

PLA Feasibility Study for Project Labor Agreement



Hutchinson Elementary School Project
Pelham Union Free School District
Westchester County, NY



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Glossary

BCTCWPC - *Building and Construction Trades Council of Westchester and Putnam counties, the representative body of union workforce in the area where HES is located*

PFS - *Project Labor Agreement Feasibility Study, a report which assesses the feasibility of utilizing a Project Labor Agreement for a planned construction Project*

LHV - *Lower Hudson Valley, the local labor catchment area comprised of Westchester/Putnam counties in which HES will be constructed*

HV - *Hudson Valley, the regional labor catchment area comprised of Westchester/Putnam and the six counties in the Mid-Hudson region*

HES - *Hutchinson Elementary School Project, the subject of this Study*

PLA - *Project Labor Agreements are single-site, union-managed, craft labor agreements under which concessions may be negotiated off individual trades' Collective Bargaining Agreements (CBA) on work rules and schedules, over time, shift differentials, apprentice labor, and the like*

Acknowledgements

We thank for following individuals and/or their offices for their help in providing information, context and perspectives for this Study:

Labor

Eddie Doyle, President, Building and Construction Trades Council of Westchester and Putnam
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Construction Industry

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Section One

Introduction and Background

Executive Summary

Pelham voters approved approximately \$57m in capital projects for the Pelham Union Free School District (District) in a May 2018 bond referendum. The largest of these projects is the \$30.03m construction of a new Hutchinson Elementary School (HES) on its Third Avenue campus; the existing school will be razed when the new school is completed. HES is the sole focus of this Project Labor Agreement Feasibility Study (PFS).

The bond also provides for \$2.378m in construction costs for renovations and additions to the Prospect Hill School (PHS). The District asked Arace to conduct an assessment as to whether this project should be included as part of a potential PLA with HES, or bid as a separate, non-PLA project. After analysis, we do not recommend bidding PHS as part of the Hutchinson PLA framework. As such, PHS is not included in this PFS. For more details of the PHS assessment see page 7.

Metrics

Total hard construction cost* for the Hutchinson Elementary School is estimated to be \$30.003m. Approximately 45% (\$13.514m) will be for labor and 55% (\$16.514m) materials.

HES is scheduled to begin construction December 19, 2019 and end December 31, 2021. The work schedule is expected to be one 8-hour shift, five days a week. Excluding weekends and holidays, the project's duration will be 516 workdays, about 25 months.

The work plan calls for 12 prime building trades: carpenter, electrician, iron worker, laborer, mason, operating engineer, plumber, painter, roofer, sheet metal worker, sprinkler fitter, teamster.

Scope

The purpose of this Project Labor Agreement Feasibility Study (PFS) is to evaluate local labor's leadership, resources and performance record and other factors relevant to fostering efficient and economical construction.

Our research indicates that utilizing a PLA for HES would facilitate more rapid completion of the project through the following provisions:

- Eliminate strikes, work slow downs and other labor actions
- Provide access to local and regional workforce
- Foster an efficient, stable and safety conscious workforce

Based on concessions off prevailing wage standards granted by local unions in prior Westchester PLAs, constructing HES under a PLA has the potential to produce cost savings of \$857,163, approximately 6.3% savings of labor cost.

Research affirms that unions have extensive relevant experience in managing PLA projects in the local region. Building and Construction Trades Council of Westchester and Putnam Counties is the only organized labor body in the local area which has the authority to recruit the requisite complement of skilled labor force, negotiate economic concessions and ensure labor peace for the duration of the project.

**Hard costs exclude escalation, phasing, overhead and profit, insurance, bonds, and design and contingencies*

Introduction and Background

Consultant

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Qualifications

Arace is qualified to conduct this Study because it has delivered 37 Project labor agreement (PFS) for public entities including New York State Department of Transportation, Office of General Services and SUNY as well as various county and local governments and school districts. The firm has recommended both for and against the use of PLAs, and advised state and county agencies on their use. Arace's consulting portfolio includes negotiating 29 executed PLAs.

Agreement

Pelham Free Union School District (District), Westchester County, NY retained Arace & Company to conduct a Project Labor Agreement Feasibility Study (PFS) investigating utilization of a Project Labor Agreement (PLA) for construction of the Huntington Elementary School project (HES). Pelham Free Union School District is the project owner.

Scope

This PFS is an analysis of the Westchester-Putnam labor market as it pertains to utilizing a PLA to organize labor force for HES. The purpose of the PFS is to evaluate whether a PLA will be economical and serve the best interests of District taxpayers while complying with NYS Labor Law, Section 222 and applicable State and Federal participation goals.

Project Labor Agreements

Project Labor Agreements (PLAs) are single-site craft labor agreements, unique to the construction industry, which have the potential to facilitate timely, cost-effective construction. Under a PLA, concessions off the individual trades' Collective Bargaining Agreements (CBA) may be negotiated on work rules and schedules, over time, shift differentials, apprentice labor, and the like. PLAs often result in economic concessions off prevailing wage standards and include provisions which preclude strikes, lockouts, work stoppages and/or any other disruption of work for the duration.

Methodology

This Study will investigate:

- Potential economic benefits of utilizing a PLA - direct, indirect and contingency
- Local labor pool - inventory, availability and performance record
- Other factors impacting timely completion – labor unrest, concurrent projects
- Local open bidding process
- Urgency of completing HES

Introduction and Background

Boston Harbor Decision

Although there is a history of PLAs on large public works, such as the Grand Coolee Dam, dating back to the 1930's, the first legal challenge to a PLA did not occur until the Boston Harbor project in the early 1990s. The public entity owner of the project stipulated a PLA for this multi-billion dollar, multi-year clean-up of Boston Harbor, a project involving scores of contractors and unions, each of which was required to become a signatory to the PLA.

The challenge was made on a federal preemption theory, arguing that the government entity-owner requirement that all successful bidders become parties to that PLA constituted an impermissible state intrusion into the labor relations of project contractors, and was preempted by the National Labor Relations Act (NLRA).

The U.S. Supreme Court, in its landmark decision, *Associated Builders and Contractors of Massachusetts/Rhode Island, Inc. v. Massachusetts Water Resources Authority* (commonly known as Boston Harbor), 507 U.S. 218 (1993), that although the government could not impose a PLA in its regulatory capacity, it was not prohibited from benefiting from a PLA wherein the government entity was acting in its proprietary capacity as an owner or a purchaser of construction services in the construction industry marketplace. This decision subsequently provided the impetus for public-sector PLAs across the nation. It has forced opponents of PLAs to base their challenges primarily upon a theory that a PLA violates a state's competitive bidding statutes because it allegedly favors union over open shop bidders.

Soon after the Boston Harbor decision, then-NY Governor Mario Cuomo issued a memorandum referencing the "Boston Harbor Agreement" and directing that all state construction agencies and authorities evaluate the benefits of negotiating a PLA where the benefits may include labor stability, timely delivery and efficiency.

New York State Thruway Authority Decision

New York State's standards for utilizing PLAs were established in the 1996 Court of Appeals decision in the combined case involving PLAs authorized by the New York State Thruway Authority (NYSTA) and the Dormitory Authority of the State of New York (DASNY). The Court of Appeals ultimately upheld the PLA for the \$130 million, four-year Thruway Authority (Tappan Zee Bridge) project but rejected it for the \$170 million, five-year Dormitory Authority project (Roswell Park Cancer Institute).

The court upheld the NYSTA PLA based its authorization on the recommendation of its project manager, Hill International, Inc., pursuant to a pre-bid cost analysis which indicated the value of a uniform agreement like the PLA. The DASNY decision, on the other hand, was made after bids were opened, and was not supported by a detailed review and analysis similar to that used by the NYSTA.

In its Thruway decision, *New York State Chapter AGC, Inc. v. New York State Thruway Authority*, 88 N.Y. 2d 56, 643 N.Y.S. 2d 480, 666 N.E.2d 185 (1996), the court established the following criteria for determining the validity of PLAs on a case-by-case:

- A PLA could be sustained for a particular project where the record supporting the determination to enter into the PLA was justified by the interests underlying the competitive bidding laws.
- The public authority bears the burden of showing that the decision to utilize a PLA had as its purpose and likely effect the advancement of the interests embodied in the competitive bidding statutes.

Introduction and Background

Thruway continued ...

Two central purposes of New York's competitive bidding statutes, as restated within the Thruway decision, are protection of the public fisc by obtaining the best possible work at the lowest possible price, and prevention of favoritism, improvidence, fraud and corruption in the awarding of public contracts.

An agency decision based on a consultant/construction manager's report is the key element for having that decision upheld by New York courts. The report should show, regardless of the size or complexity of the project, that a PLA is justified based on specified cost savings - both the direct and indirect benefits of a uniform agreement - taking into account such unique factors as the project's timetable and a history of labor unrest.

NYS Executive Order No. 49

On February 12, 1997, then-Governor George Pataki promulgated Executive Order No. 49 'Project Labor Agreements' validating PLAs as one of many tools that may be used in the construction process by management and labor to achieve the goals of timeliness, cost-effectiveness, fairness, equity and conformity to the law. It was continued by Governors Spitzer, Paterson and Cuomo through Executive Orders No. 5 (2007), No. 9 (2008) and No. 2 (2011) respectively. It sets forth the policies and procedures to be followed by state agencies in determining whether a PLA should be utilized and, if so, the interaction between Article 8 of the Labor Law and the PLA. Executive Order No. 49 has been often cited with approval by the New York Courts.

New York Labor Law, Section 222

In 2008 the New York State Legislature codified the guidelines set forth in E.O. 49 and by the Court of Appeals by enactment of New York Labor Law, Section 222, Project Labor Agreements. Section 222 defines a PLA and provides that any state agency or department may require a contractor awarded a contract for a project to enter into a PLA during or for work involved when the agency or department determines that its interest in obtaining the best work at the lowest possible price while facilitating timely completion.

PLAs in Lower Hudson Valley

PLAs have been utilized for dozens of projects in the Westchester County area, including high profile public works projects like the Tappan Zee Bridge (original and current) and the Cross County Expressway. Recent private sector PLAs include Life Time Athletic Club (Harrison) and Ridge Hill (Yonkers). See an inventory of Lower Hudson Valley (LHV) PLAs on page 20.

PLAs for both the NYC Rondout Water By-Pass Tunnel will be in progress during HES's construction as will the West Point Barracks project. With construction unemployment at its lowest level in twenty years in Westchester, high demand for local craft labor may have an impact on recruiting and sustaining HES's workforce.

PLAs in NY State

PLAs have been used extensively in construction of publicly financed schools, bridges and roadways, office complexes, airports, highways and transit systems in New York State. Current projects include LaGuardia and Kennedy airports. There have been more than 300 PLAs in the New York City metropolitan area for a wide range of state, local and private clients including Office of General Services, SUNY, Department of Transportation, Dormitory Authority and Bridge Authority.

Project Description

Hutchinson School

In a May 2018 bond referendum, Pelham voters approved approximately \$57m for District capital projects. The largest of these projects (\$30.03m) will build a new Hutchinson Elementary School (HES) on the site of the school’s current Third Avenue campus, and then raze the old building. Students would remain in the existing school and utilize portable classrooms as needed until construction of the new building is completed over a 25 month period. HES is the sole focus on this Project Labor Agreement Feasibility Study (PFS).

Prospect Hill School

The bond also provides \$2.378m for construction of an addition and renovations to Prospect Hill School (PHS) on a campus about two miles from Hutchinson. PHS’s renovations include: ADA accessibility; enhanced security; replacement of the annex’s roof and parapet; upgrades and renovations to the athletic field/facilities.

Qualifying Assessment

In mid-March 2019, prior to beginning the PFS process, the District asked Arace to assess whether there would be an advantage to including PHS as part of a potential PLA for the Hutchinson School, or if it should be bid as a separate, non-PLA project. After analysis, we do not recommend bidding PHS as part of the Hutchinson PLA framework based on the following reasons:

- PLAs are defined as single-site collective craft labor agreements. Hutchinson and Prospect Hill are two miles apart and cannot be considered a single-site
- PLAs are most effective on projects like Hutchinson with a large, sustained scope of work utilizing many trades over several years. Prospect Hill’s scope is comprised of small specialty contracts, such as elevator, roofing and security, which are generally handled by a single sub-contractor and are of short duration
- In our opinion, PHS’s lower dollar value specialty contracts will attract more bidders if the project is not constructed as PLA
- In our opinion, the PHS project can probably be completed more quickly (and perhaps more cheaply) through conventional, non-PLA construction

Labor Conditions

The prime trades for the Hutchinson Elementary School Project are carpenter, electrician, iron worker, laborer, mason, operating engineer, plumber, painter, roofer, sheet metal worker, sprinkler fitter, teamster.

Local Labor Market

NYS Department of Labor pegs April 2019 unemployment at 3.4% in the Westchester labor catchment area (combined for reporting with Orange and Rockland counties), the lowest rate since 2001. In Westchester County, demand for local workforce has been driven by a strengthening economy in the Metropolitan area anchored by several very large projects, including reconstruction of LaGuardia and Kennedy Airports. See samples below of area projects under way or scheduled during HES’s construction period.

CONCURRENT PROJECTS	NYC-Rondout Water By-Pass Tunnel (\$1bn) Legoland (\$450m) Cricket Valley Energy Center (\$850m) Vassar (\$500m) Danskammer Power Plant (\$450m) West Point \$200m
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Labor Conditions (continued)

With unemployment already low in Westchester, high demand for craft labor in the area may have some impact on recruiting and sustaining the Hutchinson project’s requisite workforce. However, the depth of local union work force appears sufficient to provide the necessary complement.

Experience

The Building and Construction Trades Council of Westchester and Putnam counties is a geographically-based union trades association comprised of affiliated unions. Although union workers comprise about 30% of Westchester/Putnam’s construction labor pool, they construct 90% of area schools. See examples of recent local school PLA construction projects below. See page 20 for completed area PLAs.

LOCAL SCHOOL PLAs	Westchester CC, Mahopac, NY Manhattanville College Student Union Mount Vernon City School District Irvington Public School Putnam Valley High School
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Network

Eddie Doyle is president of the Building and Construction Trades Council of Westchester and Putnam Counties (BCTCWPC), a union trades association comprised of affiliates in these two counties. Mr. Doyle and Ross Pepe, his counterpart at Construction Industry Council of Westchester and Hudson Valley (CICWHV), have frequently partnered in providing workforce and contractors for PLAs (and other construction) in Westchester and throughout the Hudson Valley. Together, these organizations have developed and maintained strong working relationships with local officials, contractors and vendors, and a successful record of managing PLAs.

Assumptions

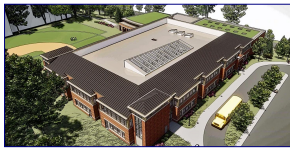
Total hard construction cost* for the Hutchinson Elementary School (HES) project is estimated to be \$30.03m. Approximately 45% (\$13.514m) will be for labor and 55% (\$16.514m) materials. These assumptions are based on Arace’s recommendation to configure the PLA (and this PFS) solely for HES, and to exclude Prospect Hill School additions and renovations from these considerations. See PAGE 7 for more about this recommendation.

HES is scheduled to begin construction December 19, 2019 and end December 31, 2021. The work schedule is expected to be one 8-hour shift, five days a week. Excluding weekends and holidays, the project's duration will be 516 workdays, about 25 months.

The work plan calls for 12 prime building trades: carpenter, electrician, iron worker, laborer, mason, operating engineer, plumber, painter, roofer, sheet metal worker, sprinkler fitter, teamster. The average hourly wage for this complement is \$99.02 (NYSDOL, April 2019). Dividing this rate by \$13.5m labor cost works out to a total of 136,472 project work hours or 264 (average) work hours per day over the 516 day duration.

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|---------------------------|--|
| METRICS
AT A
GLANCE | <ul style="list-style-type: none"> • Project Budget (hard cost): \$30.03m • Labor cost: \$13.513m • Duration: 25 months • Work days: 516 work days • Total Work Hours: 136,472 • Work Hours per day: 264 average • Labor Cost per day: \$26,189 |
|---------------------------|--|

**Hard costs exclude escalation, phasing, overhead and profit, insurance, bonds, and design and contingencies*



Section Two

Economic Analysis—Direct Savings

Uniform Standards

40-Hour Work Week

Standardizing the work day for all trades increases productivity on the job site by providing a predictable framework for coordinating the times different trades use for breaks, lunch, set up and close down time. Construction projects routinely incur overtime hours due to the inevitable slippages in coordinating work hours so one trade can keep up or keep ahead of a coordinating work trade. A good construction manager with strong organizational skills can significantly mitigate these impacts but not eliminate them.

The Westchester County trades all have standard 40 hour work weeks with the exception of painters and electricians who have 35 hour weeks. But almost all trades have different work rules such as start times, lunch periods, work breaks, reporting pay, management rights, premium and overtime rates.

Adopting a PLA for HES would immediately establish a standard 40 hour workweek for all trades (union and open shop), including uniform times for breaks, meals and other non-work elements of the workday, overriding their individual agreements for the duration of the project. Standardizing all time-related workflow facilitates greater coordination of the construction process.

Work Rules

A PLA for HES would set a standard time for all trades on the project for breaks, meals and other non-work elements of the workday, overriding their individual collective bargaining agreements for the duration of the project. Using provisions in a 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 project. This gives the contractor flexibility to schedule the workday to maximize productivity.

Management Rights

Many of the existing collective bargaining agreements do not contain a "Management Rights" clause. Those that exist are often ambiguous or inadequate to offer the contractor the authority and flexibility required for vital control and management of the project work. Under a PLA's management rights clause there is no limitation or restriction upon the contractors' choice of means or methods for performing their work, including, techniques, and equipment. The contractor has full and exclusive control authority to direct the work force, including determining the number of employees to be hired and their requisite qualifications; the promotion, transfer, and layoff of its employees; the discipline or discharge for cause of its employees; the assignment and schedule of work; the promulgation of reasonable program work rules; and the requirement, timing, and number of employees to be utilized for overtime work. Using clearly established management rights allows the contractor to realize distinct efficiencies, and realize potential savings on labor costs, even on a relatively small project like HES.

Basis for Potential Savings Calculations

In prior PFS in the Lower Hudson Valley, potential cost savings for this category have averaged .0025% of labor cost, and we use this same calculation here.

POTENTIAL SAVINGS
\$33,783

Apprentice Workers

The minimum ratio of apprentices to journey-workers is set as part of the prevailing wage schedule for each trade; these ratios vary greatly from trade to trade. Each trade has a NYS-approved apprenticeship program where newly trained craftsmen are employed at a lower scale than the journeymen’s rate. See table below for the allowable ratios of registered apprentices to journey-workers for the specific job categories.

Under a PLA these ratios may be changed, and contractors would have the opportunity to utilize a single, maximum apprentice ratio for all trades. Utilizing more apprentices holds the potential for cost savings because apprentices are paid an average of 60% of a journeyman’s wages and benefits (or 40% in potential savings per apprentice man hour). Increasing apprentice participation also expands training opportunities for women, minorities, veterans, those with disabilities and economically-disadvantaged, non-minority males.

We note that Article 8 of the New York State Labor Law states that only apprentices individually registered in a program certified by the New York State Department of Labor may be paid apprenticeship rates on a public works project. The robust union apprentice programs in the Lower Hudson Valley fulfill these requirements for union contractors. Some open shop contractors also meet this test, but the majority do not. In effect, the savings projected for this provision are obviated for contractors who do not meet NYSDOL certification qualifications; they must pay their apprentices at journeyman rates.

APPRENTICE TRAINING RATIOS	Carpenter	1:1,1:4	Painter	1:1,1:3
	Electrical	1:1,1:3	Plumber	1:1,1:3
	Iron Worker	1:1,1:4	Roofer	1:1,1:2
	Laborer	1:1,1:3	Sheetmetal	1:1,1:3
	Mason	1:1,1:4	Sprinkler	1:1,1:2
	Operator	1:1,1:5		

Basis for Potential Savings Calculations
 Assuming 40% cost savings on apprentice labor in lieu of journeymen (\$19.23 instead of \$48.08) times 5% apprentice labor over the duration (6,823 hours)

POTENTIAL SAVINGS
\$131,206

Saturday Make-Ups

HES is expected to utilize a 5-day, 8 hour work week schedule. When severe weather or other factors forces a work stoppage on the job site over the project’s 25 month duration, there are PLA provisions that can be incorporated under which a missed work day and its man-hours can be made-up on Saturday and be paid at the straight time wage rate. We note that only operating engineer and plumber trades among the participating primes allow for Saturday make-up work at straight time.

It is, of course, impossible to predict an exact number of work days that will be lost to weather conditions, especially on a project like the HES where only a small percentage of the work is performed outdoors. To define a potential value for this provision, we use a conservative standard of two lost work days over the duration when Saturday make-up could be required.

Basis for Potential Savings Calculations
 84% of 516 average work hours a day = 433 average work hours a day x 2 days = 866 work hours x \$24.04 (half the hourly rate)

POTENTIAL SAVINGS
\$20,818

Overtime

Different Westchester County unions trades have different overtime rates in their CBAs. Under a PLA, there is precedent for establishing a standard rate of time and one-half the regular hourly rate for all overtime hours worked outside the standard 8 hour work day (or the 4-10's schedule if it is selected). All time on Saturday, regardless of the number of hours worked, is paid at time and one-half.

Without a PLA for HES, the two participating trades with 35 hour work weeks, painters and electricians, would be paid time and one-half for each hour over 7 hours in a day, Under a PLA, there is precedent for these trades to work a 40 hours per week schedule at straight time, generating potential savings off prevailing rates. For OT rates of all participating trades, see the table on page 21.

<p>EXAMPLES OVERTIME RATES</p>	<p>Painters and Electricians Time and one-half for each hour over 7 hours per day/35 hour work week</p> <p>Iron Workers Time and one- half the hourly rate for the ninth and tenth hours week days and the first 8 hours Saturday. Double the hourly rate all additional hours including benefits at the same premium rate as shown for overtime.</p> <p><i><u>Basis for Potential Savings Calculations</u></i> Assuming 5% overtime (6823 hours) over the 25 month duration, with 2 trades exceeding 7 hours a day requiring time and one half, potential savings= \$24 p/h for OT 6 hours OT p/d = \$144 p/d savings x 516 work days</p> <p>POTENTIAL SAVINGS \$74,304</p>
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Shift Work

HES has a very tight construction schedule. In order to complete the project on time, 5% of the work is expected to be performed as either irregular shift or second shift work. Utilizing a Project Labor Agreement would provide the opportunity to organize and schedule off-shift work as required under a uniform wage standard that applies to all signatory unions.

This provision would supersede the different premiums for off-shift work in participating trades' Collective Bargaining Agreements, and generate potential cost savings. The local building trades have different premiums for irregular, second and third shifts as part of their prevailing wage agreements.

Analysis of recent Westchester-Putnam PLAs reveals that there is a precedent for a 10% standard premium for all irregular and second shift work on PLA projects. We note that this provision cannot be negotiated after the PLA has been signed.

<p>EXAMPLES SHIFT RATES</p>	<p>Laborer, Carpenter, Operating Engineers, Teamster 15% of wages is added to straight time pay</p> <p>Plumber 25% of wages is added to straight time pay</p> <p>Mason 15% premium is paid for 2nd shift, 25% for 3rd</p> <p><i><u>Basis for Potential Savings Calculations</u></i> Assuming 5% of the project will be second or irregular shift work = 6823 work hours x \$48.08 average hourly rate = \$328,049 x 6.5% savings off local</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;"> <p>POTENTIAL SAVINGS \$21,323</p> </div>
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Holidays

If the varying holiday schedules of HES’s participating trades are not in perfect alignment, it can lead to conflicting work schedules, loss of productivity and added cost. Our research showed that while the Westchester County unions share many of the same holiday schedules, they differ on others and which are paid holidays and which are not. See holiday analysis chart on page 22 for more specifics.

According to the New York State Department of Labor’s prevailing wage schedule for April 2019, HES’s 12 prime trades are scheduled for a total of 31 holidays over the 25 month duration. Under a PLA, a uniform standard may be negotiated for all trades, often reducing the total number of observed holidays over the duration, and typically generating potential cost savings off standard rates. In Westchester County, there is precedent in prior local PLAs for unions to grant a concession off the holidays listed in the prevailing wage schedule. This would reduce the number of observed holidays by 14 over the duration. We note that standard pay holiday rates are in effect if HES is configured as non-PLA construction. See examples below.

EXAMPLES OF CBA HOLIDAYS	<p><u>Day after Thanksgiving</u> Plumber, electrician, painter and sheet metal workers are be paid overtime if they work. Carpenters would be paid for the day even if they don’t work that day; if they were required to work they also receive double pay plus benefits. workers would be paid double time for both hourly wage and benefits if required to work</p> <p><u>Lincoln’s Birthday</u> Paid holiday for engineers, laborers and teamster; if they were required to work that day, they also receive double pay plus benefits.</p> <p><u>Veterans Day</u> Laborers, Electricians, Plumbers, Operating Engineers, Teamsters and Sheetmetal would be paid at the overtime rate if they work. Masons would be paid double time for both hourly wage and benefits if required to work</p> <p><u>Good Friday.</u> Plumbers would be paid double time for both hourly wage and benefits. Operating engineers and sheet metal workers would be paid overtime but no holiday benefits are paid unless work is performed that day.</p>
	POTENTIAL SAVINGS \$104,514



Section Three Economic Analysis—Indirect Savings

Collective Bargaining Agreements

On public works projects, all contractors, union and open shop, are required by law to pay workers the prevailing wage rates, which are derived from the area collective-bargaining agreements (CBA) for each trade. The CBA for each of HES’s 12 trades has provisions governing every aspect of work, and each contains a significant number of miscellaneous clauses unique to that trade. A PLA supersedes all individual CBA work schedules and other terms for the duration of the project, establishing one efficient standard which applies uniformly to all trades.

As an example, under a PLA for HES there would be no requirement for payments for travel expenses, travel time, subsistence allowance or other such reimbursements regardless of any language in individual CBA’s. There would also be language stating that the selection of craft forepersons and general forepersons, and the number of forepersons required and the like.

Renegotiated CBAs

Over the 25 month duration of the project, the CBA’s of most or even all trades will have to be renegotiated. See details below. Not uncommonly, some CBAs may not be renewed on schedule and this can, though infrequently, result in strikes or work stoppages. Such actions, if of long duration, might have a disruptive impact on work flow and project delivery. This may present an unwelcome circumstance for a time-sensitive project like HES. See page 18 for more details of the urgency of completing this project. But under a PLA, strikes or work stoppage of any kind are prohibited. A PLA guarantees that all unions would continue to work for the duration without change or interruption even if new CBAs were not successfully renegotiated.

CBA	Carpenters	4/30/19	Painters	4/30/20
EXPIRATION	Electrician	3/31/21	Plumber	4/30/19
DATES	Iron Worker	3/31/21	Roofer	**
	Laborer	4/30/20	Sheetmetal	**
	Mason	6/30/19	Sprinkler	**
	Operator	**		

If the standard work week in any of the participating trades’ CBAs is renegotiated to less than 40 hours, under the terms of HES’s PLA the work week would remain at 40 hours per week. The same applies to any other new CBA provisions if such provisions are less favorable to the project than those uniformly required of contractors for construction work normally covered by these agreements. We calculate a small potential savings for the guarantee of workforce continuity throughout the PLA, another layer of support for assuring HES’s on-time delivery.

Basis for Potential Savings Calculations

We assign a potential savings value of one quarter of one percent (.0025) for the PLA’s direct ability to standardize and adjust the CBA provision and its indirect impact of remaining in full force and effect even if one or more CBAs expire during the project schedule

**POTENTIAL SAVINGS
\$33,783**

** info unavailable at time of this writing

Labor Productivity

When there are jurisdictional disputes (between unions and between union and open shop craft on the same job) anticipated confrontations between workers adversely impacts the productivity of the workmen. A PLA obviates this concern because it mandates immediate resolution of jurisdictional disputes in the no-strike/no lockout, no slowdown/disruption clause.

Because all union workers are graduates of rigorous state-certified apprentice programs, they are likely to be more productive and safely conscious than other workers. Our assumption of greater productivity here is based on the fact that all union journey workers must complete a comprehensive course of training in their trade before they are state certified. Our research shows that about only 20% of all open shop workers receive a similar level of training. In most trades, the number of hours of training required to be certified is roughly equivalent to earning a bachelor's degree in the arts and sciences.

Research indicates that about 10% of open shop workers have graduated from a certified training and education program; the majority learn their trade in non-certified programs or through on the job training. While these workers are often highly skilled and competent, on average they have less skill than the union workers who have had more thorough, certified training and education. Using union workers on a PLA project would therefore tend to increase the likelihood of a more productive workforce. Union emphasis on continuing safety training also tends to reduce the incidence of job-related injuries, and lawsuits, with their negative impact on workflow and morale.

Based on the desire to keep to the construction schedule and improve job safety we conclude that there would be a benefit to employing a more highly trained and coordinated workforce under the umbrella of a Project Labor Agreement.

One possible disadvantage of using a PLA for open shop contractors is the requirement that a contractor is typically allowed to bring 10-20% of their regular crew on to a PLA job. That means that 80-90% of his crew is new to him and his core team. The open shop trade group, Associated Building Contractors (ABC), identifies this issue as the number one reason open shop contractors do not bid PLA projects.

This arrangement may, or may not, reduce the efficiency of a team working together for the first time. A crew that works together regularly will certainly be able to coordinate their efforts more easily than a crew that has no prior experience. However, union-trained workers are often part of mixed crews and, especially on public works projects, have a long history of accommodating diverse working arrangements. It is reasonable to assume that any initial loss of efficiency would be reduced as work proceeded over JTC's 25 month duration and routines became clear. On average, 30-40% of all construction projects have mixed crews combining union and open shop workforce.

Basis for Potential Savings Calculations
We assign a potential savings value of one quarter of one percent (.0025) for this category for the higher level of formal skill and safety training of union workforce.

POTENTIAL SAVINGS
\$27,027

Access to Labor Supply

NYS Department of Labor reports March 2019 unemployment in the Westchester labor catchment area (with Orange and Rockland counties) was 3.4%, the lowest rate since 2001. Demand for local construction workforce has been driven by a strengthening economy in the Metropolitan area anchored by several very large projects, including reconstruction of LaGuardia and Kennedy Airports. These conditions may impact HES’s labor complement over the duration.

However, given HES’s relatively modest labor requirement and the size of the available local labor pool, it is reasonable to assume that the project can be constructed wholly or in large part by workforce comprised of local residents. We note that there are approximately 3,000 trained union journeymen and apprentices in the Westchester-Putnam Building and Construction Trades Council and an additional 60,000 in the Metro New York catchment area.

In the unlikely event that HES experiences labor shortages, a PLA guarantees an adequate and timely supply of labor for the duration. In such a circumstance, the entire Metro area union membership data base is searched for necessary craft workers. This provision adds a layer of stability for the construction process and helps to facilitate the project’s timely completion.

Research shows that the Westchester-Putnam unions have a consistent record of providing the requisite labor complement for PLAs in a timely manner.

SAMPLE CONCURRENT CONSTRUCTION PROJECTS	NYC-Rondout Water By-Pass Tunnel (\$1bn) Cricket Valley Energy Center (\$850m) Danskammer Power Plant (\$450m) Legoland (\$450m) West Point \$200m Vassar (\$500m)
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Section Four Economic Analysis—Cost Avoidances

Wicks Law Exception

Summary

Under the New York State’s Wicks Law enacted in 1912, a state or local government awarding a contract for the construction of a building must separately and independently bid the work for plumbing, electric wiring, and HVAC if the cost of the project exceeds the area threshold. As the current Wicks Law threshold for Westchester County is \$1.5m and HES’s budget is \$30.03m, Wick Law requirements are in play. Many studies have concluded that Wicks increases the cost of construction projects by 10-30% (see ‘Studies’ section below for more details). In 2008, NYS Legislature amended Wicks Law to provide project owners the opportunity to avoid the mandated requirements by constructing their project under a PLA. A PLA is currently the only alternative to Wicks Law for state and local government construction above the area qualifying threshold.

Rationale

The most frequently cited reason why state or local government entities seek to avoid Wicks Law requirements is to eliminate overlaps and redundancies in scheduling and coordinating the labor forces of the four independent prime contractors. Under a PLA, a single construction manager is typically hired to manage all other contractors. This change in management structure creates a more efficient construction process - and potentially leads to indirect cost savings. Many authoritative Studies (see examples below) on the impacts of Wicks have confirmed that Wicks projects increase the cost of construction projects by 10-30%. For HES, we conservatively estimate a 3% reduction in labor costs (\$405,405) as a consequence of avoiding Wicks requirements by utilizing a PLA.

Additional Advantage

A PLA would exempt the District from Wicks mandated bidding requirements and thus give the Pelham Schools the flexibility to seek as many contractor bids, or as few, as is judged to be in its best interests.

Studies

In May 1987, the New York State Division of the Budget issued a report concluding that Wicks projects were approximately 13% more expensive than comparable non-Wicks projects. In 1993, the NYC School Construction Authority issued reports concluding that Wicks projects took an average 60% more time to complete than non-Wicks projects, and increased cost by 13%. Other studies and reports had similar findings, including New York State School Boards Association (1991) and Niagara Falls School District (1996). Wicks Law was ultimately amended in 2008.

Stipulation

We note that if a PLA is ultimately used in lieu of Wicks, then, in accordance with NYS Labor Law § 222(2)(e), all contractors must demonstrate that they have participated in NYS-approved apprentice training programs for at least three years. Further, these apprenticeship-training programs must have graduated at least one journeyman in the last three years and have used affirmative action efforts to retain minority apprentices. The robust, state-certified union apprentice programs in Westchester-Putnam counties fulfill all these requirements. Some local open shop contractors meet these standards, but the majority do not.

Basis for Potential Savings Calculations
3% of \$13.514m (total labor cost)

POTENTIAL SAVINGS
\$405,405

Avoidance of Work Stoppage

Research shows no evidence of work stoppage actions in the Hudson Valley in the last year, including Westchester and Putnam counties. But such things do happen, even on PLA projects. PLAs include mechanisms for swift, mandated resolution of all disruptive labor activity by any signatory union or employee against any contractor or employer while performing covered work in the project. This provision applies to all job actions including strikes, slow downs, walk-outs and the like. All contractors and workforce, union and open shop, must abide by these rules.

Avoidance of labor unrest through a PLA provides the project owner with the ability to reduce the risk of costly delays. At minimum, this provision provides HES with the assurance of labor continuity for the duration. It also adds an important layer of labor stability to the construction process which increases the possibility of on-time delivery, an important consideration for HES. See page 18 for more about the urgency of completing this project.

We assign no dollar value to potential cost avoidances in this category because it cannot be predicted with any certainty if, when and for what duration, labor unrest might occur.



Section Five

Economic Analysis— Contingency

4-10's Work Schedule

At the time of this writing, the project management team does not expect to utilize a four day at 10 hours per day (4-10's) work schedule. We include this provision here as an option for bidders who want more flexibility to deploy workforce without increased cost. The 4-10's schedule has sometimes been employed by construction manager's in order to help meet on-time delivery.

Ordinarily, all trades would have to be paid their overtime rates for the ninth and tenth hours of a 4-10's schedule as required by New York State's Prevailing Wage law. Under a PLA, however, and only under a PLA, a CM is permitted to schedule 4-10 hour work days at straight time. Potential savings are derived from converting two standard overtime hours per man, per day to straight time.

POTENTIAL SAVINGS
*Assuming full utilization of the 4-10's
work schedule: approximately 40
hours per month per man in overtime
rates averaging \$22.85 per hour*



Section Six Compliance

MWBE and SDVOB Goals

Hutchinson Elementary School Project is funded entirely by local bonds and as such has no state or federal requirements in this category.

We note that state and local officials confirm that Westchester-Putnam unions have a long record of good faith efforts in Minority/Women Business Enterprise (MWBE) and Service Disabled Veteran-Owned Businesses (SDVOB) participation. This statement is based on review of contractor and vendor participation data required on public works construction. We consider local unions to be in compliance because we did not discover any evidence to the contrary.

Urgency

One of the requirements of a PLA, as determined by the U.S. Congress in the 1930's, was to provide a set of construction rules which facilitate more rapid completion of public works projects.

The construction plan for Hutchinson Elementary School Project (HES) calls for building a new Hutchinson School adjacent to the existing structure, parts of which date back to 1914. For reasons of economy and efficiency, students will remain in the current building throughout the duration of construction. For safety, the construction site will be cordoned off to separate student space from construction areas. But the noise and activity of large construction equipment on a small educational campus will be unavoidably disruptive for students, staff and visitors and vendors.

To minimize disruption to the learning process during Hutchinson's construction, the District and its construction team planned HES with an accelerated 25 month schedule. Given the importance of reducing the disruption of HES's construction, utilizing a PLA to facilitate more timely completion is both warranted and justified.

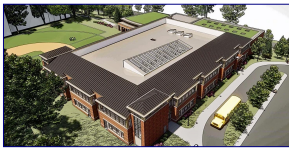
Open Bidding

By law, PLAs must guarantee an open bidding process for all contractors, union and open shop. In discussions with county officials, construction managers, contractors and trade association leaders, we found no evidence of unlawful bidding or hiring practices in area PLA projects. Research discovered open shop participation in Westchester-Putnam PLAs, mainly as sub-contractors. Based on this anecdotal analysis, the local Building and Trades Council has a demonstrated commitment to the PLA's provision for open bidding. There is no reason to assume that open shop bidders will not have an opportunity to win contracts for HES.

Issue

According to Associated Builders and Contractors (ABC), an open shop membership association, its contractors rarely bid PLA projects due to the additional costs of participation and the difficulty of using the open shop business model within the PLA framework. Given that 85% of all construction contractors and workers are open shop, this raises the concern that HES's costs will be higher due to a limited pool of bidders.

It is beyond the scope of this Study to assess the number of open shop contractors who may bid this project and the impact, if any, on bids. The fact that all bidders have an open opportunity to bid means the project is in compliance with this PLA requirement. The U.S. court system has repeatedly upheld the current agreements for open shop participation in Project Labor Agreements.



Section Seven

Conclusion

Conclusion

In our view, employing a PLA for the Hutchinson Elementary School Project would establish a single set of rules and conditions for all workers, union and open shop, which would increase labor force continuity and stability and mitigate the potential for labor unrest, work slowdowns or stoppages. By fostering greater labor harmony, a PLA could also increase job site safety and reduce the risk of accident and injury.

Based on review of prior Lower Hudson Valley PLAs and anecdotal conversations with local union leaders and members, there is precedent under a PLA for potential savings based on concessions unions may grant off prevailing wages standards. See summary chart below.

Our research indicates that an HES PLA has the potential to produce potential cost savings of \$857,163, approximately 6.3% savings of labor cost.

Economic Summary

Potential Cost Savings and Cost Avoidances

Direct Cost Savings

Holiday schedules	104,514
Overtime	74,304
Shift work	21,323
Apprentices	131,206
Saturday make-up	20,818

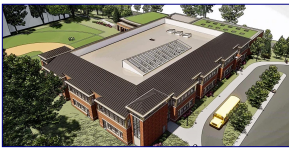
Indirect Cost Savings

CBA's	33,783
Uniform Standards	33,783
Labor Productivity	27,027

Cost Avoidance

Wicks Law Exception	405,405
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TOTAL POTENTIAL SAVINGS: \$857,163



Section Eight
Appendix

COMPLETED LHV PLAS

18 Hole Golf Course, New Castle, NY
 Avalon on the Sound Phase II
 Avalon Willows, Mamaroneck, NY
 Bank Street Commons
 BioMed, Greenburgh, NY
 Bronx River Parkway Roadway
 Catskill & Delaware Ultraviolet Center, Mahopac, NY
 Central Westchester Parkway
 Ciba-Geigy Additives Lab
 City Center, White Plains, NY
 Classic Residence by Hyatt
 Cross County Shopping Center
 Croton Dam
 Croton Point Park
 Dewatering Equipment Rehabilitation
 Entergy Nuclear Northeast Generation Support Building
 Fortunoff Store, White Plains, NY
 Gateway Project
 Hudson Hills Development
 Hudson Park North
 Hudson Park, Yonkers, NY
 Hudson Valley Hospital Center Peekskill, NY
 I-287 Rehabilitation
 IBM World Headquarters
 IBM/Quest Data Center
 Irvington Public School
 Learning Center, Westchester CC, Mahopac, NY
 Manhattanville College Student Union
 Mount Vernon City School District
 Multiplex Movie Theatres
 Municipal Bond Investors Assurance
 Nordstrom Inc., North White Plains, NY
 Norwood E. Jackson Correctional Center, Valhalla, NY
 NY-Rangers-Knicks-Liberty Practice Facility
 Oncology Department, Putnam Hospital, Carmel, NY
 Osborne Retirement Community
 Parking Structure, White Plains, NY
 Pavilion Shopping Mall, Peekskill, NY
 Pfizer Training Center

Phelps Memorial Hospital, Pierpointe-on-Hudson
 Pondfield Bridge, Yonkers, NY
 Pool Modernization, Tibbetts Brook Park, Yonkers, NY
 Putnam Commons Nursing Home
 Putnam County Courthouse
 Putnam County Hospital
 Putnam County Senior Citizens
 Putnam Valley High School
 Regeneron Tenant Fit out 734 & 745
 Renaissance Square, White Plains, NY
 Ridge Hill Village Center
 Roadway on Old Mamaroneck, Rye Brook, NY
 Senior Housing, Rye Brook, NY
 Sheraton Hotel, Sleepy Hollow, NY
 Sprout Brook Ashfill, Liner Containment System
 St. Agnes Hospital, White Plains, NY
 Stop & Shop Supermarket
 Summerfield Suite Hotel
 Tappan Zee Bridge Rehabilitation
 Target Store, Yonkers, NY
 Irvington Public School
 Tech Building, Westchester Community College
 The Osborne Retirement Home
 Travelers Conference Center
 Trump Briarcliff Manor LLC
 Trump National Golf Course
 Trump Plaza/Parcel 1A
 Tuckahoe Road Bridge
 US Postal Service Mail Handling Facility, Harrison, NY
 Wal-Mart Store
 Water Treatment Facility, Wellington
 Westchester Reform Temple
 Westchester Resource Recovery Plant
 Westchester White Plains Fashion Mall, White Plains, NY
 Woodlands Senior Housing
 Yonkers Ave/St. James Garden
 Yonkers Contracting
 Yonkers Joint Wastewater Treatment
 Yonkers Pier Restaurant
 Yonkers Raceway

PREVAILING WAGE RATES FOR WESTCHESTER COUNTY, NY (April, 2019)

Union	Classification	Hour	Benefits	Overtime Rate
Carpenters	Building Heavy & Highway	\$45.30	\$30.93	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Laborers	Heavy & Highway	\$42.22	\$22.38	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sundays and Holidays, Two- and one-half times the hourly rate for Holidays, if worked
Painters		\$46.85	\$26.72	Time and one half of the hourly rate after 7 hours per day, Time and one half of the hourly rate on Saturday, Sunday and Holidays.
Electrician	Wireman/ Technician	\$52.75	\$50.55	Time and one half of the hourly rate after 7 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Masons	Heavy & Highway	\$42.59	\$34.99	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Roofers		\$49.50	\$26.37	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Sunday and Holidays
Plumbers		\$55.66	\$34.11	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday. Double the hourly rate on, Sunday and Holidays, including benefits at same premium as shown for overtime. Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather,
Sheetmetal		\$43.70	\$41.42	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Sprinkler Fitter		\$45.42	\$23.97	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Operating Engineers	Heavy & Highway	\$61.03	\$22.55	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, Double the hourly rate on Sunday and Holidays
Teamsters	Heavy & Highway	\$40.92	\$29.42	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate on Saturday, Double the hourly rate on Sunday and Holidays
Iron Worker		\$51.05	\$77.40	Time and one half of the hourly rate after 8 hours per day, Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours, Double the hourly rate on, Sunday and Holidays,
Totals		\$576.99	\$420.81	Wage + Benefits = \$83.15 average hour rate

UNION HOLIDAY ANALYSIS FOR WESTCHESTER COUNTY, NEW YORK (April, 2019)

Union	Classification	Paid	Overtime
Carpenters	Heavy/Highway	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Day after Thanksgiving, Presidents Day	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Day after Thanksgiving, Presidents Day
Laborers	Heavy/Highway	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday
Painters		None	New Year's, Thanksgiving, day after Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day
Electrician	Wireman/Technician	None	New Year's, Memorial Day and July 4 th Labor Day, Thanksgiving, Christmas, Veterans Day, Presidents Day, day after Thanksgiving, Columbus Day, Good Friday
Masons	Heavy/Highway	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day
Roofers		None	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day
Plumbers		None	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Presidents Day, day after Thanksgiving, Good Friday
Sheet metal		None	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, day after Thanksgiving, Good Friday, day before Christmas
Sprinkler Fitter		None	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day
Operating Engineers		New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday
Teamsters		New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, Veterans Day, Presidents Day, Good Friday, Lincoln's Birthday
Iron Workers		None	New Year's, Thanksgiving, Christmas, Memorial Day, July 4 th , Labor Day, 1/2 Day before Christmas, 1/2 Day before New Years

** Paid holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed. Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.*