

*Monroe County
Clerk of the Legislature*

*Jamie L. Slocum
Clerk*



*Heather D. Halstead
Deputy Clerk*

*David Grant
Assistant Deputy Clerk*

M E M O R A N D U M

TO: Legislators, Directors, Staff and Media

FROM: Jamie L. Slocum, Clerk of the Legislature

DATE: February 10, 2015

RE: Matter of Urgency – File No. 15-0051

15-0051 Authorize Implementation of a Project Labor Agreement for the Monroe Community College Downtown Campus Main Bid Construction Project – As A Matter of Urgency – County Executive Maggie Brooks

Per President Jeffrey R. Adair, the attached communication is declared to be a Matter of Urgency pursuant to Section 545-24 (A) (3) of the Rules of the Monroe County Legislature and will be considered at the February 10, 2015 meeting of the Monroe County Legislature.

Attachment.



Office of the County Executive

Monroe County, New York

Maggie Brooks
County Executive

February 9, 2015

OFFICIAL FILE COPY	
No. <u>150051</u>	
Not to be removed from the Office of the Legislature of Monroe County	
Committee Assignment	
URGENT	-1-

To The Honorable
Monroe County Legislature
407 County Office Building
Rochester, New York 14614

Subject: Authorize Implementation of a Project Labor Agreement for the Monroe Community College Downtown Campus Main Bid Construction Project

Honorable Legislators:

I recommend that Your Honorable Body authorize the implementation of a Project Labor Agreement ("PLA") for the Monroe Community College (MCC) Downtown Campus Main Bid Construction Project.

This project involves the design and construction of a new MCC Downtown Campus located at 321 State Street in the City of Rochester. In June 2013, Monroe County acquired several existing buildings and a portion of a surface parking lot formerly owned by the Eastman Kodak Company. The buildings will be renovated to accommodate a new, approximately 250,000 square feet MCC Downtown Campus. The project will also include improvements to the existing parking lot, as well as major utility work needed to separate services between adjacent Kodak buildings and the new Downtown Campus. The MCC Downtown Campus Main Bid Construction Project will be advertised in April of 2015.

The terms of the PLA have been negotiated with the union trades by Monroe County, LiRo Engineers, Inc. and the Project Construction Manager, DiMarco Constructors LLC. The PLA will be executed between DiMarco Constructors LLC as construction manager and the union trades. Monroe County negotiated and implemented PLAs for the MCC Building 9 Expansion and Renovation Project in 2007 and the Public Safety Laboratory (Crime Lab) in 2009.

PLAs provide uniform work conditions, cost savings, maximum labor-management harmony, and comprehensive protection against work disruptions arising out of labor disputes. A Project Labor Agreement Benefits Analysis performed by LiRo Engineers, Inc. shows the PLA for the MCC Downtown Campus Main Bid Construction Project will result in an estimated labor cost savings of at least \$361,000. The benefits of such an agreement are outlined in the final Benefits Analysis Report on file in the Office of the Clerk of the Legislature.

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The specific legislative actions required are:

1. Authorize the implementation of a Project Labor Agreement for the benefit of Monroe County for the Monroe Community College Downtown Campus Main Bid Construction Project.
2. Authorize the County Executive, or her designee, to take such necessary action as is required to insure that the work on the Monroe Community College Downtown Campus Main Bid Construction Project is carried out in accordance with the terms of the Project Labor Agreement and, in the event of a court order prohibiting the implementation of the Project Labor Agreement, to take such action as is necessary to progress the work without delay, including the letting of further or additional contracts necessary to complete the Project.

Environmental assessments were completed for this project and it was determined that there would be no significant effect on the environment.

This PLA will have no impact on the revenues or expenditures of the current Monroe County budget.

I recommend that this matter be referred to the appropriate committees for favorable action by Your Honorable Body.

Sincerely,



Maggie Brooks
County Executive

By Legislators Valerio and Yolevich

Intro. No. ____

RESOLUTION NO. ____ OF 2015

AUTHORIZING IMPLEMENTATION OF PROJECT LABOR AGREEMENT FOR MONROE COMMUNITY COLLEGE DOWNTOWN CAMPUS MAIN BID CONSTRUCTION PROJECT

BE IT RESOLVED BY THE LEGISLATURE OF THE COUNTY OF MONROE, as follows:

Section 1. The implementation of a Project Labor Agreement for the benefit of Monroe County for the Monroe Community College Downtown Campus Main Bid Construction Project is hereby authorized.

Section 2. The County Executive, or her designee, is hereby authorized to take such necessary action as is required to insure that the work on the Monroe Community College Downtown Campus Main Bid Construction Project is carried out in accordance with the terms of the Project Labor Agreement and, in the event of a court order prohibiting the implementation of the Project Labor Agreement, to take such action as is necessary to progress the work without delay, including the letting of further or additional contracts necessary to complete the Project.

Section 3. This resolution shall take effect in accordance with Section C2-7 of the Monroe County Charter.

File No. 15-00XX

ADOPTION: Date: _____ Vote: _____

ACTION BY THE COUNTY EXECUTIVE

APPROVED: _____ VETOED: _____

SIGNATURE: _____ DATE: _____

EFFECTIVE DATE OF RESOLUTION: _____

Project Labor Agreement
Benefits Analysis

Main Building Construction Project

September 8, 2014



PLA Benefits Analysis

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PLA Benefits Analysis

Executive Summary

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014



Monroe CC Downtown Campus

Overview

As part of our role in providing Construction Management Services on behalf of Monroe County (as a subconsultant to DiMarco Constructors) for the Monroe Community College Downtown Campus, LiRo was authorized to investigate the feasibility of utilizing a Project Labor Agreement (PLA) for the Main Building Construction Project. Our experience and familiarity with the Rochester and Monroe County construction industry, as well as our analysis and negotiation of PLAs for other western New York education institutions such as the University of Buffalo and Buffalo State College, has afforded LiRo the opportunity to identify the specific issues related to this region and the specifics of the Project while also considering the concerns and requirements of both the County and the local Building Trades Council.

The LiRo analysis herein also makes no determination as to the advisability of utilizing a single- or multi-prime contracting approach as that decision would have no effect on the potential financial benefits of the use of a Project Labor Agreement. Potential benefits of the use of a Project Labor Agreement are realized based on potential savings in labor costs. As the labor costs are a direct result of the Scope of Work, which would be unchanged whether procured under a single- or multi-prime contract, potential savings would remain constant in either scenario and, therefore, the procurement method has not been considered.

Project Description

Monroe Community College is currently embarking on the relocation of its Downtown campus to the site known as Kodak's Corporate Office and Headquarters at 343 State Street in Rochester, NY. The proposed renovation of the portions of the facility to be utilized as the new downtown campus are anticipated to start in November 2015 and be completed in February 2017.

The programmatic elements of the new campus will include classrooms, laboratories, event space, a Learning Commons and Integrated Learning Center, faculty and department offices as well as a cafeteria and student areas. Improvements to the exterior envelope include replacement of the curtainwall facing State Street, the main entrance and emergency exit doors and the existing roof. Improvements to the MEP systems incorporate boiler upgrades for energy efficiency while various electrical options are in consideration commensurate with the proposed use.

Study Overview

To facilitate the analysis for the potential use of a Project Labor Agreement, LiRo utilized the following information:

- LiRo's more than a dozen years of experience in the City of Rochester and Western New York region dealing with the local Building Trades Councils and their unions.
- LiRo's experience in managing numerous public construction projects related to higher education campuses, academic buildings, schools, libraries, hospitals and the like.
- LiRo's experience in feasibility study development, negotiation, implementation and administration of numerous PLAs for projects which range in construction cost from less than \$2M to over \$200M. In addition to dozens of other PLAs throughout the region, LiRo

Monroe CC Downtown Campus

has been involved with the following PLAs for educational projects with specific relevance to the MCC Downtown Campus:

- SUNY Buffalo School of Medicine
 - SUNY Stony Brook MART/Bed Tower
 - Baruch College—Field Building Renovation
 - Medgar Evers College Library
 - SUNY Buffalo State College Caudell Hall
-
- Available information on previous and on-going PLA terms and conditions relevant to this Project.
 - Recent revisions to the New York State General Municipal Law and New York State Labor Law relevant to the utilization of PLAs.

This diversified experience around New York State has afforded LiRo the ability to develop a detailed understanding of trade labor participation, numerous and varied trade issues and constraints and the localized acceptability of standardized working conditions.

Summary of Recommendations

Our analysis and experience has typically shown that standardized working conditions and terms such as work hours/week, start/finish times, holidays, overtime, etc., with experienced crafts and trades allow for effective and productive contract performance, conformance with applicable safety rules and regulations, safe and enforceable construction practice, and potential labor cost savings.

Based upon the preliminary construction estimate for the proposed Scopes of Work for the Main Building Construction Project of Monroe Community College’s New Downtown Campus, as summarized in Section 2.4 and included in Appendix A, the Construction Manager has analyzed the trade labor required for the Project, the labor costs associated with the various trades, increases in the anticipated costs due to escalation and contingency factors, and the anticipated savings as detailed in Section 3—Financial Considerations.

The following is a summary of the potential savings:

1. No Disruptions or Interference due to Jurisdictional Disputes =	\$ 10,000
2. Four (4) 10-Hour Days =	283,165
3. Standardized Holidays =	3,071
4. Flexible Schedules =	13,000
5. Working Stewards =	22,000
6. No Break Periods =	43,733
7. Apprentices =	63,960
8. Industry Training Funds =	<u>227,413</u>
Total Estimated Savings =	\$ 644,342

Monroe CC Downtown Campus

Percent savings of estimated direct labor cost (\$14,577,720) =	4.57%
Percent savings of total estimated construction cost (\$38,020,928) =	1.75%

This analysis has reviewed the factors to be taken into account when Monroe County and Monroe Community College consider the feasibility of implementation of a PLA for the Main Building Construction Project at the MCC Downtown Campus. LiRo's assessment has incorporated both financial and non-financial considerations and has determined that the potential benefit of a PLA to be warranted.

In summary, we offer the following conclusions:

- The Rochester construction trades are largely unionized and participate to a significant extent on municipal construction projects in the area. The Union trades' participation with open shop trades could impact job progress; however, this potential impact is eliminated by a PLA.
- Due to the number of trades likely to be involved in this Project, a potential for jurisdictional disputes exists. This issue is mitigated by a PLA.
- PLAs promote the competitive bidding process ensuring the lowest cost for the best quality workmanship. This is accomplished by ensuring all bidders are using the same labor basis for their estimate and bid.
- The use of a qualified and trained labor force is imperative on this Project and is assured by a PLA.
- The PLA will standardize work hours and key labor requirements producing a potential savings in labor cost for the project, which we believe further justifies the use of a PLA.
- The PLA will eliminate the potential for strikes during construction, which could occur since there are collective bargaining agreements for trades involved in the project that will expire during the construction timeframe (see Appendix B). It is imperative to maintain labor harmony and eliminate work stoppages in order to avoid adversely impacting the construction schedule.

Accordingly, it is LiRo's conclusion that a PLA for the Main Building Construction Project at Monroe Community College's Downtown Campus is feasible and justified, and meets statutory requirements for use of a PLA. Further, LiRo recommends that a PLA be developed and implemented for the Main Building Construction Project and incorporated into the contract documents.

PLA Benefits Analysis

1.0 Introduction

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014

PLA Benefits Analysis

1.1 Overview and Intent

As part of our role in providing Construction Management Services on behalf of Monroe County (as a subconsultant to DiMarco Constructors) for the Monroe Community College Downtown Campus, LiRo was authorized to investigate the feasibility of utilizing a Project Labor Agreement (PLA) for the Main Building Construction Project. Our experience and familiarity with the Rochester and Monroe County construction industry, as well as our analysis and negotiation of PLAs for other western New York educational institutions such as the University of Buffalo and Buffalo State College, has afforded LiRo the opportunity to identify the specific issues related to this region and the specifics of the Project while also considering the concerns and requirements of both the County and the local Building Trades Council.

The intent of the feasibility analysis is to review the construction aspects of the project, and the conditions under which the Project will be constructed, to determine if the implementation of a PLA would satisfy the requirements of Section 222 (2) (a) of the New York State Labor Law, including considerations of schedule, cost, quality of construction and avoidance of labor unrest. PLAs have, on previous projects, afforded opportunities for promoting work site harmony; preventing costly delays associated with strikes and lockouts; providing an expedited resolution mechanism for labor and jurisdictional conflicts; providing uniform work schedules, consistent work hours and overtime provisions; and insuring that qualified skilled tradesman are used by the trades involved in the project.

PLAs are especially desirable on projects that incorporate aggressive and complex construction schedules with essential milestones, the extension of which would have an adverse impact on operations and/or security and cause significant hardship to the owner. PLAs also provide for an enhancement of the competitive bidding process by clarifying and solidifying the contractor/ labor relationship for the project.

In addition, recent changes in the provisions of the New York State Labor Law have allowed for the utilization of a single prime contractor on projects in which a PLA has been implemented. However, the LiRo analysis herein also makes no determination as to the advisability of utilizing a single- or multi-prime contracting approach as that decision would have no effect on the potential financial benefits of the use of a Project Labor Agreement. Potential benefits of the use of a Project Labor Agreement are realized based on potential savings in labor costs. As the labor costs are a direct result of the Scope of Work, which would be unchanged whether procured under a single- or multi-prime contract, potential savings would remain constant in either scenario and, therefore, the procurement method has not been considered in our analysis.

1.2 Methodology and Approach

To facilitate the analysis for the potential use of a Project Labor Agreement, LiRo utilized the following information:

- LiRo's more than a dozen years of experience in the City of Rochester and Western New York region dealing with the local Building Trades Councils and their unions.



PLA Benefits Analysis

- LiRo's experience in managing numerous public construction projects related to higher education campuses, academic buildings, schools, libraries, hospitals and the like.
- LiRo's experience in feasibility study development, negotiation, implementation and administration of numerous PLAs for projects which range in construction costs from less than \$2M to over \$200M. In addition to dozens of other PLAs throughout the region, LiRo has been involved with the following PLAs for educational projects with specific relevance to the MCC Downtown Campus:
 - SUNY Buffalo School of Medicine
 - SUNY Stony Brook MART/Bed Tower
 - Baruch College—Field Building Renovation
 - Medgar Evers College Library
 - SUNY Buffalo State College Caudell Hall
- Available information on previous and on-going PLA terms and conditions relevant to this Project.
- Recent revisions to the New York State General Municipal Law and New York State Labor Law relevant to the utilization of PLAs.

This diversified experience around New York State has afforded LiRo the ability to develop a detailed understanding of trade labor participation, numerous and varied trade issues and constraints and the localized acceptability of standardized working conditions.

1.3 Historical Basis

PLAs have historically been of greatest benefit on projects that incorporate aggressive and complex construction schedules with essential milestones, the extension of which would have an adverse impact on operations and/or security and cause significant hardship to the owner. PLAs can also provide benefits to the bidding process in localities where there is a documented conflict between union and non-union contractors through the clarification and solidification of the contractor/labor relationship for the Project.

In the case of Monroe County and, in particular, the MCC Downtown Campus, we have considered not only the financial but also the non-financial benefits, such as labor harmony, opportunities for MWBE subcontractors, workforce training, and construction quality.

PLA Benefits Analysis

2.0 Project Description

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014



PLA Benefits Analysis

2.1 Scope

Monroe Community College is currently embarking on the relocation of its Downtown Campus to the site known as Kodak's Corporate Office and Headquarters at 343 State Street in Rochester, NY. The new Downtown Campus will be accomplished through the renovation of a portion of the existing buildings and will be separated from those areas to remain occupied by Kodak.

The programmatic elements of the new campus will include classrooms, laboratories, event space, a Learning Commons and Integrated Learning Center, faculty and department offices as well as a cafeteria and student areas. Improvements to the exterior envelope include replacement of the curtainwall facing State Street, the main entrance and emergency exit doors and the existing roof. Improvements to the MEP systems will incorporate various electrical options commensurate with the proposed use as well as other opportunities that may be applicable.

2.2 Unique Project Features

Due to the renovation of a portion of the existing buildings combined with the focused effort to accomplish the renovation within a prescribed budget, the work will need to not only be accomplished as expeditiously as possible but also with special consideration for the melding of new and existing construction and systems.

Consequently, a highly-trained workforce familiar with the intricacies of renovations within an existing structure and the unique challenges associated with such an undertaking will be necessary to adequately address the scope and quality parameters of the Project.

2.3 Schedule

The proposed renovation is anticipated to occur in the course of a fairly aggressive 15-month schedule beginning in November 2015 and completing in February 2017. Meeting such a schedule will require a highly-trained workforce familiar with the intricacies of renovations within an existing structure and the unique challenges associated with such an undertaking.

2.4 Construction Costs

The intended Scope of Work for the Project was estimated to determine the respective Anticipated Cost of the Work for each contract. A detailed estimate is provided in Appendix A, the details of which reflect the trade costs as described in Schematic Design Documents. While the trade estimate reflects current information, it is also anticipated that increases to the cost of the work will occur due to escalation and the continuing design process. The following, therefore, represents the current estimated trade costs in the left column while the fully anticipated cost of construction, incorporating an escalation and design contingency factor of 1.26, is provided in the right column.

Description	Trade Estimate	Anticipated Cost
Material	\$ 18,611,165	\$ 23,443,208
Labor	11,573,004	14,577,720
Total	\$ 30,184,169	\$ 38,020,928



PLA Benefits Analysis

3.0 Economic Considerations

Project Labor Agreement Benefits Analysis

Main Building Construction Project

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PLA Benefits Analysis

3.1 Strike Protection

This provision within a PLA would specify that there will be no strikes, work stoppages, or labor disruptions of any kind. Generally, this is an important cost avoidance measure that assures Bidders that there will be labor harmony on the jobsite throughout the 15-month duration of the Project.

A work strike potential exists for this project due to the expiration of several collective bargaining agreements during the construction period. Potential cost savings (avoidances) could be realized, since there would no longer be a need for the Bidders to carry an allowance to cover the costs associated with resolving delays from potential work stoppages or strikes.

Based on the size, scope, and duration of this project, it is reasonable to assume that a Bidder would provide for an allowance to make up for lost time due to strikes; however, this potential cost savings (avoidance) is not quantifiable.

3.2 Jurisdictional Disputes

Provisions as part of a PLA typically require the continuance of work during the resolution of any jurisdictional disputes. Absent a PLA, the likelihood of trades walking off a project pending the resolution of a jurisdictional dispute is considerable. A project of this scope is likely to have jurisdictional disputes and potential project savings could be realized since there would no longer be need for the Bidders to carry a built-in allowance to cover the costs associated with labor disruptions/interruptions at the work site.

Based on the size, scope, and duration of this project, it can be assumed that a Bidder would include an allowance based on a two man crew working one week per year to make up lost time due to disruptions and/or interruptions. The potential cost savings is calculated as follows:

$$2 \text{ men} \times 40 \text{ hours/year} \times 1.25 \text{ yrs.} \times \$100/\text{hr. (avg.)} = \$10,000$$

3.3 Off-site Fabrication

These articles in the PLA would confirm that the Contractor will retain full control over the direction of the workforce with regard to schedule and manpower and also allows for the Contractor to utilize off-site labor and precast/prefabricated materials (in accordance with the applicable collective bargaining agreements). Potential project savings can vary significantly based on Bidders' anticipated means and methods and, therefore, its estimated potential savings cannot be quantified.

3.4 40-Hour Work Week

This provision of a PLA would provide for a standardized 8-hour workday and 40-hour workweek for all trades involved with the Project. Savings which are normally associated with this provision would not be realized on this Project as all of the expected trades are already working a 40-hour workweek pursuant to their respective CBAs and, therefore, no savings would be realized by this provision.

PLA Benefits Analysis

3.5 Four (4) 10-Hour Days

While many CBAs include a stipulation that time worked over 8 hours a day be paid at the overtime rate, this provision would provide the option for the Contractor to work four (4) 10-hour days rather than five (5) 8-hour days. The rationale to the benefits reaped by this provision is that it saves one (1) hour of set-up time per week per individual working on the Project.

In determining the potential benefit of this provision, it is important to note that the respective CBAs for the Electricians and the Carpenters already include this provision and, therefore, the labor hours associated with these trades have been exempted from the calculations in determining potential cost savings from this provision which has been determined by dividing the total labor hours by forty (40) hours per week which, in turn, defines the total savings in number of man-hours allocated for set-up time. The cost savings associated with the reduced set-up time is then determined by multiplying the savings in man-hours by the average hourly salary.

Additionally, as shown in Appendix D, it is anticipated that an anticipated loss of productivity will occur in the ninth and tenth hours of ten-hour-days and a conservative value of five percent (5%) has been applied for hours nine and ten or twenty percent (20%) of the total applicable man-hours. The resultant is then deducted from the Set-up Savings.

Finally, although the trades would have the option of working four (4) 10-hour days, it is anticipated that it will be necessary for the Construction Manager (CM) to have a presence on the job site for the fifth work day of the week. Delineating the cost associated with this presence was accomplished by assuming a CM presence for two-thirds of the twenty-six weeks of the anticipated six-month construction duration.

Consequently, when subtracting the costs associated with loss of productivity and the CM's site presence for two-thirds of the fifth days included in the project schedule results in a potential savings associated with this provision of **\$224,800**.

3.6 Standardized Holidays

This section of a PLA would specify recognized holidays and would limit the yearly number of holidays to six (6). Potential savings from this provision are, therefore, realized due to reduced holiday pay for those trades having CBAs that incorporate more than six (6) holidays annually. As detailed in Appendix E attached hereto, the standardized holidays for the Project would total seven (7) and the potential savings that may be realized due to this provision is **\$2,438**.

3.7 Flexible Schedules

The intent of this section is to provide contractors with the ability to adjust start times and establish shift work with increased flexibility. This potentially represents a potential cost savings as it allows Bidders to reduce and/or eliminate any built-in allowance they may have carried to address the overtime costs associated with planning specific operations to occur out of sequence (early start/late finish) with the normal work days delineated in the respective CBA.

PLA Benefits Analysis

Based on the size, scope, and duration of this project, it can be assumed that a Bidder may have included an allowance based on two men working an average of one hour of overtime per week during peak construction periods to cover early starts/late finishes outside of the standard shift hours resulting in potential savings calculated as follows.

$$2 \text{ men} \times 1 \text{ hour/week} \times 52 \text{ weeks/year} \times 1.25 \text{ yrs.} \times \$100/\text{hr. (avg.)} = \$13,000$$

3.8 Overtime

As the overtime provision identified in each of the CBAs of the unions involved in the Work is consistent at one and a half (1 ½) times salary, no benefit would be realized by a standardizing provision in the PLA.

3.9 Shift Differential

This section would eliminate or reduce the premium for shift work stipulated in respective CBAs. Such a concession allows Bidders the opportunity to base their labor costs on the negotiated shift differentials rather than the CBA-defined differential and potential reflecting a potential cost savings in their bid. Based on the size, scope, and duration of this project, it is not possible to quantify the savings associated with this condition.

3.10 Guaranteed Pay

While some of the respective CBAs for the effected trades for this Project include provisions for guaranteed pay they also delineate that such guaranteed pay is only applicable when the worker is informed that he is not needed to work when he shows up for work rather than the day before. A provision in the PLA that eliminates this qualification is a benefit that allows the Contractor to not be penalized for their own inability to manage their work force. As a Contractor's management acumen could never be adequately defined, this is a benefit that cannot be quantified.

3.11 Stewards

This requirement under a PLA specifies that shop stewards shall be working stewards with reduce supervisory functions, thus providing increased productivity. The potential savings are estimated as follows (assumes an additional ½ hour of productivity per day from the stewards during the peak work period):

$$\frac{1}{2} \text{ hr/day} \times 3 \text{ stewards} \times 150 \text{ peak workdays} \times \$100/\text{hr. (avg.)} = \$22,000$$

3.12 Meal Period

This section would, typically, give the Contractor the flexibility in coordinating and/ or staggering meal periods of individual trades to maintain efficiency. This would allow for potential cost savings as it provides Bidders the opportunity to reduce and/or eliminate any built-in allowance they may have carried to cover the overtime costs associated with having labor to work through their meal period to realize required efficiency for time-sensitive operations. Based on size, scope, and duration of this project, it is not possible to quantify potential cost savings.

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3.13 No Break Periods

This section of a PLA would specify that there will be no rest periods, organized coffee breaks or other non-working time during the workday (with the exception of the ½ hour unpaid lunch break). While many CBAs are silent on rest periods, many tradesmen typically take at least one break during the workday.

It should be noted that these savings may only be realized should Bidders feel confident that they will get increased production during the workday due to the elimination of breaks. If such a conclusion is reached, the potential savings that might be realized would typically be estimated based on 10% of the workforce that would have taken at least one 15 minute break during the workday.

The potential savings could be estimated as follows (assumes productivity from the 10% of the workforce that would have taken at least one 15 minute break during the workday):

$$10\% \times (15 \text{ min break} / 480 \text{ min workday}) = 0.3\% \text{ overall labor production increase} = \$43,733$$

3.14 Apprentices

Recognizing the need to provide support programs to maintain adequate numbers of competent workers in the construction industry and to provide trade entry opportunities for minorities, women and economically disadvantaged non-minority males, apprentice programs are a recognized method to accomplish this goal. Apprentice ratios vary among the trades and actual usage that would be realized is dependent on available personnel in various categories.

The inclusion of a provision for maximizing the use of apprentices would realize a potential cost savings of \$50,777 as delineated in the Appendix F to this report.

3.15 Industry Training Funds

Trade Union CBAs include obligations for industry training and promotion funds in excess of the prevailing wage rate. PLAs often incorporate a provision that excludes the requirement for payment of these funds. Potential savings can vary, however, as respective CBAs range in their requirements for specific contributions and potential savings are determined by the specific trades required by the Scope of Work of an individual project.

Potential cost savings due to this concession, as delineated in Appendix G to this Report, are estimated at \$180,539.

PLA Benefits Analysis

4.0 Additional Considerations

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014



PLA Benefits Analysis

While the benefits of a Project Labor Agreement (PLA) are often defined by the financial considerations associated with the potential savings of specific provisions within the PLA, non-financial benefits are often also realized as part of a PLA and can provide value to an Owner as it relates to the overall success of a Project.

4.1 Labor Stability

In addition to the discussion of financial benefits in Section 3.1—Strike Protection and Section 3.2—Jurisdictional Disputes, the delivery of projects within the desired schedule can be negatively affected by the impacts of labor instability should delays or work stoppages occur. Consequently, the provisions of a PLA that insure labor stability for the Project can be of a major benefit, especially when an aggressive schedule is necessary to meet the Owner's goals, such as is the case with the desire for the new Downtown Campus to be completed to facilitate occupancy use for the Fall Semester in 2017.

4.2 Burden of Management

Assembling an effective and efficient project management team is an endeavor most Owners face and an essential factor in the successful delivery of critical public projects. Contributing to the effectiveness of a management team is the environment and structure within which the team functions. Consequently, the work rules established within a PLA can be an effective tool in assisting teams in managing projects to successful completion.

The above noted benefits are best achieved within a complicated project where coordination among trades and special provisions increase the value of such provisions.

4.3 "Tag-Along Provision"

A PLA will incorporate the requirement that all Contractors utilize union craft workers through the referral systems and hiring halls utilized by the unions. The union referral requirements, commonly known as the "Tag-Along Provision," will stipulate the ratio of union craft workers and their own Core Employees to which a Contractor who is not a signatory to a collective bargaining agreement must abide by in the course of the Project.

While limited percentages of Core Employees are typically allowed under the PLA, more favorable terms are often afforded to Minority and Women Owned Businesses contributing to meeting defined MWBE utilization goals.

4.4 Minority/Female Business and Workforce Participation

A PLA typically does not acknowledge specific goals but rather confirms the union's commitment to supporting said goals. Consequently, a PLA provides no additional benefits or opportunities other than those stipulated as part of the contract.

Acknowledgement within a PLA of the union's good faith efforts to meet the stipulated contract requirements and goals would not alter any of the requirements nor provide any additional benefits beyond those stipulated by Bid Documents and Contracts. However, the PLA would stipulate that any



PLA Benefits Analysis

failure of the union referral system to provide labor in the prescribed percentages would offer contractors the option of obtaining labor from other sources.



PLA Benefits Analysis

5.0 Conclusions/Recommendations

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014



PLA Benefits Analysis

Our analysis and experience has typically shown that standardized working conditions and terms such as work hours/week, start/finish times, holidays, overtime, etc., with experienced crafts and trades allow for effective and productive contract performance, conformance with applicable safety rules and regulations, safe and enforceable construction practice, and potential labor cost savings.

Based upon the preliminary construction estimate for the proposed Scopes of Work for the Main Building Project of Monroe Community College’s New Downtown Campus, as summarized in Section 2.4 and included in Appendix A, the Construction Manager has analyzed the trade labor required for the Project, the labor costs associated with the various trades, increases in the anticipated costs due to escalation and contingency factors, and the anticipated savings as detailed in Section 3—Financial Considerations.

The following is a summary of the potential savings:

1. No Disruptions or Interference due to Jurisdictional Disputes =	\$ 10,000
2. Four (4) 10-Hour Days =	283,165
3. Standardized Holidays =	3,071
4. Flexible Schedules =	13,000
5. Working Stewards =	22,000
6. No Break Periods =	43,733
7. Apprentices =	63,960
8. Industry Training Funds =	<u>227,413</u>
Total Estimated Savings =	\$ 666,342

Percent savings of estimated direct labor cost (\$14,577,720) = 4.57%

Percent savings of total estimated construction cost (\$38,020,928) = 1.75%

This analysis has reviewed the factors to be taken into account when Monroe County and Monroe Community College consider the feasibility of implementation of a PLA for the Main Building Construction Project at the MCC Downtown Campus. LiRo’s assessment has incorporated both financial and non-financial considerations and has determined that the potential benefit of a PLA to be warranted.

In summary, we offer the following conclusions:

- The Rochester construction trades are largely unionized and participate to a significant extent on municipal construction projects in the area. The Union trades’ participation with open shop trades could impact job progress; however, this potential impact is eliminated by a PLA.
- Due to the number of trades likely to be involved in this Project, a potential for jurisdictional disputes exists. This issue is mitigated by a PLA.

PLA Benefits Analysis

- PLAs promote the competitive bidding process ensuring the lowest cost for the best quality workmanship. This is accomplished by ensuring all bidders are using the same labor basis for their estimate and bid.
- The use of a qualified and trained labor force is imperative on this Project and is assured by a PLA.
- The PLA will standardize work hours and key labor requirements producing a potential savings in labor cost for the project, which we believe further justifies the use of a PLA.
- The PLA will eliminate the potential for strikes during construction, which could occur since there are collective bargaining agreements for trades involved in the project that will expire during the construction timeframe (see Appendix B). It is imperative to maintain labor harmony and eliminate work stoppages in order to avoid adversely impacting the construction schedule.

Accordingly, it is LiRo's conclusion that a PLA for the Monroe Community College Downtown Campus Main Building Construction Project is feasible and justified, and meets statutory requirements for use of a PLA. Further, LiRo recommends that a PLA be developed and implemented for the Main Building Construction Project and incorporated into the contract documents.



PLA Benefits Analysis

Appendix A—Project Cost Estimate

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014



Group	Phase	Description	Takeoff Quantity	Labor Coefficient	Labor Price	Labor Amount	Material Price	Material Amount	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Coef/Unit	Total Amount	Location	
1100.00	1191.00	GENERAL REQUIREMENTS															
		General Requirements - Total	1.00												63,088	4th-AscSupport	
		General Requirements - Total	1.00												49,314	2nd-AscSupport	
		General Requirements - Total	1.00												57,683	7th-EDWB	
		General Requirements - Total	1.00												21,759	6th-Event Space	
		General Requirements - Total	1.00												89,048	7th-Event Space	
		General Requirements - Total	1.00												2,877	Lobby	
		General Requirements - Total	1.00												18,344	Lobby Stairs	
		General Requirements - Total	1.00												87,874	Lobby Stairs	
		General Requirements - Total	1.00												38,443	1st-Student Sh	
		General Requirements - Total	1.00												28,177	2nd-Student Sh	
		General Requirements - Total	1.00												37,458	4th-AscSupport	
		General Requirements - Total	1.00												72,365	3rd-AscSupport	
		General Requirements - Total	1.00												140,289	5th-AscSupport	
		General Requirements - Total	1.00												122,724	6th-AscSupport	
		General Requirements - Total	1.00												34,849	3rd-Student Sh	
		General Requirements - Total	1.00												79,258	1st-Student Sh	
		General Requirements - Total	1.00												41,078	1st-Corridor	
		General Requirements - Total	1.00												373	1st-Corridor	
		General Requirements - Total	1.00												49,885	2nd-Corridor	
		General Requirements - Total	1.00												2,338	2nd-Corridor	
		General Requirements - Total	1.00												28,178	1st-Student Sh	
		General Requirements - Total	1.00												25,176	2nd-Student Sh	
		General Requirements - Total	1.00												84	1st-Student Sh	
		General Requirements - Total	1.00												53,114	3rd-Corridor	
		General Requirements - Total	1.00												58,755	3rd-Corridor	
		General Requirements - Total	1.00												8,739	3rd-Corridor	
		General Requirements - Total	1.00												13,863	3rd-Corridor	
		General Requirements - Total	1.00												43,661	3rd-Corridor	
		General Requirements - Total	1.00												2,821	3rd-Corridor	
		General Requirements - Total	1.00												53,116	3rd-Corridor	
		General Requirements - Total	1.00												2,525	3rd-Corridor	
		General Requirements - Total	1.00												61,063	3rd-Corridor	
		General Requirements - Total	1.00												2,528	3rd-Corridor	
		General Requirements - Total	1.00												24,916	3rd-Corridor	
		General Requirements - Total	1.00												2,885	3rd-Corridor	
		General Requirements - Total	1.00												58,500	3rd-Corridor	
		General Requirements - Total	1.00												11,179	3rd-Event Space	
		General Requirements - Total	1.00												17,798	3rd-Event Space	
2081.00	2071.00	Demolition - Siterwork															
		Prep - Rubbish Removal	155.00 cuyd	132.00	83.87	20,596				6.25	2,019			163.11	20,605	4th-AscSupport	
		Demolition - Siterwork	5.00	5.00	83.87	419.4				837.50	4,188			827.50	4,188	4th-AscSupport	
		Demolition - Siterwork	2,200.00	2,200.00	83.87	184,514				37.50	83,250			87.45	197,764	4th-AscSupport	
		Demolition - Siterwork	254.00	254.00	83.87	21,304				37.50	9,525			12.85	30,829	4th-AscSupport	
		Demolition - Siterwork	3,240.00	3,240.00	83.87	270,761				37.50	121,500			8.43	353,261	4th-AscSupport	
		Demolition - Siterwork	12.00	12.00	83.87	1,006				6.25	75			6.32	1,081	4th-AscSupport	
		Demolition - Siterwork	12.00	12.00	83.87	1,006				140.00	1,680			150.00	1,680	4th-AscSupport	
2100.00	2110.00	STEWORK															
		Steelwork	1.00													178,820	4th-AscSupport
		Steelwork	1.00													181,021	4th-AscSupport
2630.00	2631.00	FENCING															
		Fencing - Chain Link	1,800.00	1,800.00	1.25	2,250										31,500	4th-AscSupport
3133.00	3133.00	CONCRETE															
		Formwork - 8" Thick	1,711.00	1,711.00	1.84	3,148										31,176	4th-AscSupport
3137.00	3137.00	FORMS															
		Formwork - 8" Thick	400.00	400.00	83.87	33,548										33,548	4th-AscSupport
3183.00	3183.00	FORMS															
		Formwork - 8" Thick	400.00	400.00	83.87	33,548										33,548	4th-AscSupport
3188.00	3188.00	FORMS															
		Formwork - 8" Thick	400.00	400.00	83.87	33,548										33,548	4th-AscSupport

Spreadsheet Report
12-044MCC-August Revised

D&M Contractors

Group	Phase	Description	Thick	Quantity	Unit	Material	Material Price	Material Amount	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Cost/Unit	Total Amount	Location
3160.01		Forms - Screens		24.32	sq					2.50	61			2.50	61	Event Space
3215.00		Rebar - All Types		1,000.00	lin		426	1,404.00	730					1.18	1,180	Lobby Stair
3231.00		Rebar - Whymek Lump Sum		25.96	sq		744	12.87	347					42.51	1,791	Event Space
3315.00		WVW Sheets 10'10"		24.00	cyd		456	195.36	3,184					151.78	3,643	Lobby Stair
3319.00		Conc - On Corridor		29.80	cyd		387	125.72	3,000					142.45	4,275	Event Space
3374.00		Conc - On Corridor		30.52	sq			9.38	300					8.93	300	
3380.01		Finish - General		2,332.00	sq		6,185							3.51	8,185	Event Space
3385.00		Finish - Stair		70.00	sq		4,584			1.25	800			7.62	5,484	Lobby Stair
3388.00		Finish - Non Slip (Emery)		70.00	sq		3,538	0.69	421					5.26	3,659	Lobby Stair
3390.01		Finish - Rub. Out & Patch		420.00	sq		178			0.03	13			0.46	191	Lobby Stair
3395.00		Finish - Rubbed		420.00	sq		881			0.08	34			2.50	925	Lobby Stair
4000.00		MASONRY														
4105.00		Mortar - All Types		18.28	cyd			22.71	462					265.74	4,622	
4150.00		Rebar - All Types		18.28	cyd			29.25	736					45.41	736	
4211.15		Reinforce Horizontal Wall		5.01	mf		1,384	257.40	1,293					588.00	2,081	
4211.45		Reinforce Vertical Wall		6.87	mf		4,549	1.90	11,323		2.82			8.79	11,323	
4250.01		Masonry Restoration		395.00	each		1,710	9.84	1,689		163			9.50	1,689	
4710.11		Chimney - Rub Block		1.00	sum		4,146	1.17	152					33.01	4,298	
4731.00		Scaffolds - Tubular Steel		6,512.00	sq		5,714			0.84	6,155			1.82	11,819	
4731.50		Form FSI Concrete		72.84	cyd		18,224	216.45	19,714					483.82	33,228	
4731.00		Masonry Inserts		3,277.00	each			1.78	6,029					1.84	6,029	Event Space
5000.00		METALS														
5126.00		Structural Steel		1,612.00	sq		104,142	28.33	3,800					94.33	115,249	Lobby Stair
5126.00		Structural Steel @ 15' height		2,332.00	sq		138,422	28.33	61,380					94.33	187,812	Event Space
5126.00		Structural Steel @ 8' height		759.00	sq		11,499	11.70	9,345					28.91	70,344	Lobby
5312.10		Structural Steel		2,332.00	sq				9,550					4.10	9,550	Event Space
5705.00		Ornamental Rail		390.00	lin		2,292	123.70	46,332					125.07	48,624	
6000.00		WOOD & PLASTICS														
6226.01		Finish Carpentry		16,000.00	sq				48,488					0.29	48,488	
6400.00		Architectural Woodwork		170.00	lin				70,200					412.94	70,200	16-Sublevel
6400.00		Finish Millwork		300.00	sq				23,000					76.67	23,000	16-Sublevel
6400.00		Concession Stand Sublet		60.00	lin				35,100					585.00	35,100	16-Sublevel
6400.00		Public Safety Info Desk		1.00	each				14,000					14,000.00	14,000	16-Sublevel
6400.00		Bookstore Check-out Station		78.00	lin				17,784					224.00	17,784	16-Sublevel
6400.00		Library Shelving		300.00	lin				108,108					360.36	108,108	4th-AscSupport
6400.00		Lib Storage Cabinets		4.00	sum				28,000					877.50	28,000	4th-AscSupport
6400.00		Main Comp File Locations		140.00	lin				74,880					18,770.00	74,880	5th-AscSupport
7000.00		THERMAL & MOISTURE PROT														
7315.00		Insulation - Sprayed On		51,000.00	sq				37,401					267.16	37,401	
7520.01		EPDM - General							363,948					3.60	363,948	

Equip	Phase	Description	Quantity	Unit	Labor Price	Labor Amount	Material Price	Material Amount	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Quantity	Total Amount	Location
7530.01		EPDM - General	36,882.00	sq ft					1,539,820					37,000	1,539,820	
7811.00		Coat Applied Roofing & Accessories	2,272.00	sq ft					27,187					11,770	27,187	Event Space
8000.00		DOORS & WINDOWS														
8000.00		Door/Framing/Hardware	301.00	each					242,845					608.13	242,845	
8000.00		Door - Access	72.00	each	63.44	4,567	231.00	16,848						297.44	21,415	
8418.00		2x1 1/2" Solid Access Panel	1.00	sum					178,500					179,500	1st Corridor	
8418.00		Entrances & Skylights	1.00	sum					657,884					657,884	1st Elevator	
8920.01		Crush Wall - Remover/Repairs	1.00	sum					2,014,108					8.78	2,014,108	
9000.00		FINISHES														
9000.00		Wall Board Systems	279,878.00	sq ft					802,483					3.80	802,483	
9000.00		Wall Studs & Drywall/Sheet of Stone	237,334.00	sq ft					833,042					3.51	833,042	
9000.00		Ceiling Finishers	2,232.00	sq ft				5,238						3.52	5,238	
9000.00		Flooring	237,334.00	sq ft	1.27	2,998	2,25	5,238	763,822					3.22	763,822	2nd Event Space
9000.00		Painting	237,334.00	sq ft												
10000.00		Specialties														
10000.00		Parting/Sheet of Stone	14.00	sum					40,250					2,825.00	40,250	
10000.00		SPECIALTIES														
10000.00		Total Partitions	332.00	each					73,249					78.05	73,249	
10430.01		Lockers - Wardrobe	60.00	each	198.87	11,932	175.95	10,530						302.37	18,142	
10500.00		Fire Extinguisher Cabinet	38.00	each					8,624					234.00	8,624	
10524.00		Fire Extinguisher Cabinet	14.00	each					8,190					563.00	8,190	
10800.00		Total Accessories	0.00	sum					0					0.00	0	1st-StudentLife
11000.00		EQUIPMENT														
11000.00		Food Service Equipment	11.00	each	1,814.98	19,965	4,265.00	45,945						5,109.88	66,110	1st-Auditorium
11500.00		Lab Cleanroom	4.00	each	1,264.77	5,059	12,250.00	48,140						13,553.70	54,215	1st-Auditorium
11811.00		Lab Fume Hood	1.00	sum					1,170,000					1,170,000	Common	
14000.00		CONVEYING SYSTEMS														
14000.00		Elevator Passenger Hydraulic Elevator	27,254.00	sq ft					1,249,584					8.27	1,249,584	
15000.00		MECHANICAL														
15000.00		Fire Protection	78.00	each					458,300					5,850.00	464,150	
15000.00		Plumbing	23,427.00	sq ft					878,804					37.44	878,804	
15000.00		HVAC	805.00	sq ft					23,548					29.25	23,548	1st-Auditorium
15000.00		Budget Per Square Foot	182,800.00	sq ft					7,181,475					37.44	7,181,475	
15000.00		Budget Per Square Foot	2,888.00	sq ft					84,798					29.25	84,798	
15000.00		Budget Per Square Foot	18,883.00	sq ft					677,028					37.44	677,028	
15000.00		New Chair	1.00	sum					568,000					568,000.00	568,000	
16000.00		ELECTRICAL														
16000.00		Electrical	15,729.00	sq ft					515,085					32.78	515,085	1st-Auditorium
16000.00		Budget Per Square Foot	8,448.00	sq ft					180,042					21.06	180,042	
16000.00		Budget Per Square Foot	112,000.00	sq ft					3,889,587					32.78	3,889,587	
16000.00		Budget Per Square Foot	17,197.00	sq ft					1,413,273					21.06	1,413,273	
16000.00		Budget Per Square Foot	12,543.00	sq ft					394,829					32.78	394,829	
16000.00		Budget Per Square Foot	2,888.00	sq ft					81,263					21.06	81,263	
16000.00		Budget Per Square Foot	10,682.00	sq ft					882,388					32.78	882,388	

Estimate Totals

Estimate Totals

Description	Amount	Totals	Hours	Rate	Cost Basis	Cost per Unit	Percent of Total
Subcontract	344,018	4,782,532	133,867	3,576	2,414	1,71%	1,71%
Material	350,018				117,038	92,00%	92,00%
Equipment	72,417				0,333	0,24%	0,24%
Crew	1,453,105				5,899	4,77%	4,77%
Total	30,184,188	30,184,188			127,679	100,00	

PLA Benefits Analysis

Appendix B—Labor Costs by Trade

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**MCC Downtown Campus
Main Building Construction Project
Labor Costs by Trade**

Trade Labor Category	Local	Expiration	Man-hours	Labor Cost	% of Total
General					
Bricklayers	3	4/30/2017	4,538	256,855	4.74%
Carpenters	85	5/31/2016	40,858	2,292,729	42.31%
Cement Mason	3	5/14/2016	182	10,296	0.19%
Concrete Worker	435	5/14/2016	111	5,419	0.10%
Elevator Mechanic	27	7/8/2017	2,042	175,572	3.24%
Glazier	660	4/30/2013	3,282	166,902	3.08%
Ironworker	33	4/30/2015	3,441	199,415	3.68%
Laborer	435	6/30/2016	3,909	188,577	3.48%
Operating Engr - Class 1	158	5/31/2013	1,002	63,401	1.17%
Operating Engr - Class 2	158	5/31/2013	981	59,608	1.10%
Painter	150	4/30/2017	12,648	611,250	11.28%
Resilient Flooring	85	5/31/2016	419	20,592	0.38%
Roofer	22	5/30/2014	8,266	431,855	7.97%
Spray Fireproofers	150	6/30/2014	1,545	75,864	1.40%
Teamsters IBT	118	6/30/2013	1,718	81,283	1.50%
Tile Layer	3	4/30/2017	6,752	389,618	7.19%
Tile Layer Helper	3	4/30/2017	8,324	389,618	7.19%
Subtotal			100,018	5,418,854	100.00%
Mechanical					
Electrician	86	5/31/2015	12,944	813,681	16.40%
Heat/Frost Insulator	26	Pending	14,398	798,797	16.10%
Operating Engr - Class 1	158	5/31/2013	314	19,846	0.40%
Painter	150	4/30/2017	513	24,807	0.50%
Sheet Metal Worker	46	Pending	37,597	2,356,698	47.50%
Steamfitter	13	6/30/2014	15,519	947,641	19.10%
Subtotal			81,285	4,961,470	100.00%
Electrical					
Electrician	86	5/31/2015	7,017	441,112	98.50%
Teamsters IBT	118	6/30/2013	142	6,717	1.50%
Subtotal			7,159	447,829	100.00%
Plumbing					
Heat/Frost Insulator	26	Pending	342	18,982	10.40%
Painter	150	4/30/2017	23	1,095	0.60%
Plumber	13	4/30/2014	2,660	162,443	89.00%
Subtotal			3,025	182,520	100.00%
Fire Protection					
Painter	150	4/30/2017	140	6,748	1.20%
Sprinklerfitter	669	6/30/2014	9,098	555,555	98.80%
Subtotal			9,238	562,303	100.00%
Total			200,725	11,572,976	

Note: Highlighted CBA expiration dates occur during anticipated construction period.

PLA Benefits Analysis

Appendix C—Cost Savings for 40-Hour Workweek

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**LIRO Program and
Construction Management, PE P.C.**
A LIRO Group Company

**MCC Downtown Campus
Main Building Construction Project
Cost Savings--40-Hour Workweek**

Trade Labor Category	Local	Workweek per CBA	Hourly Rate*		Delta	OT Hours/Week	Potential Savings
			Regular	Overtime			
Bricklayers	3	40	56.60	N/A	-	-	-
Carpenters	85	40	56.12	N/A	-	-	-
Cement Mason	3	40	56.60	N/A	-	-	-
Concrete Worker	435	40	48.81	N/A	-	-	-
Electrician	86	40	62.86	N/A	-	-	-
Elevator Mechanic	27	40	85.99	N/A	-	-	-
Glazier	660	40	50.85	N/A	-	-	-
Heat/Frost Insulato	26	40	55.48	N/A	-	-	-
Ironworker	33	40	57.96	N/A	-	-	-
Laborer	435	40	48.24	N/A	-	-	-
Operating Engr - Cla	158	40	63.29	N/A	-	-	-
Operating Engr - Cla	158	40	60.79	N/A	-	-	-
Painter	150	40	48.33	N/A	-	-	-
Plumber	13	40	61.06	N/A	-	-	-
Resilient Flooring	85	40	49.14	N/A	-	-	-
Roofer	22	40	52.25	N/A	-	-	-
Sheet Metal Worke	46	40	62.68	N/A	-	-	-
Spray Fireproof	150	40	49.11	N/A	-	-	-
Sprinklerfitter	669	40	61.22	N/A	-	-	-
Steamfitter	13	40	61.06	N/A	-	-	-
Teamsters IBT	118	40	47.30	N/A	-	-	-
Tile Layer	3	40	57.71	N/A	-	-	-
Tile Layer Helper	3	40	46.81	N/A	-	-	-
Total							-

* includes fringes and taxes

PLA Benefits Analysis

Appendix D—Cost Savings for Four (4) 10-Hour Days

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**MCC Downtown Campus
Main Building Construction Project
Cost Savings--Four (4) 10-Hour Days**

Description	Value	Comment
Set-up Savings		
Total Labor Hours	199,954	
Less Carpenter/Electrician Labor	60,819	Provision included in respective CBAs
Labor Hours Considered for Benefit	139,135	
Divided by 40 hours/week	40	
Total Manweeks	4,999	
Savings in Hours	4,999	Savings = 1 hour per man per week
Average Hourly Labor Rate	74.16	
Set-up Savings	370,712	
Loss of Productivity		
Labor Hours Considered for Benefit	139,135	
Hours 9 & 10 (Percentage of Total)	20%	
Hours of Loss of Productivity	27,827	
Assumed Loss of Productivity	5%	
Average Hourly Labor Rate	74.16	
Cost of Loss of Productivity	103,182	
Additional CM Cost		
Fifth Day Hours	8	
Labor Rate	123.20	
Daily Rate	985.60	
Project Duration (in weeks)	65	
Application of Fifth Day	66.7%	Assumed 2/3 of available fifth days
Additional CM Cost	42,731	
Summary		
Set-up Savings	370,712	
Loss of Productivity	(103,182)	
Additional CM Cost	(42,731)	
Benefit Summary	224,800	
Escalation/Contingency Factor	1.26	
Adjusted Savings	283,165	

PLA Benefits Analysis

Appendix E—Cost Savings for Standardized Holidays

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**LIRO Program and
Construction Management, PE P.C.**
A LIRO Group Company

**MCC Downtown Campus
Main Building Construction Project
Cost Savings--Standardized Holidays**

Trade Labor Category	Local	Holidays during Project		Delta	Hourly Rate*		Average Workforce	Potential Savings
		per CBA	per PLA		Holiday	Regular		
Bricklayers	3	7	7	-	113.20	56.60	1.70	-
Carpenters	85	7	7	-	112.24	56.12	15.70	-
Cement Mason	3	7	7	-	113.20	56.60	0.10	-
Concrete Worker	435	7	7	-	97.62	48.81	-	-
Electrician	86	7	7	-	125.72	62.86	7.70	-
Elevator Mechanic	27	9	7	2	171.98	85.99	0.80	1,101
Glazier	660	7	7	-	101.70	50.85	1.30	-
Heat/Frost Insulator	26	7	7	-	110.96	55.48	5.70	-
Ironworker	33	7	7	-	115.92	57.96	1.30	-
Laborer	435	7	7	-	96.48	48.24	1.50	-
Operating Engr - C	158	7	7	-	126.58	63.29	0.50	-
Operating Engr - C	158	7	7	-	121.58	60.79	0.40	-
Painter	150	7	7	-	96.66	48.33	5.10	-
Plumber	13	7	7	-	122.12	61.06	1.00	-
Resilient Flooring	85	7	7	-	98.28	49.14	0.20	-
Roofer	22	8	7	1	104.50	52.25	3.20	1,338
Sheet Metal Worker	46	7	7	-	125.36	62.68	14.50	-
Spray Fireproofers	150	7	7	-	98.22	49.11	0.60	-
Sprinklerfitter	669	7	7	-	122.44	61.22	3.50	-
Steamfitter	13	7	7	-	122.12	61.06	6.00	-
Teamsters IBT	118	7	7	-	94.60	47.30	0.70	-
Tile Layer	3	7	7	-	115.42	57.71	2.60	-
Tile Layer Helper	3	7	7	-	93.62	46.81	3.20	-
Total								2,438
Escalation/Contingency Factor								1.26
Adjusted Savings								3,071

* includes fringes and taxes

PLA Benefits Analysis

Appendix F—Cost Savings for Use of Apprentices

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**MCC Downtown Campus
Main Building Construction Project
Cost Savings--Use of Apprentices**

Trade Labor Category	CBA Ratio	Hourly Rate		Average Rate		Total Hours	Potential Savings
		Journeyman	Apprentice	Per CBA	Per PLA		
Bricklayers	1:4	56.60	40.06	53.29	52.46	4,538	3,751
Carpenters	1:4	56.12	38.34	52.56	51.67	40,858	36,312
Cement Mason	1:4	56.60	40.06	53.29	52.46	182	150
Concrete Worker	1:3	48.81	38.51	46.75	46.24	111	57
Electrician	1:3	62.86	39.52	45.36	45.36	19,961	-
Elevator Mechanic	1:2	85.99	66.40			2,042	-
Glazier	1:3	50.85	39.79	42.56	42.56	3,282	-
Heat/Frost Insulator	1:3	55.48	46.76	48.94	48.94	14,741	-
Ironworker	1:4	57.96	42.88	54.94	54.19	3,441	2,594
Laborer	1:3	48.24	38.51	40.94	40.94	3,909	-
Operating Engr - Class 1	1:5	63.29	60.19	62.67	62.52	1,315	204
Operating Engr - Class 2	1:5	60.79	60.19	42.55	42.13	981	1,098
Painter	1:3	48.33	25.02	30.85	30.85	13,324	-
Plumber	1:3	61.06	40.34	45.52	45.52	2,660	-
Resilient Flooring	1:4	49.14	41.83	47.68	47.31	419	153
Roofer	1:2	52.25	35.36		39.58	8,266	-
Sheet Metal Worker	1:3	62.68	42.57	47.60	47.60	37,597	-
Spray Fireproofers	1:3	49.11	25.02	31.04	31.04	1,545	-
Sprinklerfitter	1:2	61.22	46.16		49.93	9,098	-
Steamfitter	1:3	61.06	40.34	45.52	45.52	15,519	-
Teamsters IBT	N/A	47.30				1,860	-
Tile Layer	1:4	57.71	49.53	56.07	55.66	6,752	2,759
Tile Layer Helper	1:4	46.81	37.92	45.03	44.59	8,324	3,699
Total							50,777
Escalation/Contingency Factor							1.26
Adjusted Savings							63,960

Note: PLA would delineate the minimum use of apprentices at 1:3 but a ratio of 1:2, as stipulated in various CBAs, would still be allowed.

PLA Benefits Analysis

Appendix G—Cost Savings for Industry Training Funds

Project Labor Agreement Benefits Analysis

Main Building Construction Project

September 8, 2014





**LIRO Program and
Construction Management, PE P.C.**
A LIRO Group Company

**MCC Downtown Campus
Main Building Construction Project
Cost Savings--Industry Training Funds**

Trade Labor Category	Local	Expiration	Industry Funds	Manhours	Savings
Bricklayers	3	4/30/2017	2.01	4,538	9,121
Carpenters	85	5/31/2016	0.74	40,858	30,235
Cement Mason	3	5/14/2016	0.45	182	82
Concrete Worker	435	5/14/2016	0.45	111	50
Electrician	86	5/31/2015	1.04	19,961	20,759
Elevator Mechanic	27	7/8/2017	0.90	2,042	1,838
Glazier	660	4/30/2013	2.00	3,282	6,564
Heat/Frost Insulator	26	Pending	0.45	14,741	6,633
Ironworker	33	4/30/2015	1.35	3,441	4,645
Laborer	435	6/30/2016	0.68	3,909	2,658
Operating Engr - Class 1	158	5/31/2013	2.66	1,002	2,665
Operating Engr - Class 2	158	5/31/2013	2.66	981	2,609
Painter	150	4/30/2017	1.01	12,648	12,774
Plumber	13	4/30/2014	1.01	2,660	2,687
Resilient Flooring	85	5/31/2016	0.74	419	310
Roofer	22	5/30/2014	1.08	8,266	8,927
Sheet Metal Worker	46	Pending	0.58	37,597	21,806
Spray Fireproofers	150	6/30/2014	1.01	1,545	1,560
Sprinklerfitter	669	6/30/2014	1.01	9,098	9,189
Steamfitter	13	6/30/2014	1.01	15,519	15,674
Teamsters IBT	118	6/30/2013		1,718	-
Tile Layer	3	4/30/2017	1.31	6,752	8,845
Tile Layer Helper	3	4/30/2017	1.31	8,324	10,904
Total				199,594	180,539
Escalation/Contingency Factor					1.26
Adjusted Savings					227,413