the 52-county Upstate New York region stood at 5.4 percent in February 2016, a decrease from 6.3 percent in February 2015. Reflective of this decrease, the New York State Department of Labor reported that the state's labor force has increased by 106,500 between February of 2015 and February 2016 as more state residents have renewed confidence about finding a job in the state.

As demands on skilled labor increase, availability will decrease, making access to skilled workers through hiring halls and certified apprenticeship programs even more valuable. This gives the union worker greater strength at the bargaining table and, in turn, increases the potential for confrontation and labor disruption in local bargaining negotiations. There are approximately \$1.7 Billion in construction projects planned or recently begun for a six county area around Monroe County, including the Genesee County EDC STAMP Infrastructure Project, the Batavia Downs Renovations, the Lago Resort & Casino, the Monroe Community College Downtown Campus Renovations, and the Genesee Brewing Facility Phase I. Expenditures at this level in the region would not place unusual demand on available labor in the region.

The Western New York area construction trades have a very strong and comprehensive organizing program and take a strong position when advocating for local union involvement in project work. Organizing activities have increased in recent years and we expect increases in the frequency of job actions over keeping employment local. We also expect to see more project site demonstrations such as bannering, hand billing, and picketing.

We find it difficult to quantify precisely the very real time and expense added to a bid to protect against the uncertainties of an unstable labor force (e.g., added coordination costs, acceleration of schedules, standby costs during job actions, costs to cover liquidated damages). Accordingly, job actions of any nature become a critical factor in cost-effective timely project completion. Given the current economic and unemployment conditions, we view the labor market in Western/Central New York as tightening and having a reasonable potential for labor unrest. A PLA would eliminate the uncertainty related to labor instability.

Section 5 Economic Considerations

5.1 General

We analyzed potential cost savings for the Project utilizing the projected labor craft hours, wage rates currently in effect, contract provisions included in the previous Phase I agreement, and provisions contained in other recent agreements in Western/Central New York. Given the nature and size of this Project, and the make-up of the market, even without a PLA we would expect, on a dollar basis, a minimum of 75 percent of the successful contractors and/or sub-contractors to be unionized contractors covered by one or more of the applicable CBAs. We base our projections on our review of recent projects and an understanding of construction labor supply and demand in the Western New York region, the size of the project, the nature and makeup of contractors who routinely execute projects of this nature, and previous projects constructed under PLAs.

Where appropriate, we have calculated the cost impacts of individual contract provisions likely to be part of the PLA by assuming a 75 percent unionized project. Detailed calculations are included in Appendix E. Union participation greater than 75 percent will increase the projected savings.

As discussed below, we also analyzed other economic savings attributed to use of a PLA but not directly related to labor cost.

5.2 Labor Cost Savings Attributed to the Use of a PLA

We prepared labor cost savings projections based upon contract provisions routinely included in local PLAs and likely to be included in any PLA for the Project. The following discusses the potential for economic savings for each anticipated contract provision.

5.2.1 Contract Duration/Expiration Date

The proposed PLA would prohibit strikes and lock-outs or other job actions for the duration of the agreement. This would avoid the potential for work stoppages resulting from wage and benefit negotiation at the end of each craft's local area agreement, thus ensuring uninterrupted project completion.

5.2.2 Overtime

Based upon the most likely staffing scenario, we anticipate the use of overtime. Depending upon the other provisions of the proposed PLA, up to 20 percent of the labor effort could be in overtime hours. Overtime could result from unusual conditions caused by work in and around existing facilities that must remain in service at all times. The proposed PLA standardizes on time and one-half for overtime on weekdays and Saturdays. We do not anticipate work conditions that would trigger overtime at a rate greater than 1.5 times base, so this provision alone yields no savings.

5.2.3 Flexible Start Times

The anticipated PLA will allow the contractors/subcontractors to set start times between the hours of 6 a.m. and 9 a.m. and use special shift start and finish times to fit the needs of the assignment. This will give the contractor flexibility to schedule the workday to maximize productivity and eliminate the setup and breakdown time for one work day each week. Flexible hour schedules could

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accommodate for seasonal daylight, and after hours work, which would enhance productivity. We estimate that flexibility of start times will translate into approximately one hour per week per person of productivity gains. Maximum savings will result from using flexible start times during the summer months (June and July). We have assumed that flexible start times will only apply to work performed by Electrical Workers, Plumbers & Steamfitters, Sheet Metal Workers, and Sprinkler fitters. We project maximum savings from flexible start times to be approximately \$448,200.

5.2.4 Industry Fund Payments

The anticipated PLA provisions limit the workers' pay to base wages and fringe benefit payments as published in the prevailing wage schedules. This, in turn, would avoid collectively bargained payments, such as Industry Promotion Funds, which are in excess of those required by/for public works projects. The local agreements provide for a payment ranging from \$0.00/hr. to a maximum of \$2.28/hr. for these added costs. Eliminating these payments under a PLA would save approximately \$353,200.

5.2.5 Apprentice Ratio/Apprentice Program Participation

The anticipated PLA agrees to apprentice ratios equal to or better than those set by the New York State Department of Labor. This translates to apprentice ratios of 3 to 1 or better. Moving several of the crafts to this ratio would reduce labor costs by approximately \$525,300.

The anticipated PLA also provides access to a qualified pool of apprentices not otherwise available to non-union contractors. This would allow non-union contractors (who do not have state approved apprentice programs) to obtain qualified apprentices, through the referral process, to lower overall crew labor cost and result in anticipated savings of \$529,000.

5.2.6 Guaranteed Pay

The anticipated PLA eliminates guaranteed pay in its entirety and replaces it with a travel allowance equivalent to one hour's pay. Standardizing on this provision for all trades will result in an estimated savings of \$61,100.

5.2.7 Holiday Pay

The anticipated PLA eliminates paid holidays in their entirety for the selected trades that have this provision in their CBAs. The estimated savings is \$31,600.

5.2.8 Off-Site Fabrication

The anticipated PLA allows for some work to be performed offsite. This PLA study assumes that offsite work would only apply to 2% of the total craft hours for Plumbers & Steamfitters and Electrical Workers, and 5% of the total craft hours for Carpenters, Iron Workers and Sheet Metal Workers. The offsite work performed by these crafts is estimated to reduce costs by 20% or approximately \$224,600.

5.2.9 Enhanced Minority/Women's Workforce Program

Many projects under way in the region have established aggressive minority and female workforce participation goals. This project establishes a combined goal of 30% participation.

To reach these goals, PLAs often have more structured efforts to recruit and equip minority and

women candidates with the skills needed to enter apprentice programs in the construction trades and then, through existing Department of Labor apprentice program Direct Entry or waiver provisions, place these individuals on the project sites. In certain instances, projects have funded these efforts by project contributions, based upon hours worked, to non-profit agencies to implement the programs. Project contributions have ranged up to \$0.15 for each craft hour worked.

In PLA negotiations, the RJSCB would need to determine the specific enhancements to existing workforce program development and the resulting cost. If the RJSCB desires to implement more comprehensive program elements, we conservatively estimate the added expense to the Project (based upon a per hour cost of \$0.15) to be just over \$256,000. This additional cost would be subject to the RJSCB's approval regarding the use of such funds, including requiring contractors to provide a quarterly accounting update report that is confirmed in an annual audit.

5.2.10 Management Rights/Jurisdictional Requirements

The anticipated PLA contains very strong Management Rights language. By controlling the level of staffing, the scheduling of staffing, and the selection and employment of a Foreman as the Contractor's staff, Management can realize distinct efficiencies. For large projects or complex projects with high labor loadings, using clearly established management rights typically results in savings of two percent of the labor costs. For smaller or less complex projects with moderate schedules and less intense labor loadings, these advantages are reduced to 0.5 percent.

When considering the effect of jurisdictional restrictions, we make further adjustments to small projects. In an open shop environment, workers could perform the work of more than one trade over the work day. While prevailing wage requirements would dictate that they must be compensated for the work of each trade under the schedule in effect for that trade, they could still perform the differing tasks. Union agreements and PLAs would restrict the work of the governing trade, thereby prohibiting crossover to take place. The crossover of individual workers from one trade activity to another in a single day's work is more frequent on smaller, less intense projects. This practice also occurs more frequently in the general building construction trades than in other crafts.

Although you would see enhanced coordination by using a single prime contractor in a design-bidbuild delivery system from the inception of the project, a strong management rights clause would provide additional value given the aggressive schedule and the need to coordinate the efforts of multiple labor crafts in a very efficient manner. We anticipate that including enhanced management rights language in the proposed PLA would offer a 1.5 percent cost savings or approximately \$2,235,000.

5.2.11 Workers Compensation ADR

The anticipated PLA would permit a Worker's Compensation Alternative Dispute Resolution ("ADR") process that could produce cost savings. Despite this fact, implementing a project-specific ADR program is not practical given the timeframe required to develop a program and gain approval through the State Worker's Compensation system. Accordingly, we do not project any savings in this report. Nevertheless, individual craft labor unions can put their own programs in place, so the PLA should allow for applying an ADR program if one becomes available.

5.2.12 Shift Work

The anticipated PLA would reduce any applicable shift premiums to a standardized 5% premium for second and third shifts with no reduction in the hours worked (i.e., 8 hours of work for 8 hours of pay) when premiums are required by applicable CBAs. We anticipate a significant quantity of shift work for all craft hours related to all school projects. We based our cost savings projections on a using the PLA to reduce the shift differential premium for all crafts working on the second and third shifts to 5% with no reduction of hours worked unless three shifts are worked. The estimated savings when operating with a second shift are projected to be \$921,400.

5.3 Other Economic Savings Attributable to a PLA

Based upon contract provisions used in prior PLAs and that we expect to be in the PLA for the Project, we project additional savings not directly related to labor.

5.3.1 Wicks Law

If the Project uses a PLA, Section 222 of the NYS Labor Law will allow the RJSCB to avoid the Wicks Law. The Wicks Law requires that public works projects use multiple prime contractors, in a designated fashion, rather than allowing a single contractor on construction projects. Various studies have reported that complying with the Wicks Law adds between 10% and 30% of the total construction costs. See, for example, the reports prepared by the New York State Division of Budget (May 1987) and New York State School Boards Association (March 1991) indicating that eliminating the Wicks Law would reduce construction costs by 24 to 30 percent and 20 to 30 percent, respectively (a range of from \$17,800,000 to more than \$26,700,000 for this project). Governor Pataki reported that the Wicks Law adds 10 percent to construction costs in New York State. Legislation that authorizes certain Wicks Law exemptions cites a 10 to 30 percent cost reduction. Assuming the Wicks Law exemption would only apply to projects with a total cost greater than \$30 Million (East High School, Edison Technical High School, and the Clara Barton School), and using a modest ten percent reduction in cost, we project savings to the Project of \$8,900,000. Because a PLA is the only way under Section 222 to avoid the Wicks Law, the cost savings should be attributed to the PLA.

5.4 Summary

We estimate that using a PLA could save a little over \$5,073,400 in direct labor costs or approximately 6.0 percent of the projected total cost of labor for the Project (estimated at about \$85,147,609).

In addition, we estimate savings of \$8,900,000 from avoiding the Wicks Law. This would make the total direct labor cost savings and other savings attributable to use of a PLA approximately \$13,973,400 on a total project cost of \$298,000,000 or approximately 4.7 percent savings.

Section 6 Additional Considerations

The RJSCB could enjoy several additional benefits from a PLA. These are difficult to quantify in dollars, but would be significant factors in the overall success of the Project.

6.1 Labor Stability

The RJSCB anticipates that Project construction will occur over sixty-one months. During the life of the Project, all local labor contracts will renew. Should there be any significant changes to the applicable contracts, this could significantly disrupt the Project timeline. While it may not be easy to quantify the cost of disruption, the impact is clear. For projects with multiple crafts (e.g., general and electrical), disruptions can result in claims of delay by individual sub-contractors who are dependent upon the performance of other sub-contractors subject to the action. Further, the RJSCB would incur certain project financing. At a minimum, we estimate an additional \$18,000 to \$25,000/month in project administration and engineering oversight costs. Further, we cannot quantify the indirect costs related to lost revenue, but they could be significant.

6.2 The "Tag Along Provision"

Key provisions of any Project Labor Agreement include the "Union Recognition and Employment" provisions, specifically the Union Referral requirement. Commonly referred to as the "Tag Along" requirement, this provision governs bringing craft workers to the Project. All craft workers must pass through the job referral systems and hiring halls established by the unions. The "Tag Along" provision specifically allows a contractor who is not signatory to a CBA to bring his own core employees to the Project. The number of core employees brought to the job is limited by the agreement on the basis of a percentage of the workforce on the Project, thus typically increasing the number of workers delivered to the project by the signatory unions. The proposed PLA anticipates a "Tag Along" requirement of 25 percent, with special considerations provided for small businesses (as defined in the PLA) and Minority and Women Businesses. These special considerations offer significant opportunity for these small, minority and women's businesses by allowing a greater percentage of their own staff to participate. The "Tag Along" requirements are often the core element of any PLA negotiation. The unions can get to increase the number of workers delivered to the project by union hiring halls in exchange for the types of concessions and resultant economic savings to the Project described in Section 5.

6.3 Enhanced Minority Recruiting & Training Programs

Using a PLA that contains apprentice demands for the Project could help the RJSCB advance minority/women recruitment and training and participation goals for the Project by combining formal and comprehensive area wide pre-apprentice programs designed to deliver first year apprentices prepared to make a construction trade a career. As demonstrated through other PLAs now in effect in the area, owners can develop goals and objectives for minority and women workforce participation that incorporate this significant feature in DOL-approved apprentice programs not otherwise available to non-union contractors who do not have approved programs.

Section 7 Conclusions and Recommendations

Based upon the size and scope of the Project, the proposed schedule, and the anticipated mix of craft labor, we conclude that using a PLA would provide measureable economic benefit. We estimate that using a PLA could result in savings of a little over \$5,073,400 in direct labor costs or approximately 6.0 percent of the total cost of labor for the project (estimated at about \$85,147,609).

In addition, we estimate savings of \$8,900,000 from avoiding the Wicks Law. This would make the total direct labor cost savings and other savings attributable to use of a PLA approximately \$13,973,400 on a total project cost of \$298,000,000 or approximately 4.7 percent savings.

Using a PLA could also provide the following non-quantifiable benefits:

- 1) avoiding the costly delays of potential strikes, slowdowns, walkouts, picketing and other disruptions arising from work disputes, and promoting labor harmony and peace for the duration of the Project;
- 2) standardizing the terms and conditions governing the employment of labor on the Project;
- 3) permitting wide flexibility in work scheduling and shift hours and times, thereby increasing productivity;
- 4) providing comprehensive and standardized mechanisms for settling work disputes, including those relating to jurisdiction;
- 5) ensuring a reliable source of skilled and experienced labor;
- 6) enhanced minority and women workforce participation; and
- 7) avoiding favoritism, fraud and/or corruption by ensuring availability of the benefits of the PLA to all successful bidders regardless of union/non-union status or the status of their employees.

By using a PLA, the Rochester Joint Schools Construction Board could achieve several of its stated objectives, including the prudent use of public funds and avoiding favoritism, fraud and/or corruption. In summary, Seeler Engineering, P.C. recommends that the RJSCB proceed with negotiations for a PLA.

Tables

Table 1

Rochester Joint Schools Construction Boad

Modernization Program Phase II

Rochester Schools

<u>Name</u>	<u>Local No.</u>
<u>Boilermakers</u>	7
Bricklayers (Bldg)	3
Bricklayers (H&H)	3
Carpenters (Bldg)	276
Carpenters (H&H)	276
Electrical Workers	86
Elevator Workers	27
Glazers	660
Heat & Frost Insulators	26
Iron Workers	33
Laborers (Bldg)	435
Laborers (H&H)	435
<u>Millwrights</u>	1163
Operating Eng. (Building)	158
Operating Eng. (H&H)	158
Operating Eng. (Tech)	158
Painters	4
Plasterers & Cement Masons	9
Plumbers/Steamfitters	13
<u>Roofers</u>	22
Sheet Metal Workers	46
Sprinkler Fitters	669
Teamsters (Bldg)	118
Teamsters (H&H)	118

Table 2

Craft	eyman Rate \$/hr . Benefits)	Total Hours Per Craft		Labor \$ per Craft w/o Burden		
Boilermakers	\$ 58.74	0	\$	-		
Bricklayers (Bldg.)	\$ 49.67	194,409	\$	9,656,295.03		
Bricklayers (H&H)	\$ 49.67	0	\$	-		
Carpenters (Bldg)	\$ 49.53	244,108	\$	12,090,669.24		
Carpenters (H&H)	\$ 48.33	0	\$	-		
Cement Masons	\$ 45.64	0	\$	-		
Electrical Workers	\$ 56.69	268,110	\$	15,198,150.49		
Electrical - Street	\$ 54.36	0	\$	-		
Elevator Workers	\$ 60.27	0	\$	-		
Glaziers	\$ 45.92	44,184	\$	2,028,929.28		
Heat & Frost Insulators	\$ 48.62	16,697	\$	811,808.14		
Iron Workers	\$ 51.51	29,935	\$	1,541,951.85		
Laborers (Bldg)	\$ 42.01	283,940	\$	11,928,319.40		
Laborers (H&H)	\$ 46.71	0	\$	-		
Millwrights	\$ 47.75	0	\$	-		
Operating Eng. (Bldg.)	\$ 56.34	66,258	\$	3,732,975.72		
Operating Eng. (H&H)	\$ 63.70	0	\$	-		
Operating Eng. (Tech)	\$ 57.21	1,420	\$	81,238.20		
Painters	\$ 42.16	63,521	\$	2,678,045.36		
Pile Drivers	\$ 49.53	0	\$	-		
Plasterers	\$ 45.64	0	\$	-		
Plumbers/Steamfitters	\$ 54.39	190,967	\$	10,386,695.13		
Roofers	\$ 45.42	160,793	\$	7,303,218.06		
Sheet Metal Workers	\$ 54.40	111,876	\$	6,086,054.40		
Sprinkler Fitters	\$ 53.33	30,438	\$	1,623,258.54		
Teamsters (Bldg)	\$ 40.90	0	\$	-		
Teamsters (H&H)	\$ 40.90	0	\$	-		
Total		1,706,656	\$	85,147,608.84		

Table 3

AGREEMENT PROVISIONS	Bricklayers - Bldg	Carpenters - Bldg	Electrical Workers	<u>Glaziers</u>	Heat & Frost Insulators	Iron Workers	Laborers - Bidg	Operating Engineers - Bldg	Operating Engineers - Tech	Painters_	Plumbers & Steamfitters	<u>Roofers</u>	Sheet Metal Workers	Sprinkler Fitters
Local Number	3	276	86	660	26	33	435	158	158	4	13	22	46	<u>669</u>
Expiration Date	4/30/2017	5/31/2016	5/27/2018	4/30/2018	5/31/2017	4/30/2018	4/30/2019	2/28/2019	3/31/2016	4/30/2017	4/30/2017	6/1/2018	40	3/31/2016
Contract Duration	5 Years	5 Years	4 Years	4 Years	4 Years	3 Years	5 Years	4 Years	3 Years	5 Years	6 Years	4 Years	5 Years	3 Years
A. Regular Work Hours	40 Hours Mo - Fri 4-10s permitted with 48 hours notice	40 Hours Mo-Fri 4-10 Hour Days to extent permitted by law Mo-Fri	40 Hours Mo-Fri 4-10 hr days w/ 24 hr notice to union	40 Hours Mo-Fri 4-10 Hour Days to extent permitted by Jaw Mo-Fri Must notify Union	40 Hours Mo-Fri 7:00 AM - 5:00 PM Start times set by employer 4-10 hour days acceptable	40 Hours Mo-Fri 6:00 AM - 4:30 PM Changes in workday must be approved by Business Manager	40 Hours Mo-Fri	40 Hours Mo-Fri 4-10 Hour days allowed	40 Hours Mo-Fri	40 Hours Mo-Fri 4-10 hour days Friday make-up as permitted by law Once established it may not be changed w/o union notification	40 Hours Mo-Fri	40 Hours Mo-Fri	40 Hours Mo-Fri	40 Hours Mo - Fri 4-10 Hour Days when permitted by law
B. Regular Work Day	8 Hours/Day + 0.5 Hr Lunch 5:00 AM - 4:30 PM	8 Hours/Day 0.5 Hours/Lunch @ Midpoint 600 AM - 900 AM Start Time Start time can be changed if mutually agreed upon	8 Hours/Day 0.5 Hours/Lunch 7:00 AM - 3:30 PM Can vary by 2 hours	8 Hours/Day 0.5 Hours/Lunch Cannot change without notifying the union	8 Hours/Day 0.5 Hours/Lanch @ 12.00 PM - 12:30 PM	8 Hours/Day 0.5 Hours/Lunch 2 Lunch Periods after 10 Hours First 0.5/Lunch unpaid Second 0.33 Hour/Lunch Paid	8 Hours/Day 0.5 Hours/Lunch between 4th & 5th Hour	8 Hours/Day 0.5 Hours/Lunch 6:00 - 8:00 AM start time unless mutually agreed upon	8 Hours/Day 0.5 Hours/Lunch 6:00 - 8:00 AM start time unless mutually agreed upon	8 Hours/Day 0.5 Hours/Lunch \$2 Hour Extra if start is before 6:00 AM or after 12:00 PM	8 Hours/Day 0.5 Hours/Lunch 6:00 AM - 5:00 PM	8 Hours/Day 0.5 Hours/Lunch 5:00 AM - 4:30 PM	8 Hours/Day 0.5 Hours/Lunch 6:00 AM - 5:30 PM	8 Hours/Day 0.50 Hour/Lunch 6:00 0AM - 6:00 PM Lunch @ 12
C. Report In Pay (Hrs)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Report In Pay /Guaranteed Minimum	2 Hours pid if employee shows up and no work is provided due to inclement weather	2 hours paid if employee shows up and no work is provided, unless inclement weather	2 hours paid if employee shows up and no work is provided	2 hours paid if employee shows up and no work is provided	2 hours paid if employee shows up and no work is provided	2 Hours paid if employee shows up and no work is provided at \$30/hour At no fault of his own	2 Hours paid if employee shows up and no work is provided unless due to weather conditions	and no work is provided. 8 hrs paid straight pay if employee shows up	2 Hours paid if employee shows up and no work is provided. 8 hrs paid straight pay if employee shows up and no work is provided on Sunday		2 hours paid if employee shows up and no work is provided	2 hours paid if employee shows up and no work is provided, unless due to inclement weather or out of employers control	2 nours paid in employee shows	2 hours paid if employee shows up and no work is provided Out of Employee Control
D. Shift Work	2 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3rd Shift: 7 hrs / 8 hrs pay		1st Shift: 8 hrs/8 hrs pay 2nd Shift: 8 hrs/17.3% Premium 3rd Shift: 8 hrs/31.4% Premium		1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 8 hrs / 15% 3rd Shift: 8 hrs / 15%	1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3rd Shift: 7 hrs / 8 hrs pay	2 Shifts 1st Shift 8 hrs / 8 hrs pay 2nd Shift: 8 hrs / 8 hrs pay 3 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3rd Shift: 7.5 hrs / 8 hrs pay single irregular shift +\$1.75	2 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3rd Shift: 7.5 hrs / 8 hrs pay single irregular shift +\$1.75	2 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 8 hrs / 8 hrs pay 3 Shifts 1st Shift: 8 hrs / 8 hrs pay 2nd Shift: 7.5 hrs / 8 hrs pay 3rd Shift: 7.5 hrs / 8 hrs pay	\$2.00 Premium	1st Shift: 8hrs/8hrs pay 2nd Shift: 8hrs/8hrs pay +10% 3rd Shift: 8hrs/8hrs pay + 10%	Not Addressed	Ist Shift: Shrs / Shrs pay 2nd Shift: Shrs / Shrs pay +14% 3rd Shift: Shrs / Shrs pay +20%	1st Shift: Shrs / Shrs pay 2nd Shift: Shrs / @ 115% 3rd Shift: Shrs / @ 115%
E. Overtime	1.5X Base Mon-Sat 2x Base Sun & Holidays	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/ day or 40hrs/week Outside regualr workday	1.5X Base Mon - Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Mon - Sat 2X Base Sun & Holidays	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Sat 2X Base Sun & Holidays	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Mon - Sat 1.5X Base Sun 2X Base Holidays	1.5X Base Sat 2X Base Sun & Holidays Outside reguale workday Day after Thanksgiving 1.5X	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday	1.5X Base Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/ week Outside regualr workday	1.5X Base Mon - Sat 2X Base Sun & Holidays After 8hrs/day or 40hrs/week Outside regualr workday
F. Holidays	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay (except Industry)	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Fourth of July Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day Must work day before/after to receive holiday pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay	New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day No Holiday Pay
G. Journeymen	4	3	3	3	3	4	3	3	3	3	4	3	3	2
Apprentice	1	1	2	1	1	1	1	1	1	1	1	1	2	1
(Or Job Specific)	No	No	No	Job Specific	No	No		Job Specific	Job Specific	No	No	Job Specific	No	
H. Travel Reimbursement	Not Addressed	Not Addressed		\$0.40/mile when traveling from jobsite to jobsite using personal vehicle Parking reimbursement up to \$9.00	Up to \$7.00 per day for parking	Not Addressed	Not Addressed	Not Addressed	Not Addressed	For work outside a 30 mile radius of the city limits of the closest city to the employees home = \$0.40/mile	Not Addressed	Working within the innerloop downtion, parking upto \$4.75 reimbursed	IRS Rate per mile when travelling outside the free zone	No reimbursement within 60 miles of residence 60-80 miles = \$16.50 80-100 miles = \$26.50 100+ = \$80.00 + \$0.45/mile

Appendices

Appendix A

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

February 6, 2009

EXECUTIVE ORDER

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USE OF PROJECT LABOR AGREEMENTS FOR FEDERAL CONSTRUCTION PROJECTS

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 101 *et seq.*, and in order to promote the efficient administration and completion of Federal construction projects, it is hereby ordered that:

Policy. (a) Large-scale construction projects Section 1. pose special challenges to efficient and timely procurement by the Federal Government. Construction employers typically do not have a permanent workforce, which makes it difficult for them to predict labor costs when bidding on contracts and to ensure a steady supply of labor on contracts being performed. Challenges also arise due to the fact that construction projects typically involve multiple employers at a single location. A labor dispute involving one employer can delay the entire project. A lack of coordination among various employers, or uncertainty about the terms and conditions of employment of various groups of workers, can create frictions and disputes in the absence of an agreed-upon resolution mechanism. These problems threaten the efficient and timely completion of construction projects undertaken by Federal contractors. On larger projects, which are generally more complex and of longer duration, these problems tend to be more pronounced.

(b) The use of a project labor agreement may prevent these problems from developing by providing structure and stability to large-scale construction projects, thereby promoting the efficient and expeditious completion of Federal construction contracts. Accordingly, it is the policy of the Federal Government to encourage executive agencies to consider requiring the use of project labor agreements in connection with large-scale construction projects in order to promote economy and efficiency in Federal procurement.

Sec. 2. Definitions.

(a) The term "labor organization" as used in this order means a labor organization as defined in 29 U.S.C. 152(5).

(b) The term "construction" as used in this order means construction, rehabilitation, alteration, conversion, extension, repair, or improvement of buildings, highways, or other real property.

(c) The term "large-scale construction project" as used in this order means a construction project where the total cost to the Federal Government is \$25 million or more.

(d) The term "executive agency" as used in this order has the same meaning as in 5 U.S.C. 105, but excludes the Government Accountability Office.

(e) The term "project labor agreement" as used in this order means a pre-hire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and is an agreement described in 29 U.S.C. 158(f).

Sec. 3. (a) In awarding any contract in connection with a large-scale construction project, or obligating funds pursuant to such a contract, executive agencies may, on a project-byproject basis, require the use of a project labor agreement by a contractor where use of such an agreement will (i) advance the Federal Government's interest in achieving economy and efficiency in Federal procurement, producing labor-management stability, and ensuring compliance with laws and regulations governing safety and health, equal employment opportunity, labor and employment standards, and other matters, and (ii) be consistent with law.

(b) If an executive agency determines under subsection (a) that the use of a project labor agreement will satisfy the criteria in clauses (i) and (ii) of that subsection, the agency may, if appropriate, require that every contractor or subcontractor on the project agree, for that project, to negotiate or become a party to a project labor agreement with one or more appropriate labor organizations.

Sec. 4. Any project labor agreement reached pursuant to this order shall:

(a) bind all contractors and subcontractors on the construction project through the inclusion of appropriate specifications in all relevant solicitation provisions and contract documents;

(b) allow all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise parties to collective bargaining agreements;

(c) contain guarantees against strikes, lockouts, and similar job disruptions;

(d) set forth effective, prompt, and mutually binding procedures for resolving labor disputes arising during the project labor agreement;

(e) provide other mechanisms for labor-management cooperation on matters of mutual interest and concern, including productivity, quality of work, safety, and health; and

(f) fully conform to all statutes, regulations, and Executive Orders.

Sec. 5. This order does not require an executive agency to use a project labor agreement on any construction project, nor does it preclude the use of a project labor agreement in circumstances not covered by this order, including leasehold arrangements and projects receiving Federal financial assistance. This order also does not require contractors or subcontractors to enter into a project labor agreement with any particular labor organization.

Sec. 6. Within 120 days of the date of this order, the Federal Acquisition Regulatory Council (FAR Council), to the extent permitted by law, shall take whatever action is required to amend the Federal Acquisition Regulation to implement the provisions of this order.

Sec. 7. The Director of OMB, in consultation with the Secretary of Labor and with other officials as appropriate, shall provide the President within 180 days of this order, recommendations about whether broader use of project labor agreements, with respect to both construction projects undertaken under Federal contracts and construction projects receiving Federal financial assistance, would help to promote the economical, efficient, and timely completion of such projects.

Sec. 8. Revocation of Prior Orders, Rules, and Regulations. Executive Order 13202 of February 17, 2001, and Executive Order 13208 of April 6, 2001, are revoked. The heads of executive agencies shall, to the extent permitted by law, revoke expeditiously any orders, rules, or regulations implementing Executive Orders 13202 and 13208.

Sec. 9. Severability. If any provision of this order, or the application of such provision to any person or circumstance, is held to be invalid, the remainder of this order and the application of the provisions of such to any person or circumstance shall not be affected thereby.

Sec. <u>10</u>. <u>General</u>. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) authority granted by law to an executive department, agency, or the head thereof; or

(ii) functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

more

(OVER)

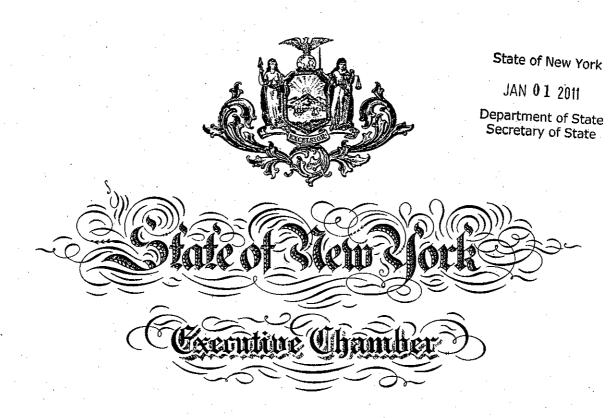
Sec. 11. Effective Date. This order shall be effective immediately and shall apply to all solicitations for contracts issued on or after the effective date of the action taken by the FAR Council under section 6 of this order.

BARACK OBAMA

THE WHITE HOUSE, February 6, 2009.

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Appendix B



No. 2

EXECUTIVE ORDER

REVIEW, CONTINUATION AND EXPIRATION OF PRIOR EXECUTIVE ORDERS

WHEREAS, an initial review has been completed of those Executive Orders and amendments thereto that are in effect as of this date;

WHEREAS, during the course of that review, it has been determined that certain Executive Orders are unnecessary, outdated, or otherwise should not be continued;

WHEREAS, it also has been determined that other Executive Orders address ongoing issues and should be continued; and

WHEREAS, it is important to identify for the public those Executive Orders that remain in effect and those that are no longer valid;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and laws of the State of New York, do hereby order that upon due consideration, deliberation and review, all Executive Orders issued by previous Governors are hereby repealed, cancelled and revoked in their entirety, with the exception of the Executive Orders set forth below and any amendments thereto, which shall remain in full force and effect until otherwise revoked, superseded or modified; and

IT IS FURTHER ORDERED that the review of prior Executive Orders shall continue over the next sixty days to determine whether additional orders should be revoked, superseded or modified.

EXECUTIVE ORDERS BEING CONTINUED

A. Executive Orders of Governor Nelson A. Rockefeller

Executive Order No. 42, issued October 14, 1970 (Relating to procedures for submission and settlement of certain grievances of State employees).

B. Executive Orders of Governor Mario M. Cuomo

<u>Executive Order No. 2</u>, issued January 11, 1983 (Establishing the position of State Director of Criminal Justice);

Executive Order No. 5, issued February 16, 1983 (Establishing the Women's Division in the Executive Chamber);

Executive Order No. 6, issued February 18, 1983 (Assigning responsibilities of the State Department of Civil Service, and certain State agencies for insuring equal employment opportunity for minorities, women, disabled persons and Vietnam era veterans in State government and establishing the Governor's executive committee for affirmative action);

Executive Order No. 7, issued February 18, 1983 (Establishing a Governor's Advisory Committee for Hispanic Affairs);

Executive Order No. 8, issued February 25, 1983 (Directing State agencies to consider labor relations practices when awarding State contracts);

Executive Order No. 11, issued April 26, 1983 (Expanding the membership and powers of the Securities Coordinating Committee);

Executive Order No. 12, issued May 3, 1983 (Directing the State Office for the Aging to review and comment upon policies affecting the elderly);

Executive Order No. 17, issued May 31, 1983 (Establishing State Policy on Private Institutions which Discriminate);

Executive Order No. 19, issued May 31, 1983 (New York State Policy Statement on Sexual Harassment in the Workplace);

Executive Order No. 23, issued September 1, 1983 (Establishing the Office of New York State Ombudsman);

<u>Executive Order No. 26</u>, issued October 7, 1983 (Directing the State Office of Advocate for the Disabled to review comment upon policies affecting persons with disabilities);

Executive Order No. 34, issued January 13, 1984 (Establishing the New York State Human Rights Advisory Council);

Executive Order No. 46, issued August 28, 1984 (Naming the State Office Building Campus in Albany the Governor W. Averell Harriman Campus State Office Building Campus);

Executive Order No. 56, issued December 20, 1984 (Establishing the New York State Task Force on Life and the Law);

Executive Order No. 66, issued June 5, 1985 (Establishing a Governor's Advisory Committee for Black Affairs);

Executive Order No. 77, issued October 31, 1985 (Establishing membership of the Martin Luther King, Jr. Commission);

Executive Order No. 80, issued March 21, 1986 (Juvenile justice planning);

Executive Order No. 82, issued May 2, 1986 (Establishing the Governor's Office for Hispanic Affairs);

Executive Order No. 95, issued April 15, 1987 (Designating the Disaster Preparedness Commission as the State Emergency Response Commission);

Executive Order No. 96, issued April 27, 1987 (Promoting a New York State policy against age discrimination in the workplace);

Executive Order No. 97, issued April 27, 1987 (Designating the Governor's Traffic Safety Committee as the State Agency to coordinate and approve State highway safety programs);

Executive Order No. 98, issued May 13, 1987 (Establishing a new State Council on Graduate Medical Education);

3

Executive Order No. 100, issued August 31, 1987 (Naming the Watertown State Office Building the Dulles State Office Building);

Executive Order No. 111, issued August 11, 1988 (Directing the Attorney General to inquire into matters of bias-related crimes);

Executive Order No. 114, issued December 9, 1988 (Naming the Poughkeepsie State Office Building the Eleanor Roosevelt State Office Building);

Executive Order No. 125, issued May 22, 1989 (Establishing a council of contracting agencies);

Executive Order No. 130, issued December 4, 1989 (Creating a crime proceeds strike force to investigate and prosecute certain economic activities constituting Penal, Tax, and Banking Law violations relating to money laundering);

Executive Order No. 131, issued December 4, 1989 (Establishing administrative adjudication plans);

Executive Order No. 135, issued February 27, 1990 (Prescribing procedures to allocate the State low income housing credit under the Tax Reform Act of 1986, as amended);

Executive Order No. 147, issued July 31, 1991 (Establishing an Office of Indian Relations);

Executive Order No. 150, issued October 9, 1991 (New land use and development by State agencies within the Adirondack Park);

Executive Order No. 158, issued June 23, 1992 (Naming the New Scotland Avenue Laboratory Building the David Axelrod Institute for Public Health);

Executive Order No. 169, issued March 22, 1993 (Directing State Agencies to Act Consistently with the Upper Delaware River Management Plan);

Executive Order No. 170.1, issued June 23, 1993 (Establishing Uniform Guidelines for Determining the Responsibility of Bidders); and

Executive Order No. 179, issued December 30, 1993 (Establishing the New York State Commission on National and Community Service).

C. Executive Orders of Governor George E. Pataki

Executive Order No. 20, issued November 30, 1995 (Establishing the Position of State Director of Regulatory Reform);

Executive Order No. 26.1, issued September 28, 2006 (Incorporating the National Incident Management System as the Management System for Emergency Response);

Executive Order No. 40, issued July 26, 1996 (Ordering State Agencies to Register Emission Reduction Credits);

Executive Order No. 45, issued November 13, 1996 (Establishing the Position of State Director of Consumer Protection);

Executive Order No. 49, issued February 12, 1997 (Establishing Procedures to Consider, in its Proprietary Capacity, the Utilization of One or More Project Labor Agreements);

Executive Order No. 50, issued October 1, 1996 (Establishing a Governmental Commission to Investigate the Recovery of Holocaust Victims' Assets);

Executive Order No. 51, issued May 20, 1997 (Activities of State Agencies Within the New York City Watershed);

Executive Order No. 57, issued October 23, 1997 (Establishing the New York City Watershed Protection and Partnership Council);

Executive Order No. 83, issued July 1, 1998 (Establishing the Jackie Robinson Empire State Freedom Medal and the Jackie Robinson Empire State Freedom Medal Commission);

Executive Order No. 86, issued August 19, 1998 (Establishing the New York City Watershed Inspector General);

Executive Order No. 109, issued May 9, 2001 (Establishing a Special Prosecutor to Investigate and Prosecute Criminal Acts Relating to Fraudulent Motor Vehicle Insurance claims);

Executive Order No. 111, issued June 11, 2001 (Directing State Agencies to be More Energy Efficient and Environmentally Aware: "Green and Clean State Buildings and Vehicles");

Executive Order No. 116, issued January 7, 2002 (Reconstituting the State Drought Management Task Force);

Executive Order No. 117, issued January 28, 2002 (Establishing the Position of Chief Information Officer (CIO) of the State of New York);

<u>Executive Order No. 125</u>, issued March 24, 2003 (Directing State Officials to Ensure that the Appropriate Protections and Benefits are Extended to Members of the Reserve Armed Forces of the United States and the Organized Militia of New York State);

Executive Order No. 128, issued June 16, 2003 (Designation of Lower Manhattan Development Corporation to Carry Out Environmental Impact Review and to Fulfill Requirements For Receipt of Federal Assistance in Connection With the Redevelopment of Lower Manhattan Following the Terrorist Attacks of September 11, 2001); and

<u>Executive Order No. 142</u>, issued November 21, 2005 (Directing State Agencies and Authorities to Diversify Transportation Fuel and Heating Oil Supplies Through the Use of Bio-Fuels in State Vehicles and Buildings).

D. Executive Orders of Governor Eliot L. Spitzer

Executive Order No. 3, issued January 1, 2007 (Promotion of Public Access to Government Decisionmaking);

Executive Order No. 8, issued February 18, 2007 (Establishing the MWBE Executive Leadership Council and the MWBE Corporate Roundtable);

Executive Order No. 9, issued March 5, 2007 (Ordering the Commissioner of the Department of Correctional Services to Bar Certain Offenders from Participating in Temporary Release Programs);

Executive Order No. 13, issued May 18, 2007 (Establishing the New York State Council on Food Policy);

Executive Order No. 16, issued June 12, 2007 (Establishing the Governor's Children's Cabinet);

Executive Order No. 17, issued September 5, 2007 (Establishing the Joint Enforcement Task Force on Employee Misclassification);

Executive Order No. 19, issued October 22, 2007 (Requiring the Adoption of Domestic Violence and the Workplace Policies); and

Executive Order No. 20, issued December 4, 2007 (Establishing the Governor's Smart Growth Cabinet).

E. Executive Orders of Governor David A. Paterson

Executive Order No. 2, issued April 9, 2008 (Establishing a State Energy Planning Board and Authorizing the Creation and Implementation of a State Energy Plan);

Executive Order No. 4, issued April 25, 2008 (Establishing a State Green Procurement and Agency Sustainability Program);

Executive Order No. 5, issued May 27, 2008 (Appointing a Commissioner to Study, Examine, Investigate and Review the Management and Affairs of the Waterfront Commission of New York Harbor);

Executive Order No. 6, issued June 4, 2008 (Ensuring the Cost-Effectiveness of Contracts for Personal Services);

Executive Order No. 7, issued June 18, 2008 (Prohibition Against Personal Use of State Property and Campaign Contributions to the Governor);

Executive Order No. 8, issued June 18, 2008 (Establishing Judicial Screening Committees to Ensure that Judicial Officer Appointments are of the Highest Quality);

Executive Order No. 12, issued November 11, 2008 (Establishing the New York State Council on Returning Veterans and Their Families);

Executive Order No. 16, issued April 15, 2009 (Establishing the Statewide Council of Addictions Collaborative to Improve Outcomes for New Yorkers (ACTION));

Executive Order No. 17, issued April 27, 2009 (Establishing Measures to Evaluate Costs of Mandates on Local Government to Advance Property Tax Relief);

Executive Order No. 18, issued May 5, 2009 (Restricting the Use of Bottled Water at State Facilities and Promoting Executive Agency Sustainability);

Executive Order No. 20, issued May 29, 2009 (Naming the State Justice Building the Robert Abrams Building for Law and Justice);

Executive Order No. 22.1, issued June 22, 2010 (Establishing a Broadband Development and Deployment Council);

Executive Order No. 24, issued August 6, 2009 (Establishing a Goal to Reduce Greenhouse Gas Emissions Eighty Percent by the Year 2050 and Preparing a Climate Action Plan);

Executive Order No. 25, issued August 6, 2009 (Establishing a Regulatory Review and Reform Program);

<u>Executive Order No. 27</u>, issued September 1, 2009 (Authorizing New York City Off-Track Betting Corporation to File Petition Under Provisions of the Laws of the United States for Composition or Adjustment of Municipal Indebtedness);

Executive Order No. 31, issued November 25, 2009 (Setting Forth the Responsibilities, Duties and Powers of the Stimulus Oversight Panel);

Executive Order No. 32, issued December 14, 2009 (Establishing the Governor's Task Force on the Implementation of the 2009 Public Authorities Reform Act);

Executive Order No. 33, issued December 16, 2009 (Prohibiting Discrimination in State Employment on the Basis of Gender Identity);

Executive Order No. 35, issued February 18, 2010 (Rescinding Section II of Executive Order 142);

Executive Order No. 38, issued June 8, 2010 (Continuing the Task Force on the Implementation of the Public Authorities Reform Act);

Executive Order No. 39, issued November 4, 2010 (Establishing State Policies for the Promotion of Sustainable Local Farms and the Protection of Agriculture Lands);

Executive Order No. 41, issued December 13, 2010 (Requiring Further Environmental Review of High-Volume Hydraulic Fracturing in the Marcellus Shale);

Executive Order No. 42, issued December 13, 2010 (Establishing an Executive Chamber Records Management Policy);

Executive Order No. 43, issued December 15, 2010 (Continuing the Lower Manhattan Construction Command Center);

Executive Order No. 44, issued December 17, 2010 (Directing the Reallocation of Deemed Waived Recovery Zone Facility Bond Allocations); and

<u>Executive Order No. 45</u>, issued December 30, 2010 (Declaring an Emergency in Order to Appoint New Jersey and Connecticut Police Officers as Railroad Police Officers to Provide Enhanced Security on Commuter Trains, Buses and Ferries).



 $G \ I \ V \ E \ N \$ under my hand and the Privy Seal of the

State in the City of Albany this first day

of January in the year two thousand

eleven.

0 BY THE GOVERNOR

Secretary to the Governor

Appendix C

				Appendix C RJSCB Modernization Pr PLA Benefits An Expiration Dates of Vario	gram Phase II alysis		
ID	Task Name	Start Duration	Finish	2016 2017	2018	2019	2020 2021
				Jan e MarApri a Jun Jul u e Oct o e Jan e MarApri a Jun Jul u e Oc	o e Jan e MarApr a Jun Jul u e Oct o	e Jan e MarApr a Jun Jul u e Oc	ct o e Jan e MarApr a Jun Jul u e Oct o e Jan e MarApr a Jun Jul
1	Phase II-A Monroe HS	Mon 10/3/16 240 days	s Fri 9/1/17				
2	Phase II-A Grissom No.7	Mon 1/2/17 435 days	Sat 9/1/18				
		No	0-+ 0/4/40				
3	Phase II-A Spence No.16	Mon 1/2/17 435 days	Sat 9/1/18				
4	Phase II-A East HS	Mon 1/2/17 848 days	Wed 4/1/20		1		
5	Phase II-A DWT	Thu 12/15/16 1207 days	Sun 8/1/21				
6	Phase II-B Freddie HS (1)	Mon 7/3/17 45 days?	P Fri 9/1/17				
7	Phase II-B Freddie HS (2)	Mon 7/2/18 45 days?	? Sat 9/1/18				
8	Phase II-B Anderson No.1	Mon 7/3/17 305 days?	Sat 9/1/18				
9	Phase II-B Monroe HS	Mon 10/2/17 391 days?	? Mon 4/1/19				
10	Phase II-B Edison HS	Mon 10/2/17 500 d2	Sun 9/1/19				
10		Mon 10/2/17 500 days?	Sun 9/1/19				
11	Phase II-B SWW	Mon 7/3/17 260 days?	Sun 7/1/18				
12	Phase II-B DWT	Thu 12/15/16 1207 days	Fri 7/30/21				
13	Phase II-C Hammarskjold No.6	Mon 7/2/18 458 days?	Wed 4/1/20				
14	Phase II-C Cooper No. 10	Mon 7/2/18 458 days?	? Wed 4/1/20				
15	Phase II-C Forbes No.4	Mon 7/2/18 523 days?	Wed 7/1/20				
16	Phase II-C Barton No.2	Mon 7/2/18 567 days?	? Tue 9/1/20				
17	Phase II-D Flower No.54	Wed 1/1/20 436 days?	? Wed 9/1/21				
			10000,1721				
18							
19	Bricklayers (Building)	Sun 4/30/17 0 days	Sun 4/30/17	▲ 4/30			
			T F (0.1110				
20	Carpenters (Building)	Tue 5/31/16 0 days	5 Tue 5/31/16	5/31			
21	Electrical Workers	Sun 5/27/18 0 days	Sun 5/27/18		5/27		
22	Glaziers	Mon 4/30/18 0 days	Mon 4/30/18		♦ 4/30		
					4/30		
23	Heat & Frost Insulators	Wed 5/31/17 0 days	Wed 5/31/17	♦ 5/31			
24	Ironworkers	Mon 4/30/18 0 days	Mon 4/30/18		♦ 4/30		
					▼		
25	Laborers (Building)	Tue 4/30/19 0 days	Tue 4/30/19			♦ 4/30	
26	Operating Engineers (Building)	Thu 2/28/19 0 days	5 Thu 2/28/19			2/28	
27	Operating Engineers (Tech)	Thu 3/31/16 0 days	5 Thu 3/31/16	▲ 2/21		·	
<u> </u>			, 110 3/31/10				
28	Painters	Sun 4/30/17 0 days	Sun 4/30/17	♦ 4/30			
29	Plumbers & Steamfitters	Sun 4/30/17 0 days	Sun 4/30/17	♦ 4/30			
					_		
30	Roofers	Fri 6/1/18 0 days	Fri 6/1/18		6/1		
31	Sheet Metal Workers	Sun 4/28/19 0 days	s Sun 4/28/19			4/28	
20	Cariaklar Fittara	Thu 0/04/40	Thu 0/04/42			•	
32	Sprinkler Fitters	Thu 3/31/16 0 days	5 Thu 3/31/16				
	Phase II Task		Progress	External Tasks	Deadline	<u> </u>	2
JSCB ate: F	ri //9/16			• •			
	Split	Ν	Ailestone	Project Summary External Milest			
				Page 1			

Appendix D

Rochester School Modernization Program Phase II	Total Project Cost	Construction Cost		
Phase II-A James Monroe High School (Part A) (1)	\$ 26,418,624.00	\$	20,000,000.00	
Phase II-A Virgil L. Grissom School No. 7	\$ 24,386,422.00	\$	19,000,000.00	
Phase II-A John Walton Spencer School No. 16	\$ 29,466,927.00	\$	23,000,000.00	
Phase II-A East High School	\$ 55,885,550.00	\$	41,000,000.00	
Phase II-A District-Wide Technology Project	\$ 24,386,422.00	\$	6,000,000.00	
Phase II-B Dr. Freddie Thomas High School	\$ 5,100,532.00	\$	4,000,000.00	
Phase II-B Martin B. Anderson School No. 1	\$ 21,422,236.00	\$	17,000,000.00	
Phase II-B James Monroe High School (Part B)	\$ 28,562,981.00	\$	21,000,000.00	
Phase II-B Edison Technical High School	\$ 30,603,194.00	\$	23,000,000.00	
Phase II-B School Without Walls	\$ 9,180,958.00	\$	7,000,000.00	
Phase II-B District-Wide Technology Project	\$ 40,561,918.00	\$	8,000,000.00	
Phase II-C Dag Hammarskjold School No. 6	\$ 27,169,411.00	\$	22,000,000.00	
Phase II-C Dr. Walter Cooper Academy School No. 10	\$ 27,707,158.00	\$	22,000,000.00	
Phase II-C George Mather Forbes School No. 4	\$ 28,733,350.00	\$	22,000,000.00	
Phase II-C Clara Barton School No. 2	\$ 31,811,923.00	\$	25,000,000.00	
Phase II-D The Flower City School No. 54	\$ 23,602,394.00	\$	18,000,000.00	
Rochester School Modernization Program Phase II Totals	\$ 435,000,000.00	\$	298,000,000.00	

Appendix E

Summary

Rochester Joint Schools Construction Boad Modernization Program Phase II Rochester Schools

Item #	Cost Savings	Amount Saved
1	Flexible Start Times	\$ 448,200
2	Industry Funds	\$ 353,200
3	Apprentice Ratios	\$ 525,300
4	Non Union Apprentices	\$ 529,000
5	Guaranteed Pay	\$ 61,100
6	<u>No Holiday Pay</u>	\$ 31,600
7	Offsite Fabrication	\$ 224,600
8	Workforce Development	\$ (256,000)
9	Management Rights	\$ 2,235,000
10	2nd Shift	\$ 921,400
Total		\$ 5,073,400
	Total Construction Cost	\$ 298,000,000
	Total Labor Cost	\$ 85,147,609
	Total Savings Percentage	6.0%

Assumptions:

Productivity gain of 1 hour per person per crew per week for coordination of trades for 2 months per year for 6 years (2016 through 2021) for the following crafts. Assume only applicable to the month of June and July. Assume all work performed by Electrical Workers, Plumbers & Steamfitter, Laborers, and Operating Engineers related and subject to savings from flexible start times. Assume all other crafts not subject to savings from flexible start times. Savings available regardless of union/non-union affiliation.

School	Savings Through Implementation of Flexible Start Times				
Phase II-A James Monroe High School (Part A)	\$ 28,625				
Phase II-A Virgil L. Grissom School No. 7	\$ 33,553				
Phase II-A John Walton Spencer School No. 16	\$ 38,021				
Phase II-A East High School	\$ 53,745				
Phase II-A District-Wide Technology Project	\$ 9,070				
Phase II-B Dr. Freddie Thomas High School	\$ 17,548				
Phase II-B Martin B. Anderson School No. 1	\$ 30,445				
Phase II-B James Monroe High School (Part B)	\$ 19,464				
Phase II-B Edison Technical High School	\$ 35,095				
Phase II-B School Without Walls	\$ 11,588				
Phase II-B District-Wide Technology Project	\$ 11,337				
Phase II-C Dag Hammarskjold School No. 6	\$ 26,872				
Phase II-C Dr. Walter Cooper Academy School No. 10	\$ 26,872				
Phase II-C George Mather Forbes School No. 4	\$ 31,059				
Phase II-C Clara Barton School No. 2	\$ 43,869				
Phase II-D The Flower City School No. 54	\$ 31,059				
Total	\$ 448,223				

Total Savings \$ 448,223

Assumptions	
Assumptions	Value
Hours Saved Per Week	1
Weeks Per Month	4
Applicable Months	
School	Applicable Month
Phase II-A James Monroe High School (Part A) (1)	2
Phase II-A Virgil L. Grissom School No. 7	4
Phase II-A John Walton Spencer School No. 16	4
Phase II-A East High School	6
Phase II-A District-Wide Technology Project	10
Phase II-B Dr. Freddie Thomas High School	2
Phase II-B Martin B. Anderson School No. 1	3
Phase II-B James Monroe High School (Part B)	2
Phase II-B Edison Technical High School	4
Phase II-B School Without Walls	2
Phase II-B District-Wide Technology Project	10
Phase II-C Dag Hammarskjold School No. 6	3
Phase II-C Dr. Walter Cooper Academy School No. 10	3
Phase II-C George Mather Forbes School No. 4	4
Phase II-C Clara Barton School No. 2	5
Phase II-D The Flower City School No. 54	4

Workers Per Week Per Project

Craft	Journeyman Rate \$/hr						
	(incl. Benefits)						
Boilermakers	\$ 58.74						
Bricklayers (Bldg.)	\$ 49.67						
Bricklayers (H&H)	\$ 49.67						
Carpenters (Bldg)	\$ 49.53						
Carpenters (H&H)	\$ 48.33						
Cement Masons	\$ 45.64						
Electrical Workers	\$ 56.69						
Electrical - Street	\$ 54.36						
Elevator Workers	\$ 60.27						
Glaziers	\$ 45.92						
Heat & Frost Insulators	\$ 48.62						
Iron Workers	\$ 51.51						
Laborers (Bldg)	\$ 42.01						
Laborers (H&H)	\$ 46.71						
Millwrights	\$ 47.75						
Operating Eng. (Bldg.)	\$ 56.34						
Operating Eng. (H&H)	\$ 63.70						
Operating Eng. (Tech)	\$ 57.21						
Painters	\$ 42.16						
Pile Drivers	\$ 49.53						
Plasterers	\$ 45.64						
Plumbers/Steamfitters	\$ 54.39						
Roofers	\$ 45.42						
Sheet Metal Workers	\$ 54.40						
Sprinkler Fitters	\$ 53.33						
Teamsters (Bldg)	\$ 40.90						
Teamsters (H&H)	\$ 40.90						

Craft	Monroe A	No.7	No.16	East	DWTA	Freddie	No.1	Monroe B	Edison	SWW	DWT B	No.6	No.10	No.4	No.2	No.54	
Bricklayers (Bldg.)	8	5	5	5	0	5	6	5	5	3	0	5	5	4	5	4	
Carpenters (Bldg)	10	6	7	6	0	6	7	7	6	4	0	6	6	5	6	5	
Electrical Workers	8	5	5	5	4	5	6	6	5	3	5	5	5	4	5	4	
Glaziers	2	1	2	2	0	1	2	2	1	1	0	2	2	1	1	1	
Heat & Frost Insulators	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
Iron Workers	2	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
Laborers (Bldg)	12	6	8	7	0	7	8	8	7	4	0	7	7	6	7	6	
Operating Eng. (Bldg.)	3	2	2	2	0	2	2	2	2	1	0	2	2	2	2	2	
Operating Eng. (Tech)	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
Painters	3	2	2	2	0	2	2	2	2	1	0	2	2	2	2	2	
Plumbers/Steamfitters	8	4	5	5	0	5	6	5	5	3	0	5	5	4	5	4	
Roofers	7	4	5	4	0	4	5	5	4	3	0	4	4	4	4	4	
Sheet Metal Workers	5	3	3	3	0	3	3	3	3	2	0	3	3	3	3	3	
Sprinkler Fitters	2	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
Savings									- "								
Savings Per Craft Per Project	Monroe A	No.7	No.16	East	DWT A	Freddie	No.1	Monroe B	Edison	sww	DWT B	No.6	No.10	No.4	No.2	No.54	Total
Savings Per Craft Per Project Bricklayers (Bldg.)	\$ 3,179 \$	3,974 \$	3,974 \$	5,960 \$	- \$	1,987 \$	3,576 \$	1,987 \$	3,974 \$	1,192 \$	- \$	2,980 \$	2,980 \$	3,179 \$	4,967 \$	3,179 \$	47,087
Savings Per Craft Per Project Bricklayers (Bldg.) Carpenters (Bldg)	\$ 3,179 \$ \$ 3,962 \$	3,974 \$ 4,755 \$	3,974 \$ 5,547 \$	5,960 \$ 7,132 \$	- \$ - \$	1,987 \$ 2,377 \$	3,576 \$ 4,161 \$	1,987 \$ 2,774 \$	3,974 \$ 4,755 \$	1,192 \$ 1,585 \$	- \$ - \$	2,980 \$ 3,566 \$	2,980 \$ 3,566 \$	3,179 \$ 3,962 \$	4,967 \$ 5,944 \$	3,179 \$ 3,962 \$	47,087 58,049
Savings Per Craft Per Project Bricklayers (Bidg) Carpenters (Bidg) Electrical Workers	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$	3,974 \$ 4,755 \$ 4,535 \$	3,974 \$ 5,547 \$ 4,535 \$	5,960 \$ 7,132 \$ 6,802 \$	- \$ - \$ 9,070 \$	1,987 \$ 2,377 \$ 2,267 \$	3,576 \$ 4,161 \$ 4,081 \$	1,987 \$ 2,774 \$ 2,721 \$	3,974 \$ 4,755 \$ 4,535 \$	1,192 \$ 1,585 \$ 1,360 \$	- \$ - \$ 11,337 \$	2,980 \$ 3,566 \$ 3,401 \$	2,980 \$ 3,566 \$ 3,401 \$	3,179 \$ 3,962 \$ 3,628 \$	4,967 \$ 5,944 \$ 5,669 \$	3,179 \$ 3,962 \$ 3,628 \$	47,087 58,049 74,599
Savings Per Craft Per Project Bricklayers (Bldg.) Carpenters (Bldg) Electrical Workers Glaziers	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 735 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$	- \$ - \$ 9,070 \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$	- \$ - \$ 11,337 \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$	47,087 58,049 74,599
Savings Per Craft Per Project Bricklayers (Bidg.) Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 735 \$ \$ 389 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$	- \$ - \$ 9,070 \$ - \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$	- \$ - \$ 11,337 \$ - \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$	47,087 58,049 74,599 13,041 9,335
Savings Per Craft Per Project Bricklayers (Bidg.) Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 735 \$ \$ 3889 \$ \$ 824 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$	- \$ - \$ 9,070 \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$ 412 \$	- \$ - \$ 11,337 \$ - \$ - \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$	47,087 58,049 74,599 13,041 9,335 10,302
Savings Per Craft Per Project Bricklayers (Bidg) Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg)	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,829 \$ \$ 3,829 \$ \$ 8,244 \$ \$ 4,033 \$	3,974 \$ 4,755 \$ 4,535 \$ 778 \$ 778 \$ 824 \$ 4,033 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$	- \$ - \$ 9,070 \$ - \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$ 2,353 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$ 2,689 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 778 \$ 824 \$ 4,705 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$ 412 \$ 1,344 \$	- \$ - \$ 11,337 \$ - \$ - \$ - \$ - \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629
Savings Per Craft Per Project Bricklayers (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Bidg.)	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 735 \$ \$ 735 \$ \$ 389 \$ \$ 824 \$ \$ 4,033 \$ \$ 1,352 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$ 2,704 \$	- \$ - \$ 9,070 \$ - \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$ 2,353 \$ 901 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$ 1,352 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$ 2,689 \$ 901 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$	- \$ - \$ 11,337 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635
Savings Per Craft Per Project Bricklayers (Bidg). Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Bidg.) Operating Eng. (Fich)	S 3,179 S S 3,662 S S 3,662 S S 3,678 S S 3,735 S S 735 S S 8,24 S S 4,033 S S 4,035 S S 4,552 S	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$ 915 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$ 2,704 \$ 2,704 \$	- \$ 9,070 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 389 \$ 412 \$ 2,353 \$ 901 \$ 458 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$ 1,352 \$ 687 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$ 2,689 \$ 901 \$ 458 \$	3,974 \$ 4,755 \$ 4,535 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$ 915 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 1,344 \$ 451 \$	- \$ - \$ 11,337 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$ 687 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$ 687 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$ 1,144 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984
Savings Per Craft Per Project Bricklayers (Bidg). Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Bidg.) Operating Eng. (Tech) Painters	\$ 3,179 \$ \$ 3,962 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,628 \$ \$ 3,892 \$ \$ 8,24 \$ \$ 4,033 \$ \$ 1,352 \$ \$ 4,033 \$ \$ 4,58 \$ \$ 1,012 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$ 915 \$ 1,349 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$ 2,704 \$ 1,373 \$ 2,024 \$	- \$ - \$ 9,070 \$ - \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$ 2,353 \$ 901 \$ 458 \$ 675 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$ 1,352 \$ 687 \$ 1,012 \$	1,987 \$ 2,774 \$ 2,721 \$ 389 \$ 412 \$ 2,689 \$ 901 \$ 458 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$ 915 \$ 1,349 \$	1,192 \$ 1,585 \$ 1,360 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$ 458 \$	- S - S 11,337 S -	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$ 1,144 \$ 1,686 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984 16,189
Savings Per Craft Per Project Bricklayers (Bldg). Carpenters (Bldg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bldg) Operating Eng. (Bldg.) Operating Eng. (Tech) Painters Plumbers/Steamfitters	S 3,179 S S 3,962 S S 3,662 S S 3,662 S S 3,662 S S 3,662 S S 3,862 S S 3,89 S S 4,033 S S 4,033 S S 4,58 S S 4,58 S S 1,012 S S 3,448 S	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 1,349 \$ 3,481 \$	3,974 \$ 5,547 \$ 4,635 \$ 1,469 \$ 778 \$ 8,224 \$ 5,377 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 2,704 \$ 1,373 \$ 2,024 \$ 6,527 \$	- \$ 9,070 \$ -	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$ 412 \$ 412 \$ 901 \$ 458 \$ 675 \$ 2,176 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$ 1,352 \$ 687 \$ 1,012 \$ 3,916 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 412 \$ 2,689 \$ 901 \$ 458 \$ 675 \$ 2,176 \$	3,974 \$ 4,755 \$ 4,535 \$ 778 \$ 4,705 \$ 4,705 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$	1,192 \$ 1,185 \$ 1,360 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$ 451 \$ 337 \$ 1,305 \$	- \$ - \$ 11,337 \$ -	2,980 \$ 3,566 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$ 3,263 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 688 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$ 3,263 \$	3,179 \$ 3,962 \$ 3,662 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$ 3,481 \$	4,967 \$ 5,944 \$ 5,669 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$ 1,144 \$ 1,686 \$ 5,439 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$ 3,481 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984 16,189 50,691
Savings Per Craft Per Project Bricklayers (Bidg) Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Bidg.) Operating Eng. (Tech) Painters Plumbers/Steamfitters Roofers	S 3,179 S S 3,662 S S 3,662 S S 3,662 S S 3,662 S S 7,35 S S 735 S S 8,24 S S 4,033 S S 1,512 S S 1,012 S S 1,012 S S 2,544 S	3,974 \$ 4,755 \$ 4,535 \$ 775 \$ 778 \$ 24 \$ 4,033 \$ 1,803 \$ 1,803 \$ 1,349 \$ 3,481 \$ 2,907 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$ 3,634 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$ 2,704 \$ 1,373 \$ 2,024 \$ 6,527 \$ 4,360 \$	- \$ 9,070 \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 349 \$ 412 \$ 2,353 \$ 901 \$ 458 \$ 675 \$ 2,176 \$ 1,453 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 618 \$ 4,033 \$ 1,352 \$ 687 \$ 1,012 \$ 3,916 \$ 2,725 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$ 2,689 \$ 901 \$ 458 \$ 675 \$ 2,176 \$ 1,817 \$	3,974 \$ 4,755 \$ 4,533 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$	1,192 \$ 1,585 \$ 1,560 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$ 451 \$ 337 \$ 1,305 \$ 1,005 \$ 1,090 \$	- \$ \$ 11,337 \$ -	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 618 \$ 3,529 \$ 1,552 \$ 617 \$ 1,012 \$ 3,263 \$ 2,180 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 6418 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$ 3,263 \$ 2,180 \$	3,179 \$ 3,562 \$ 3,662 \$ 735 \$ 778 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$ 3,481 \$ 2,907 \$	4,967 \$ 5,69 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$ 1,144 \$ 1,666 \$ 5,439 \$ 3,634 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 4,033 \$ 1,803 \$ 9,15 \$ 1,349 \$ 3,481 \$ 2,907 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984 16,189 50,691 37,244
Savings Per Craft Per Project Bricklayers (Bidg). Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Tech) Painters Plumbers/Steamfitters Roofers Sheet Metal Workers	\$ 3,179 \$ \$ 3,662 \$ \$ 3,662 \$ \$ 3,662 \$ \$ 3,662 \$ \$ 3,662 \$ \$ 3,678 \$ \$ 3,869 \$ \$ 4,033 \$ \$ 4,033 \$ \$ 4,033 \$ \$ 4,152 \$ \$ 1,012 \$ \$ 3,481 \$ \$ 2,544 \$ \$ 2,176 \$	3,974 \$ 4,755 \$ 4,535 \$ 735 \$ 735 \$ 735 \$ 4,033 \$ 1,803 \$ 1,803 \$ 1,803 \$ 1,180 \$ 3,481 \$ 2,907 \$ 2,907 \$ 2,907 \$	3,974 \$ 5,547 \$ 4,355 \$ 778 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$ 3,634 \$ 2,611 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 2,704 \$ 1,373 \$ 2,024 \$ 6,527 \$ 4,360 \$ 3,917 \$	- \$ 9,070 \$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 389 \$ 412 \$ 2,353 \$ 901 \$ 458 \$ 675 \$ 2,176 \$ 1,453 \$ 1,453 \$	3,576 \$ 4,161 \$ 4,081 \$ 4,081 \$ 1,102 \$ 583 \$ 618 \$ 4,033 \$ 1,152 \$ 618 \$ 1,052 \$ 1,012 \$ 3,916 \$ 2,725 \$ 1,958 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 412 \$ 2,689 \$ 901 \$ 458 \$ 458 \$ 2,176 \$ 1,817 \$ 1,817 \$	3,974 \$ 4,755 \$ 4,535 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$ 2,907 \$ 2,611 \$	1,192 \$ 1,560 \$ 1,560 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$ 458 \$ 337 \$ 1,305 \$ 1,090 \$ 870 \$	- S - S 11,337 S -	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 583 \$ 618 \$ 3,529 \$ 1,052 \$ 687 \$ 1,012 \$ 3,263 \$ 2,180 \$ 1,958 \$	2,980 S 3,566 S 3,401 S 583 S 618 S 3,529 S 1,352 S 687 S 1,012 S 3,263 S 2,180 S 1,958 S	3,179 \$ 3,662 \$ 3,662 \$ 735 \$ 778 \$ 4,033 \$ 1,803 \$ 1,803 \$ 1,349 \$ 3,481 \$ 2,907 \$ 2,611 \$	4,967 \$ 5,944 \$ 918 \$ 972 \$ 1,030 \$ 2,254 \$ 1,666 \$ 5,439 \$ 3,634 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 824 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$ 3,481 \$ 2,907 \$ 2,611 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984 16,189 50,691 37,244 31,770
Savings Per Craft Per Project Bricklayers (Bidg) Carpenters (Bidg) Electrical Workers Glaziers Heat & Frost Insulators Iron Workers Laborers (Bidg) Operating Eng. (Bidg.) Operating Eng. (Tech) Painters Plumbers/Steamfitters Roofers	S 3,179 S S 3,662 S S 3,662 S S 3,662 S S 3,662 S S 7,35 S S 735 S S 8,24 S S 4,033 S S 1,512 S S 1,012 S S 1,012 S S 2,544 S	3,974 \$ 4,755 \$ 4,535 \$ 775 \$ 778 \$ 24 \$ 4,033 \$ 1,803 \$ 1,803 \$ 1,349 \$ 3,481 \$ 2,907 \$	3,974 \$ 5,547 \$ 4,535 \$ 1,469 \$ 778 \$ 824 \$ 5,377 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$ 3,634 \$	5,960 \$ 7,132 \$ 6,802 \$ 2,204 \$ 1,167 \$ 1,236 \$ 7,058 \$ 2,704 \$ 1,373 \$ 2,024 \$ 6,527 \$ 4,360 \$	- \$ 9,070 \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	1,987 \$ 2,377 \$ 2,267 \$ 367 \$ 349 \$ 412 \$ 2,353 \$ 901 \$ 458 \$ 675 \$ 2,176 \$ 1,453 \$	3,576 \$ 4,161 \$ 4,081 \$ 1,102 \$ 618 \$ 4,033 \$ 1,352 \$ 687 \$ 1,012 \$ 3,916 \$ 2,725 \$	1,987 \$ 2,774 \$ 2,721 \$ 735 \$ 389 \$ 412 \$ 2,689 \$ 901 \$ 458 \$ 675 \$ 2,176 \$ 1,817 \$	3,974 \$ 4,755 \$ 4,533 \$ 778 \$ 824 \$ 4,705 \$ 1,803 \$ 1,803 \$ 915 \$ 1,349 \$ 4,351 \$	1,192 \$ 1,585 \$ 1,560 \$ 367 \$ 389 \$ 412 \$ 1,344 \$ 451 \$ 451 \$ 337 \$ 1,305 \$ 1,005 \$ 1,090 \$	- \$ \$ 11,337 \$ -	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 618 \$ 3,529 \$ 1,552 \$ 617 \$ 1,012 \$ 3,263 \$ 2,180 \$	2,980 \$ 3,566 \$ 3,401 \$ 1,102 \$ 6418 \$ 3,529 \$ 1,352 \$ 687 \$ 1,012 \$ 3,263 \$ 2,180 \$	3,179 \$ 3,562 \$ 3,662 \$ 735 \$ 778 \$ 4,033 \$ 1,803 \$ 915 \$ 1,349 \$ 3,481 \$ 2,907 \$	4,967 \$ 5,69 \$ 918 \$ 972 \$ 1,030 \$ 5,881 \$ 2,254 \$ 1,144 \$ 1,666 \$ 5,439 \$ 3,634 \$	3,179 \$ 3,962 \$ 3,628 \$ 735 \$ 778 \$ 4,033 \$ 1,803 \$ 9,15 \$ 1,349 \$ 3,481 \$ 2,907 \$	47,087 58,049 74,599 13,041 9,335 10,302 56,629 21,635 10,984 16,189 50,691 37,244

Industry Funds

Industry Fund - Eliminate Contribution

Maximum Fund Contribution = \$2.28/hr. Minimum Fund Contribution = \$0.00/hr. Maximum savings = \$470900 75% Union/Non-Union = \$353174

Round to: \$353200

Craft	Original Estimated Total Hours	Contr	istry Fund Tibution per Hour	Tot	al Estimated Cost
Bricklayers (Bldg.)	194,409	\$	-	\$	-
Carpenters (Bldg)	244,108	\$	-	\$	-
Electrical Workers	268,110	\$	-	\$	-
Glaziers	44,184	\$	-	\$	-
Heat & Frost Insulators	16,697	\$	0.10	\$	1,670
Iron Workers	29,935	\$	0.07	\$	2,095
Laborers (Bldg)	283,940	\$	-	\$	-
Operating Eng. (Bldg.)	66,258	\$	-	\$	-
Operating Eng. (Tech)	1,420	\$	-	\$	-
Painters	63,521	\$	-	\$	-
Plumbers/Steamfitters	190,967	\$	2.28	\$	435,405
<u>Roofers</u>	160,793	\$	0.15	\$	24,119
Sheet Metal Workers	111,876	\$	-	\$	-
Sprinkler Fitters	30,438	\$	0.25	\$	7,610
<u>Total</u>	1,706,656			\$	470,898
	75%				

TOTAL INDUSTRY FUND CONTRIBUTION BY CRAFT

Total Savings \$ 353,174

LABOR COST USING APPRENTICE RATIOS PER AGREEMENTS													
Craft	Craft Journeyman Rate \$/hr (incl. Benefits)			Apprentice Rate \$/hr ncl. Benefits)	Journeymen	Apprentice	I	Average Rate \$/hr oer Crew	Estimated Total Hours per Craft (Union)	Labor \$ per Craft			
Bricklayers (Bldg.)	\$	49.67	\$	33.82	4	1	\$	46.50	145,807	\$ 6,780,014			
Carpenters (Bldg)	\$	49.53	\$	33.27	3	1	\$	45.46	183,081	\$ 8,323,595			
Electricians (Local 86)	\$	56.69	\$	39.68	3	2	\$	49.88	201,083	\$ 10,030,779			
<u>Glaziers</u>	\$	45.92	\$	28.61	3	1	\$	41.59	33,138	\$ 1,378,292			
Heat & Frost Insulators	\$	48.62	\$	39.54	3	1	\$	46.35	12,523	\$ 580,420			
Iron Workers	\$	51.51	\$	35.02	4	1	\$	48.21	22,451	\$ 1,082,420			
Laborers (Bldg)	\$	42.01	\$	29.41	3	1	\$	38.86	212,955	\$ 8,275,272			
Operating Eng. (Bldg.)	\$	56.34	\$	48.09	3	1	\$	54.28	49,694	\$ 2,697,177			
Operating Eng. (Tech)	\$	57.21	\$	40.05	3	1	\$	52.92	1,065	\$ 56,359			
Painters	\$	42.16	\$	29.51	3	1	\$	39.00	47,641	\$ 1,857,894			
Plumbers/Steamfitters	\$	54.39	\$	31.05	4	1	\$	49.72	143,225	\$ 7,121,412			
<u>Roofers</u>	\$	45.42	\$	37.49	3	1	\$	43.44	120,595	\$ 5,238,184			
Sheet Metal Workers	\$	54.40	\$	40.49	3	2	\$	48.84	83,907	\$ 4,097,749			
Sprinkler Fitters	\$	53.33	\$	43.83	2	1	\$	50.16	22,829	\$ 1,145,169			
<u>Total</u>									1,279,992	\$ 58,664,735			

LABOR COST USING APPRENTICE RATIOS PER AGREEMENTS

LABOR COST USING APPRENTICE RATIOS OF 3:1 OR BETTER

Craft]	urneyman Rate \$/hr cl. Benefits)	Apprentice Rate \$/hr ncl. Benefits)	Journeymen	Apprentice	1	Average Rate \$/hr ber Crew	Estimated Total Hours per Craft (Union)	Labor \$ per Craft	
Bricklayers (Bldg.)	\$	49.67	\$ 33.82	3	1	\$	45.71	145,807	\$ 6,664,462	
Carpenters (Bldg)	\$	49.53	\$ 33.27	3	1	\$	45.46	183,081	\$ 8,323,595	
Electricians (Local 86)	\$	56.69	\$ 39.68	3	2	\$	49.88	201,083	\$ 10,030,779	
Glaziers	\$	45.92	\$ 28.61	3	1	\$	41.59	33,138	\$ 1,378,292	
Heat & Frost Insulators	\$	48.62	\$ 39.54	3	1	\$	46.35	12,523	\$ 580,420	
Iron Workers	\$	51.51	\$ 35.02	3	1	\$	47.39	22,451	\$ 1,063,909	
Laborers (Bldg)	\$	42.01	\$ 29.41	3	1	\$	38.86	212,955	\$ 8,275,272	
Operating Eng. (Bldg.)	\$	56.34	\$ 48.09	3	1	\$	54.28	49,694	\$ 2,697,177	
Operating Eng. (Tech)	\$	57.21	\$ 40.05	3	1	\$	52.92	1,065	\$ 56,359	
Painters	\$	42.16	\$ 29.51	3	1	\$	39.00	47,641	\$ 1,857,894	
Plumbers/Steamfitters	\$	54.39	\$ 31.05	3	1	\$	48.55	143,225	\$ 6,954,259	
<u>Roofers</u>	\$	45.42	\$ 37.49	3	1	\$	43.44	120,595	\$ 5,238,184	
Sheet Metal Workers	\$	45.42	\$ 40.49	3	1	\$	44.19	83,907	\$ 3,707,683	
Sprinkler Fitters	\$	54.40	\$ 40.49	2	1	\$	49.76	22,829	\$ 1,136,037	
<u>Total</u>								1,279,992	\$ 57,964,321	

Percent Union	75%	
Total Savings	\$	525,310

NON UNION LABOR COST USING NO APPRENTICES

Craft	Journeyman Rate \$/hr (incl. Benefits)		Rate \$/hr		Apprentice Rate \$/hr (incl. Benefits)		Journeymen	Apprentice		Average Rate \$/hr per Crew	Non Union Estimated Total Hours per Craft	Labor \$ per Craft
Bricklayers (Bldg.)	\$	49.67	\$	33.82	3	0	\$	49.67	48,602	\$ 2,414,074		
Carpenters (Bldg)	\$	49.53	\$	33.27	3	0	\$	49.53	61,027	\$ 3,022,667		
Electricians (Local 86)	\$	56.69	\$	39.68	3	0	\$	56.69	67,028	\$ 3,799,538		
<u>Glaziers</u>	\$	45.92	\$	28.61	3	0	\$	45.92	11,046	\$ 507,232		
Heat & Frost Insulators	\$	48.62	\$	39.54	3	0	\$	48.62	4,174	\$ 202,952		
Iron Workers	\$	51.51	\$	35.02	3	0	\$	51.51	7,484	\$ 385,488		
Laborers (Bldg)	\$	42.01	\$	29.41	3	0	\$	42.01	70,985	\$ 2,982,080		
Operating Eng. (Bldg.)	\$	56.34	\$	48.09	3	0	\$	56.34	16,565	\$ 933,244		
Operating Eng. (Tech)	\$	57.21	\$	40.05	3	0	\$	57.21	355	\$ 20,310		
Painters	\$	42.16	\$	29.51	3	0	\$	42.16	15,880	\$ 669,511		
Plumbers/Steamfitters	\$	54.39	\$	31.05	3	0	\$	54.39	47,742	\$ 2,596,674		
Roofers	\$	45.42	\$	37.49	3	0	\$	45.42	40,198	\$ 1,825,805		
Sheet Metal Workers	\$	54.40	\$	40.49	3	0	\$	54.40	27,969	\$ 1,521,514		
Sprinkler Fitters	\$	53.33	\$	43.83	3	0	\$	53.33	7,610	\$ 405,815		
<u>Total</u>									426,664	\$ 21,286,902		

NON UNION LABOR COST USING APPRENTICE RATIOS OF 3:1 OF BETTER

Craft]	ourneyman Rate \$/hr cl. Benefits)	I	pprentice Rate \$/hr el. Benefits)	Journeymen	Apprentice	I	Average Rate \$/hr per Crew	Non Union Estimated Total Hours per Craft	Labor \$ per Craft
Bricklayers (Bldg.)	\$	49.67	\$	33.82	3	1	\$	45.71	48,602	\$ 2,221,487
Carpenters (Bldg)	\$	49.53	\$	33.27	3	1	\$	45.46	61,027	\$ 2,774,532
Electricians (Local 86)	\$	56.69	\$	39.68	3	1	\$	52.43	67,028	\$ 3,514,572
<u>Glaziers</u>	\$	45.92	\$	28.61	3	1	\$	41.59	11,046	\$ 459,431
Heat & Frost Insulators	\$	48.62	\$	39.54	3	1	\$	46.35	4,174	\$ 193,473
Iron Workers	\$	51.51	\$	35.02	3	1	\$	47.39	7,484	\$ 354,636
Laborers (Bldg)	\$	42.01	\$	29.41	3	1	\$	38.86	70,985	\$ 2,758,424
Operating Eng. (Bldg.)	\$	56.34	\$	48.09	3	1	\$	54.28	16,565	\$ 899,059
Operating Eng. (Tech)	\$	57.21	\$	40.05	3	1	\$	52.92	355	\$ 18,786
Painters	\$	42.16	\$	29.51	3	1	\$	39.00	15,880	\$ 619,298
Plumbers/Steamfitters	\$	54.39	\$	31.05	3	1	\$	48.55	47,742	\$ 2,318,086
Roofers	\$	45.42	\$	37.49	3	1	\$	43.44	40,198	\$ 1,746,061
Sheet Metal Workers	\$	54.40	\$	40.49	3	1	\$	50.92	27,969	\$ 1,424,265
Sprinkler Fitters	\$	53.33	\$	43.83	2	1	\$	50.16	7,610	\$ 381,723
<u>Total</u>									426,664	\$ 19,683,835

Non Union Labor Using No Apprentices \$ 21,286,902

Non Union Labor Using Apprentice Ratios of 3-1 or Better \$ 19,683,835

Savings \$ 1,603,068

Utilization Based on Site Activity 33%

Total Savings \$ 529,012

For this Project crew sizes large enough to utilize apprentice ratios is estimated to be 33 percent of the total labor hours. Assume 1 event per every 20 months, total project duration - 59 months (3 events total)

Guaranteed Pay During 1 Events

Craft	Rate	ırneyman e \$/hr (incl. senefits)	Workers on Site	Guaranteed Pay (Hrs)	Events	Es	Total stimated Cost	Revised Guaranteed Pay (Hrs)	ised Total timated Cost
Bricklayers (Bldg.)	\$	49.67	70	2	3	\$	20,861	1	\$ 10,431
Carpenters (Bldg)	\$	49.53	87	2	3	\$	25,855	1	\$ 12,927
Electricians (Local 86)	\$	56.69	80	2	3	\$	27,209	1	\$ 13,605
<u>Glaziers</u>	\$	45.92	21	2	3	\$	5,786	1	\$ 2,893
Heat & Frost Insulators	\$	48.62	14	2	0	\$	-	1	\$ -
Iron Workers	\$	51.51	15	2	3	\$	4,636	1	\$ 2,318
Laborers (Bldg)	\$	42.01	100	2	3	\$	25,206	1	\$ 12,603
Operating Eng. (Bldg.)	\$	56.34	28	2	3	\$	9,465	1	\$ 4,733
Operating Eng. (Tech)	\$	57.21	14	2	3	\$	4,806	1	\$ 2,403
Painters	\$	42.16	28	2	0	\$	-	1	\$ -
Plumbers/Steamfitters	\$	54.39	69	2	3	\$	22,517	1	\$ 11,259
Roofers	\$	45.42	61	2	3	\$	16,624	1	\$ 8,312
Sheet Metal Workers	\$	54.40	43	2	0	\$	-	1	\$ -
Sprinkler Fitters	\$	53.33	15	2	0	\$	-	1	\$ -
Total						\$	162,965		\$ 81,483
*Based on average number	of wo	rkers on site	for the length					Savings	\$ 81,483

"Based on average number of workers on site for the le of the project.

(1) - Assumes Only 8 hrs of 24 hr guarantee unworked

Savings\$ 81,483Percent Union75%Total Savings 2 Events\$ 61,112

(1) - Assumes Only 8 hrs of 24 hr guarantee unworked

Craft		ourneyman Rate (incl. Benefits)	Holiday Pay (Hrs)	Es	Total stimated Cost
Boilermakers	\$	58.74	0	\$	-
Bricklayers (Bldg.)	\$	49.67	0	\$	-
Bricklayers (H&H)	\$	49.67	0	\$	-
Carpenters (Bldg)	\$	49.53	0	\$	-
Carpenters (H&H)	\$	48.33	0	\$	-
Cement Masons	\$	45.64	0	\$	-
Electrical Workers	\$	56.69	0	\$	-
Electricians (Local 1249)	\$	54.36	0	\$	-
Elevator Workers	\$	60.27	0	\$	-
<u>Glaziers</u>	\$	45.92	0	\$	-
Heat & Frost Insulators	\$	48.62	0	\$	-
Iron Workers	\$	51.51	0	\$	-
Laborers (Bldg)	\$	42.01	0	\$	-
Laborers (H&H)	\$	46.71	0	\$	-
<u>Millwrights</u>	\$	47.75	0	\$	-
Operating Eng. (Bldg.)	\$	56.34	0	\$	-
Operating Eng. (H&H)	\$	63.70	0	\$	-
Operating Eng. (Tech)	\$	57.21	8	\$	42,107
Painters	\$	42.16	0	\$	-
Pile Drivers	\$	49.53	0	\$	-
<u>Plasterers</u>	\$	45.64	0	\$	-
Plumbers/Steamfitters	\$	54.39	0	\$	-
Roofers	\$	45.42	0	\$	-
Sheet Metal Workers	\$	54.40	0	\$	-
Sprinkler Fitters	\$	53.33	0	\$	-
Teamsters (Bldg)	\$	40.90	0	\$	-
Teamsters (H&H)	\$	40.90	0	\$	-
<u>Total</u>					\$42,107
]	Percent Union		75%
Tota	al Sa	vings for No	Paid Holidays	\$	31,580

*Based on average number of workers on site for the observed holidays. Assumes no one working Christmas and New Year Weeks. No pay

Rochester Schools	
	Applicable Holidays Per Project
	School

School	Applicable Holidays
Phase II-A James Monroe High School (Part A) (1)	3
Phase II-A Virgil L. Grissom School No. 7	6
Phase II-A John Walton Spencer School No. 16	6
Phase II-A East High School	12
Phase II-A District-Wide Technology Project	18
Phase II-B Dr. Freddie Thomas High School	4
Phase II-B Martin B. Anderson School No. 1	5
Phase II-B James Monroe High School (Part B)	5
Phase II-B Edison Technical High School	7
Phase II-B School Without Walls	5
Phase II-B District-Wide Technology Project	18
Phase II-C Dag Hammarskjold School No. 6	7
Phase II-C Dr. Walter Cooper Academy School No. 10	7
Phase II-C George Mather Forbes School No. 4	9
Phase II-C Clara Barton School No. 2	10
Phase II-D The Flower City School No. 54	6

Wage	Rates	
Craft	Journeyman Rate \$/hr (incl. Benefits)	
Boilermakers	\$	58.74
Bricklayers (Bldg.)	\$	49.67
Bricklayers (H&H)	\$	49.67
Carpenters (Bldg)	\$	49.53
Carpenters (H&H)	\$	48.33
Cement Masons	\$	45.64
Electrical Workers	\$	56.69
Electrical - Street	\$	54.36
Elevator Workers	\$	60.27
Glaziers	\$	45.92
Heat & Frost Insulators	\$	48.62
Iron Workers	\$	51.51
Laborers (Bldg)	\$	42.01
Laborers (H&H)	\$	46.71
Millwrights	\$	47.75
Operating Eng. (Bldg.)	\$	56.34
Operating Eng. (H&H)	\$	63.70
Operating Eng. (Tech)	\$	57.21
Painters	\$	42.16
Pile Drivers	\$	49.53
Plasterers	\$	45.64
Plumbers/Steamfitters	\$	54.39
Roofers	\$	45.42
Sheet Metal Workers	\$	54.40
Sprinkler Fitters	\$	53.33
Teamsters (Bldg)	\$	40.90
	Ś	40.90

Holiday Pay Hours					
Craft	Holiday Pay Hours				
Boilermakers	0				
Bricklayers (Bldg.)	0				
Bricklayers (H&H)	0				
Carpenters (Bldg)	0				
Carpenters (H&H)	0				
Cement Masons	0				
Electrical Workers	0				
Electrical - Street	0				
Elevator Workers	0				
Glaziers	0				
Heat & Frost Insulators	0				
Iron Workers	0				
Laborers (Bldg)	0				
Laborers (H&H)	0				
Millwrights	0				
Operating Eng. (Bldg.)	0				
Operating Eng. (H&H)	0				
Operating Eng. (Tech)	8				
Painters	0				
Pile Drivers	0				
Plasterers	0				
Plumbers/Steamfitters	0				
Roofers	0				
Sheet Metal Workers	0				
Sprinkler Fitters	0				
Teamsters (Bldg)	0				
Teamsters (H&H)	0				

Workers Per Week Per Project			Û.	1													
Craft	Monroe A	No.7	No.16	East	DWTA	Freddie	No.1	Monroe B	Edison	SWW	DWT B	No.6	No.10	No.4	No.2	No.54	
icklayers (Bldg.)	8	5	5	5	0	5	6	5	5	3	0	5	5	4	5	4	
rpenters (Bldg)	10	6	7	6	0	6	7	7	6	4	0	6	6	5	6	5	
ectrical Workers	8	5	5	5	4	5	6	6	5	3	5	5	5	4	5	4	
aziers	2	1	2	2	0	1	2	2	1	1	0	2	2	1	1	1	
at & Frost Insulators	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
n Workers	2	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
oorers (Bldg)	12	6	8	7	0	7	8	8	7	4	0	7	7	6	7	6	
erating Eng. (Bldg.)	3	2	2	2	0	2	2	2	2	1	0	2	2	2	2	2	
erating Eng. (Tech)	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
inters	3	2	2	2	0	2	2	2	2	1	0	2	2	2	2	2	
umbers/Steamfitters	8	4	5	5	0	5	6	5	5	3	0	5	5	4	5	4	
ofers	7	4	5	4	0	4	5	5	4	3	0	4	4	4	4	4	
eet Metal Workers	5	3	3	3	0	3	3	3	3	2	0	3	3	3	3	3	
rinkler Fitters	2	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	
Savings Savings Per Craft Per Project	Monroe A	No.7	No.16	East	DWTA	Freddie	No.1	Monroe B	Edison	sww	DWT B	No.6	No.10	No.4	No.2	No.54	Total
Savings Per Craft Per Project	Monroe A \$ - \$	No.7	No.16 - \$	East - \$		Freddie - S	No.1	Monroe B	Edison - S		DWT B		No.10				
Savings Per Craft Per Project cklayers (Bldg.)				East	DWT A - \$					-	\$-	\$-	\$-\$			- \$	
Savings Per Craft Per Project cklayers (Bldg.) rpenters (Bldg)	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	5 - 5 -	\$- \$-	\$ - \$ -	\$ - \$ \$ - \$	- \$	- \$	- \$	
Savings Per Craft Per Project cklayers (Bldg.) rpenters (Bldg) ctrical Workers	\$ - \$ \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$	5 - 5 -	\$- \$- \$-	\$ - \$ - \$ -	\$ - \$ \$ - \$ \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$ - \$	
Savings Per Craft Per Project klayers (Bldg.) penters (Bldg) ctrical Workers ziers	\$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- - - -	\$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	
Savings Per Craft Per Project icklayers (Bldg.) rpenters (Bldg) sctrical Workers aziers at & Frost Insulators	\$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$	5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$	
Savings Per Craft Per Project (klayers (Bldg.) rpenters (Bldg) extrical Workers aziers at & Frost Insulators n Workers	\$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	
Savings Per Craft Per Project (klayers (Bldg.) rpenters (Bldg) strical Workers aiters at & Frost Insulators n Workers borers (Bldg)	\$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	- S - S - S - S - S - S	- \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	
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Savings Per Craft Per Project klayers (Bldg.) penters (Bldg) trical Workers ziers t & Frost Insulators Workers orers (Bldg) erating Eng. (Bldg.) rrating Eng. (Tech)	\$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ -	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	42,1
Savings Per Craft Per Project (klagers (bldg) ctrical Workers ziers at & Frost Insulators n Workers orers (Bldg) erating Eng. (Tech) nters	\$ - \$ \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,746 \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,746 \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,831 \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,288 \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ -	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- S - S - S - S - S - S - S - S 2,746 S - S - S - S - S - S - S - S - S - S -	42,-
Savings Per Craft Per Project icklayers (Bidg.) ctrical Workers ziers t & Frost Insulators n Workers orers (Bidg) erating Eng. (Bidg.) erating Eng. (Rech) meters theres Steamfitters	\$ - \$ \$ -	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,746 \$ - \$	- S - S - S - S - S - S - S 2,746 - S - S 2,746	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- S - S - S - S - S - S - S - S - S - S	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,831 \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	42,5
Savings Per Craft Per Project (klayers (Bldg) penters (Bldg) ctrical Workers ziers at & Frost Insulators n Workers orers (Bldg) erating Eng. (Bldg.) erating Eng. (Tech) nters mbers/Steamfitters ofers	S - S S - S S - S S - S S - S S - S S - S S - S S - S S - S S 1,373 S S - S S - S	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,746 \$ - \$ - \$	- S - S - S - S - S - S - S - S 2,746 S - S - S - S	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- S - S - S - S - S - S - S - S 1,831 S - S - S - S	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ \$ -	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	42,:
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Trade	Total Hours Worked	Hourly Wage	Percentage Worked Offsite	Cost Reduction	C	ost Savings
Bricklayers (Bldg.)	194,409	\$ 49.67	0%	20%	\$	-
Carpenters (Bldg)	244,108	\$ 49.53	5%	20%	\$	120,907
Electrical Workers	268,110	\$ 56.69	2%	20%	\$	60,793
Glaziers	44,184	\$ 45.92	0%	20%	\$	-
Heat & Frost Insulators	16,697	\$ 48.62	0%	20%	\$	-
Iron Workers	29,935	\$ 51.51	5%	20%	\$	15,420
Laborers (Bldg)	283,940	\$ 42.01	0%	20%	\$	-
Operating Eng. (Bldg.)	66,258	\$ 56.34	0%	20%	\$	-
Operating Eng. (Tech)	1,420	\$ 57.21	0%	20%	\$	-
Painters	63,521	\$ 42.16	0%	20%	\$	-
Plumbers/Steamfitters	190,967	\$ 54.39	2%	20%	\$	41,547
Roofers	160,793	\$ 45.42	0%	20%	\$	-
Sheet Metal Workers	111,876	\$ 54.40	5%	20%	\$	60,861
Sprinkler Fitters	30,438	\$ 53.33	0%	20%	\$	-
Total	1,706,656				\$	299,526.14

Savings	\$ 299,526.14
Adjustment factor for Union	75%
Total Cost Savings	\$ 224,645
-	

2% for large, long duration, complex projects

1% for smaller, shorter duration, less complex projects

1/4 to 1/2% savings resulting from jurisdictional restrictions on small projects, on efficiencies already available through Design/Build contracts

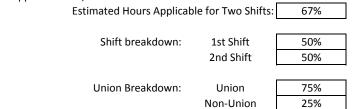
Management Rights Percentage	Total Project Cost	Percent Union	Cost Savings
1.00%	\$ 298,000,000	75%	\$ 2,235,000

To support the Enhanced Minority Workforce Program each contractor will contribute 0.15 per trade for each craft hour worked to the Rochester Careers in Construction, Inc. a non-profit 501(c)(3) corporation.

Total Labor Hours	Cost of Program (\$/hr.)	Total Cost of Program
1,706,656	\$ 0.15	\$ (255,998)

Assumptions:

Assume shift work applicable to 2/3 the total hours for all schools



Total Hours for Estimated Hours 2nd Shift 2nd Shift Wage 1st Shift 1st Shift 2nd Shift 2nd Shift Wage Hourly Wage Rate Hourly Wage Rate 1st Shift Cost in 2 **Crafts for** Craft Applicable for Hours Hours Hours Hours Rate \$/hr Rate \$/hr Applicable (Non-Union) (Union) shift approach (Union) (Non-Union) **Two Shifts** (Non-Union) (Union) (Union) (Non-Union) Projects **Bricklayers - Building** 194,409 129,606 48,602 16,201 48,602 16,201 \$ 30.90 \$ 28.53 \$ 1,964,016.92 \$ 28.53 \$ 35.86 \$ **Carpenters - Building** 244,108 162,739 61,027 20,342 61,027 20,342 \$ 28.88 \$ 28.88 \$ 2,349,946.35 \$ 33.51 \$ 28.88 \$ Electrical Workers 268,110 178,740 67,027 22,343 67,027 22,343 \$ 32.75 \$ 32.15 \$ 2,913,462.00 \$ 38.42 \$ 37.70 \$ 44,184 29,456 11,046 3,682 11,046 3,682 \$ 27.80 \$ 29.80 \$ 24.50 \$ Glaziers 24.50 \$ 397,287.80 \$ 16,697 11,131 4,174 1,391 4,174 1,391 \$ 28.61 \$ 28.11 \$ 158,538.02 \$ 32.90 \$ 28.11 \$ Heat & Frost Insulators Iron Workers 29,935 19,957 7,484 2,495 7,484 2,495 \$ 26.45 \$ 26.45 \$ 263,926.92 \$ 30.69 \$ 26.45 \$ Laborers - Building 283,940 189,293 70,985 23,662 70,985 23,662 \$ 25.94 \$ 25.09 \$ 2,435,022.12 \$ 25.94 \$ 25.09 \$ 66,258 44,172 16,565 5,521 \$ 30.80 \$ 35.74 \$ 30.80 \$ **Operating Engineers - Building** 16,565 5,521 30.80 \$ 680,248.80 \$ 15,837.73 \$ **Operating Engineers - Tech** 1,420 947 355 118 355 118 \$ 33.46 \$ 33.46 \$ 33.46 \$ 33.46 \$ 63,521 42,347 15,880 5,293 15,880 5,293 \$ 24.92 \$ 23.22 \$ 518,648.97 \$ 26.92 \$ 23.22 \$ Painters Plumbers & Steamfitters 190,967 127,311 47,742 15,914 47,742 15,914 \$ 32.18 \$ 32.18 \$ 2,048,439.35 \$ 35.40 \$ 32.18 \$ Roofers 160,793 107,195 40,198 13,399 40,198 13,399 \$ 26.95 \$ 26.95 \$ 1,444,457.12 \$ 26.95 \$ 26.95 \$ Sheet Metal Workers 111,876 74,584 27,969 9,323 27,969 9,323 \$ 32.26 \$ 31.65 \$ 1,197,352.89 \$ 36.78 \$ 36.08 \$ Sprinkler Fitters 30,438 20,292 7,609 2,537 7,609 2,537 \$ 31.66 \$ 31.66 \$ 321,222.36 \$ 36.41 \$ 31.66 \$ 413.61 \$ Total 1,706,656 1,137,771 426,664 142,221 426,664 142,221 \$ 413.56 \$ 403.63 \$ 16,708,407 \$ <u>45</u>8.77 \$

Total Cost With Second Shift Premiur

Total Cost With Second Shift Premiums Set at 105% or as Defined in the Collective Bargaining Agreements (Whichever is less) \$ 17,357,174.99 Total Cost With No Second Shift Premiums \$ 16,873,709.10

Total Savings with Second Shift Premiums Set at 5% or as Defined in the Collective Bargaining Agreements (Whichever is less) \$

nd Shift Wage Rate \$/hr (Union) .05 Premium	2nd Shift Labor Cost w/differential		2nd Shift Labor Cost w/ No differential			2nd Shift Labor Cost w/ std. differential or 5% (Whichever is less)		
32.45	\$	2,204,932.20	\$	1,964,016.92	\$	2,039,107.40		
30.32	\$	2,632,674.27	\$	2,349,946.35	\$	2,438,069.33		
34.39	\$	3,417,223.93	\$	3,037,462.88	\$	3,147,220.41		
29.19	\$	419,379.80	\$	397,287.80	\$	412,641.74		
30.04	\$	176,451.81	\$	158,538.02	\$	164,509.28		
27.77	\$	295,680.62	\$	263,926.92	\$	273,824.18		
27.24	\$	2,435,022.12	\$	2,435,022.12	\$	2,435,022.12		
32.34	\$	762,091.23	\$	680,248.80	\$	705,758.13		
35.13	\$	15,837.73	\$	15,837.73	\$	15,837.73		
26.17	\$	550,409.46	\$	518,648.97	\$	538,435.76		
33.79	\$	2,202,072.30	\$	2,048,439.35	\$	2,125,255.83		
28.30	\$	1,444,457.12	\$	1,444,457.12	\$	1,444,457.12		
33.87	\$	1,364,972.97	\$	1,238,653.78	\$	1,283,767.78		
33.24	\$	357,359.88	\$	321,222.36	\$	333,268.20		
434.24	\$	18,278,565.45	\$	16,873,709.10	\$	17,357,174.99		
ms as Defined ir	\$	18,278,565.45						

- 921,390.46
- Total Savings with the Elimination of Second Shift Premiums) \$ 1,404,856.35

Recent state legislation includes a provision that allows the RJSCB to avoid the use of Wicks Law if a Project Labor Agreement is implemented. Wicks Law requires that public works projects of this nature use multiple prime contractors, in a designated fashion, rather than allowing a single contractor on a construction projects.

School		Total Project Cost		nl Construction Cost	Wicks Law Reduction	Total Cost of Program	
Phase II-A East High School	\$	55,885,550	\$	41,000,000	10.00%	\$	4,100,000
Phase II-B Edison Technical High School		30,603,194	\$	23,000,000	10.00%	\$	2,300,000
Phase II-C Clara Barton School No. 2		31,811,923	\$	25,000,000	10.00%	\$	2,500,000
Total						\$	8,900,000
	\$	8,900,000					

* Reports prepared by the New York State Division of Budget (May 1987) and New York State School Boards Association (March 1991) indicate that elimination of the requirement to comply with Wicks Law would reduce construction costs by 20 to 30 percent. Assume a modest 10 percent reduction in cost.

*Assume only applicable to projects over \$30,000,000 total project cost.

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