



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
PO Box 44000 Olympia Washington 98504-4000

March 8, 2016

Alan Paja
Representative
Pacific Northwest Regional Council of Carpenters
25120 Pacific Hwy. S., Suite 200
Kent, WA 98032

Re: Request for redetermination with regard to Industrial Statistician's July 26, 2012 SIP Forms Determination

Dear Mr. Paja:

Thank you for your March 13, 2013 request for reconsideration of the determination dated July 26, 2012, issued by Industrial Statistician Ann Selover, pertaining to the appropriate prevailing wage scope of work for the stay in place (SIP) metal forms used on the Murray Morgan Bridge Rehabilitation (MMBR) in Tacoma.

The state's prevailing wage law is chapter 39.12 RCW. The administrative rules for the prevailing wage law are in chapter 296-127 WAC. RCW 39.12.020 requires prevailing wages on public works.

This is a reconsideration of a determination of the Industrial Statistician regarding coverage of the referenced work under Washington's prevailing wage laws and is made pursuant to WAC 296-127-060(3). See the attached document, "Prevailing Wage Determination Request and Review Process."

Under RCW 39.12.015:

All determinations of the prevailing rate of wage shall be made by the industrial statistician of the department of labor and industries.

Under WAC 296-127-060(3):

Any party in interest who is seeking a modification or other change in a wage determination under RCW 39.12.015, and who has requested the industrial statistician to make such modification or other change and the request has been denied, after appropriate reconsideration by the assistant director shall have a right to petition for arbitration of the determination."

The prevailing wage rates are identified by trade and occupation names. The state prevailing wage law, chapter 39.12 RCW, does not require that any particular work be performed by a particular craft. It does require, however, that when prevailing wage rates have been determined for a particular type of work, workers performing such work on public projects must be paid not less than the prevailing rate for the scope of work actually performed. The trades and occupations that are applied on work covered by the prevailing wage laws are described in chapter 296-127 WAC. In this case, my analysis focuses on whether the type of work performed is more similar in nature to the Carpenters scope of work, described in WAC 296-127-01310, or the Ironworker's scope of work, described in WAC 296-127-01339.

RCW 39.12.010(1) defines the "prevailing rate of wage" as: "the rate of hourly wage, usual benefits, and overtime paid in the locality, as hereinafter defined, to the majority of workers, laborers, or mechanics, in the same trade or occupation." The courts clarified this point in *Lockheed Shipbuilding Co. v. Dep't of Labor and Indus.*, 56 Wn. App. 421, 783 P.2d 1119 (1989). There the type and nature of the work was important for the correct prevailing wage scope of work description. *Lockheed*, 56 Wn. App. at 424, 429. The facts considered by the court involved shipyard boilermakers working in the shipyard, using tools that boilermakers normally use in the shipyard.

However, the Director, trial court and appellate court all found that pipefitter construction rate was correct and the shipyard boilermaker rate was incorrect. *Lockheed*, 56 Wn. App. at 422. In *Lockheed*, the construction pipefitter rates were correct for the type and nature of work to perform welding on pipe that would become an outfall pipe for a waste water treatment plant. *Lockheed*, 56 Wn. App. at 424. In that case the Washington State Court of Appeals ruled that the department was correct in its conclusion that the pipefitter construction rate, rather than the boilermaker shipyard rate, was the applicable prevailing wage rate for welding work performed on that public works project based on "type" of work performed, rather than the fact that it was performed at a shipyard by shipyard workers.

In this case the principles of *Lockheed* apply. We must consider whether the work on the metal SIP forms on the Murray Morgan Bridge was more similar to work described in the Ironworker or Carpenter trade or occupations as described in the scopes. In making this decision, the question is whether, after consideration of the Industrial Statistician's determination, and a careful review of the entire record, the evidence supports the work being categorized into one of these scopes of work

ISSUE:

What is the proper scope of work for the work performed on the Murray Morgan Bridge city approach: the Carpenters Scope of Work or the Ironworkers Scope of Work?

BACKGROUND:

According to the PCL Construction website¹, the Murray Morgan Bridge Rehabilitation Project for the City of Tacoma involved the full rehabilitation of a 99-year-old vertical lift bridge over the Foss Waterway in Tacoma, Washington. The structure of the bridge consists of lattice column and girder construction, two fixed truss spans with integral lift towers, a lift span that houses the span drive machinery and a precast column, and a cap-and-girder approach. PCL Construction provided lead abatement of the steel structures, along with application of a new three-coat paint system, repairing and improving the structural rating factor from 2 to 80 (out of 100), and replacing the mechanical and electrical systems on the bridge. The website cites that the project was a Design-Build project, which meant that PCL both designed the improvements and also served as the general contractor for the construction work. According to the City of Tacoma website², design and construction began in winter 2011. The bridge opened to vehicle and bicycle traffic on February 1, 2013.

In the project design, the Murray Morgan Bridge Rehabilitation project called for a renovation of the concrete bridge deck. To form this bridge deck, workers constructed steel "edge forms" which they welded directly to the bridge girders. Following welding in place of the edge forms, corrugated steel sheet decking, the stay in place metal "SIP" forms, are screwed down onto the welded in place edge forms. After this, concrete was poured into the SIP metal forms and allowed to cure. Due to specific

¹ <http://www.pcl.com/Projects-that-Inspire/Pages/Murray-Morgan-Rehabilitation-Project.aspx>

² <http://www.cityoftacoma.org/cms/one.aspx?objectId=26038>

factors necessitated by elements of the project, the SIP metal forms were designed to be securely installed and permanently attached to the bridge, rather than temporarily installed and ultimately removed after the concrete had cured.

On January 17, 2012, staff with PCL Construction Services emailed the Prevailing Wage section at the Department of Labor & Industries, and requested confirmation from the department that WAC 296-127-01310 (Carpenters) was the proper wage rate to apply to work to install SIP metal formwork, which concrete would be poured, in order to form the bridge deck for on the Murray Morgan Bridge.

Tim Gattie, P.E., then serving as PCL Construction's Project Manager for the Murray Morgan Bridge Rehabilitation, stated that these SIP forms were metal forms, installed by attaching metal haunch angle-shaped connectors, (called "haunch angles") to the iron beams that stretched across the bridge (called "bridge stringers"). The SIP metal form "pans" were then screwed down to the haunch angles using self-drilling screws. In support of his conclusion that the carpenter scope of work applied, Mr. Gattie offered that it was his opinion that these SIP metal forms were non-structural, because they were only installed to support the weight of the rebar and wet concrete. Once the concrete poured into them has cured, the SIP metal form system serves no purpose and has no connection to the structure other than through the metal haunch angles that connect the forms to the iron beam "bridge stringers." Lori Otto, then employee of PCL Construction, made the actual request for a wage determination providing a copy of the Carpenter scope of work WAC 296-127-01310 highlighting the areas that state carpenters "construct, erect, install and repair structures, structural members and fixtures made of wood, plywood, wallboard and materials that take the place of wood, such as plastics, metals," and "such as concrete forms."

Ann Selover, former Industrial Statistician conducted research before issuing her determination. On May 3, 2012, Ms. Selover had email communications with Randy Dubigk, WSDOT engineer with regard to the SIP form work for bridges. Mr. Dubigk provided more clarification about the nature of SIP metal forms, which he called "SIP forms." He also provided input from Marco Foster, WSDOT Assistant Construction Engineer, Bridge.

Mr. Dubigk's understanding was that for this installation of SIP metal forms on the MMBR, workers constructed steel edge forms (also referred to as "haunch angles") which they welded directly to the girders (also referred to as "bridge stringers"). In this setting, SIP forms were used to span the distance between bridge girders, providing a framework on bridges for installation of cast-in-place concrete decks. SIP forms were corrugated metal sheets permanently installed between the supporting superstructure members. Due to their corrugated cross section, the forms are able to carry the dead load of the deck while the concrete cures. The corrugations of the forms run perpendicular to the girder lengths. After the concrete has cured, these SIP metal forms, as the name indicates, remain in place, becoming a permanent component of the bridge superstructure. Although they provide no vertical support of the concrete deck slab once the concrete has been cured, Mr. Dubigk offered his opinion that metal SIP forms possess tension and compression properties that may have an effect upon the overall functioning of the bridge superstructure over time.

Mr. Dubigk further stated that before SIP forms were invented, wooden and later fiberglass formwork was used on bridges. In these cases though, after curing of the concrete, the formwork had to be removed. Installation and removal of this type of formwork is quite labor intensive and SIP metal forms provide an alternative to this effort.

Mr. Foster provided further insight. For WSDOT projects, on bridge decks, concrete forms designed to stay in place made of steel or precast concrete panels are generally not used. The WSDOT Standard Specification 6-02.3(17) specifically states "On bridge decks, forms designed to stay in place made of

steel and precast concrete panels shall not be used.” He further offered that the Murray Morgan Bridge was a design-build project, and though SIP metal forms are not WSDOT standard process, they may have been allowed on this project since the contractor is also the Engineer of Record for the design.

On January 31, 2012, Chris McClain with the Ironworkers Local 86 asked by email for a determination pertaining to this same work finding that the Ironworker was the proper scope of work. In his email, he provided pictures of the SIP metal forms, which he referred to as decking, and the haunch angle/edge form product that was being installed on the project. He provided examples through letters from Ironworker contractors that performed installations of metal decking/formwork, fastened in place by welding, screwing, and powder actuated devices, with the work being performed by Ironworker. It was his opinion that this SIP metal form system on the Murray Morgan Bridge was more than a similar metal form system and stated that these materials will be permanently attached to the bridge girders by means of welding and fasteners.

On July 26, 2012 a formal determination was issued by industrial statistician Ann Selover, finding that the Ironworkers scope of work was the most appropriate classification due to the nature of the work being performed. Ms. Selover summarized both parties’ arguments as follows: Representatives from the PNW Ironworkers assert that all work in connection with attaching the edge forms and fastening the SIP metal forms to the edge forms is work that involves materials within the scope of Ironworker. It is structural in nature, which falls within the Ironworker scope of work. The Ironworkers also admit that if the SIP forms were constructed of wood rather than metal, the work of attaching the forms to the edge forms would fall within the Carpenters scope of work.

Ms. Selover went on in her letter to summarize the arguments by the Pacific Northwest Regional Council of Carpenters by stating that the subject work is non-structural in nature, and is a concrete forming system that is clearly within the Carpenters’ scope of work. The representative of the PNW Carpenters also stated that the Carpenters’ scope of work specifically refers to building of concrete forms and that this work should not be excluded from their scope of work because the forms used here are metal forms rather than made of wood. The Carpenters’ scope of work specifically includes “materials that take the place of wood, such as metals...” PNW Carpenters also claimed that welding is clearly within the Carpenters’ scope of work.

Ms. Selover reviewed the two scopes of work, Ironworker and Carpenter in her Determination of July 26, 2012. The introductory paragraph of the Ironworker WAC 296-127-01339 uses the word “all” preceding the described work, “*structural, architectural and reinforcing iron and steel...*” It was her opinion that the indicated intent was to carve out an exclusive portion of work within this classification. She points out that the Carpenters’ scope of work is less expansive, because it doesn’t use the word *all*, but does speak to “construct, erect, install and repair *structures* [and] *structural members*.” WAC 296-127-01310.

The next issue she addressed was whether the metal SIP form itself is structural or non-structural in nature after being installed on a bridge structure. In May 2012, Ms. Selover communicated with Marco Foster, Assistant Construction Engineer, Bridge, at WSDOT. Mr. Foster relayed that WSDOT does not promote the use of steel SIP forms. In fact, WSDOT Standard Specification 6-02.3(17) specifically states “on bridge decks, forms designed to stay in place made of steel and precast concrete panels shall not be used.” He provided his opinion that the SIP metal forms are structural, in that they are engineered to support the wet concrete for placement until it has attained sufficient strength to support itself. Mr. Foster also pointed to a contractor statement that “Although they provide no vertical support of the concrete deck slab once the concrete has been cured they possess tension and compression properties that may have an effect upon the overall functioning of the bridge superstructure over time.”

Finally, Ms. Selover summarized PNW Carpenters' assertion that because the materials used for the SIP forms "take the place of wood" the work falls within the Carpenters scope of work, and PN Carpenters further stated that it has been industry practice for Carpenters to form for concrete "with the evolving technology." She concluded that "to interpret the Carpenters scope to work 'take the place of wood' language literally could expand the Carpenter scope to include nearly all the work to which other scopes of work apply, and would make the distinctions and the reasons for having other scopes of work meaningless." In her opinion, wooden formwork that is removed after the concrete is cured does not serve the same purpose as the metal SIP forms.

Her determination concluded that, "Based on the nature of the work performed regarding these SIP forms, including the materials and processes used in the performance of that work, the construction and welding of the edgeforms to the bridge structure, and the installation of the permanent metal SIP forms, is structural work within the Ironworkers scope of work, and must be paid at the prevailing rate of wage for that work classification. It would be incorrect to apply the Carpenters prevailing rate of wage to this work."

On March 13, 2013, Ed Triezenberg, with Pacific Northwest Regional Council of Carpenters (hereafter referred to as the PNW Carpenters) requested reconsideration of the determination issued on July 26, 2012. In his letter, Mr. Triezenberg reiterated that the project engineer identified the work as non-structural, cited a 1965 NLRB decision (Case No. 6-CD-168) relating to a bridge construction project in Pennsylvania that identified work relating to installation of metal SIP forms/decking as carpenter work, and documentation from carpenter employers from past years over a number of other states stating that carpenters were assigned this type of bridge construction work. His letter provided a number of attachments in support of these arguments, and raised a number of procedural concerns.

NEW EVIDENCE AND ARGUMENT PRESENTED

In reviewing and reconsidering the evidence relating to this issue, it became clear that the matter has been an issue of dispute between the Carpenters and the Ironworkers for quite some time. Evidence provided included

- Five letters from 1963 to 1970, from the National Joint Board for the Settlement of Jurisdictional Disputes for the Building and Construction Industry, responding to disputes between the Carpenters and Ironworkers relating to the proper assignment of work for metal concrete forms and decking.
- Numerous letters

On October 23, 2014, I met with Alan Paja with the Pacific Northwest Regional Council of Carpenters, and discussed the issues involved in the redetermination.

On October 24, 2014, I met and discussed the issues involved with the redetermination with representatives of the Pacific Northwest Ironworkers Local #86, including Steve Pendergrass, Jeff Glockner, Eric Gustafson, and Chris McClain.

On November 11, 2014, I visited the Murray Morgan Bridge with Chris McClain and Jeff Glockner of the PNW Ironworkers Local #86 to view the structure and get a first-hand look at the elements involved in the discussion. I also visited a construction site in Seattle, to see the installation of SIP metal decking in a building, for comparison purposes.

On November 19, 2014, I received a letter from Mr. Paja supplementing the original March 13, 2013 request for reconsideration and providing additional evidence. In this response, he provided statements

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from PCL bridge engineers Tyler VanderLinden and Peter Roody relating to the use and functionality of SIP metal forms.

On December 9, 2014, Emily Cook, a research assistant with L&I, had a phone conversation with Marco Foster, PE with WSDOT. In this conversation, Mr. Foster said that metal forms are rarely used on bridges in Washington State because of their tendency to rust and corrode. However, they are allowed to be used where the geometry of the structure is complex.

On December 10, 2014, L&I research assistant Emily Cook spoke with Mark Gaines, Construction Engineer for Bridge Construction, WSDOT. In her conversation, she asked Mr. Gaines if the SIP metal forms were removed from the Murray Morgan Bridge, would additional concrete need to be added. He replied that, depending on the bridge's design, an additional ½ to 1 inch of concrete might need to be added. Furthermore, he replied that removing the metal forms would in fact make the bridge less structurally sound since they do provide structural support.

On May 6, 2015, I observed installation of formwork and framing for a concrete pour at the Troy Block Site at the invitation of the PNW Carpenters. Troy Block is a two-building series, containing 13 floors. The materials and tools used, method that the materials were applied, and purpose were understandably different from the work performed at the Murray Morgan Bridge city approach. However, this experience was informative relating to the elements involved with the concrete forms normally installed as a component of the Carpenter scope of work. At this building under construction, I viewed carpenters installing a number of concrete forms made of different material, including wood, metal, and Styrofoam.

On May 12, 2015, I received an email from Alan Paja that contended that the department's review of the work performed on the Murray Morgan Bridge needed to differentiate between the segments of the bridge. On the bridge project, PCL built two types of decks – one, the lift span, which was specially designed to be lightweight; and the other, in the city approach segment, which was more standard, involving a metal SIP form for the concrete. He elaborated that the lighter lift span segment used an exodermic system, designed to need less concrete, with rebar integrated directly into the steel structure of the bridge, and with metal decking that is integral to the structure of the bridge, and which could not be removed. In the City approach segment, the concrete was thicker, and the metal forms could be removed if they had wanted to do so and had applied an anti-bonding agent to allow for removal. He contended that the nature of the work, structure and materials involved on the lift span was appropriate for classification to be considered ironworker, but the nature of the work, methods, materials and tools used on city approach segment of the bridge justified that it should be most appropriately designated as falling under the Carpenter scope of work.

On August 12, 2015, I sent a response to Mr. Paja asking for more information relating to his May 12th submittal, and specifically inquiring about how the differences he described in the two bridge segments equated to the lift section falling most appropriately under the Ironworker scope, and the city approach segment falling under the Carpenter scope of work. On August 18th I shared this email with Chris McClain, of the PNW Ironworkers, so that he could see the dialogue and provide any information relevant to the questions being explored.

On September 14, 2015, I met with Alan Paja to discuss his responses to the August 12th email and explore the differences in the work performed by the Ironworkers on the lift approach in comparison to the work performed on the city approach by the Carpenters. At issue here was the fact that the original determination by Ms. Selover contained facts and analysis that did not differentiate as to whether it was pertaining to the center lift span of the bridge or if it was pertaining to the city approach. Mr. Paja contended that the design elements, materials, and work required were significantly different between the

center lift span and the city approach. The center lift span was an exodermic bridge structure, and as such, was designed to have structural properties deliberately built into the design of the bridge. Consequently, and appropriately, the center lift span was built within the Ironworker scope of work. He requested that the review and analysis be focused specifically on the city approach section of the bridge, and the metal SIP forms that were installed in that area. At that time, we did not have a copy of the design plans for both the city approach and the center lift span so that we could understand the similarities and differences. Copies of the city approach plans were obtained, and discussed with all parties at a meeting held on December 14, 2015.

On December 14, 2015, I held a meeting for all involved parties to attend, and both sides were given the opportunity to present any additional evidence that had not been previously provided and summarize their opinion with regard to the Determination issued on July 26, 2012. In attendance at this meeting was Tyler VanderLinden representing PCL Construction, Alan Paja representing PNW Carpenters, Chris McClain and Jeff Glockner from the PNW Ironworkers Local #86 and Jim Christensen, current Industrial Statistician for the department.

Tyler VanderLinden summarized his argument first. He stated PCL's decision to use Carpenters for this work versus Ironworkers was because of the system chosen for the city approach section by SIP of Delaware -- and there's multiple manufacturers of this SIP form system, because it was basically a system that replaced temporary formwork. He stated that PCL brought it to the State of Washington. This system provides no additional benefits to the structure, according to Mr. VanderLinden. The difference with regard to the center lift span portion is that an exodermic deck type system was used that was integral with the concrete. It cannot be removed and adds structural capacity to the roadway system. He further stated that the statement from the engineer of record that said the system was temporary and did not add any structural capacity was still his opinion. Lastly, he believed that one section of the city approach actually had a wood system, because the metal system PCL ordered didn't work.

Alan Paja representing PNW Carpenters reiterated that it was not structural. This was concrete formwork and was designed to be concrete formwork. It is his opinion that since it was not structural, the analysis should have ended there. He further opined that should we go through the analysis of what was the purpose, which was simply to provide a structure for the concrete deck. Once that concrete was set, it was done. It's not part of the structure of the bridge, although it does remain attached. The method was the metal forms, and that the question only arose, because it wasn't wood and it was metal. Metal can be substituted for wood when it's designed to do the same thing. It is his opinion that this is the case herein. The work performed should be designated as being within the Carpenters scope of work.

Chris McClain representing PNW Ironworkers Local #86 started off by stating this isn't the only bridge where SIP forms were used. SIP forms were also used on the Kalamazoo River Bridge in southern Washington. He wasn't sure who the contractor was and it has been years since it was put in. It was also unclear who performed this work.

Mr. McClain thought that we needed to see the fine differences that make the city approach and the lift different. He said that we need to take into consideration gauge thickness of the concrete. He asked Mr. VanderLinden to address what the definition of structural integrity is, because it may not be required to hold as much of a load. It is his opinion that it was more of what capacity are we asking this product to perform, and then that becomes the structural portion of it. Mr. VanderLinden stated that he didn't believe that it was relevant to argue about whether the SIP form provided additional structural integrity. It is more important to discuss its functional purpose of the SIP form and was a consideration of the project engineer when conducting his calculations with regard to project design.

Mr. McClain further stated that he believed the better question is whether the SIP form performs a duty while it's there. It was his opinion that it did, because if you are driving concrete over something, and that concrete is sitting on a thing, the weight of the concrete will displace to any item below it, regardless of whether it was meant to be there or not. Mr. McClain stated that is why some states haven't used it. A study in Michigan was provided where they did compressive tests and shear tests. The study did show that on compression testing, bridges with SIP metal forms in place stood or upheld up to 25 percent greater than bridges without. It was the Ironworkers' opinion that this is how concrete works, and that concrete can't be placed on something that is non-existent. Mr. Glockner, who was in attendance in support of the Ironworkers with Mr. McClain, addressed the amount of welding that goes into this process as well. It was his opinion that there was a lot of welding of the haunches onto the deck and beams, thereby, making the argument that this is non-structural difficult to believe.

ANALYSIS

The question at hand in this matter is a determination regarding the proper Prevailing Wage scope of work for the work performed installing the SIP metal forms on the city approach segment of the Murray Morgan Bridge. The two scopes of work involved in this dispute are Carpenter and Ironworker.

The analysis that I am applying is to examine the elements of the work being performed – and apply the specific language of the scopes that potentially apply. I give significant weight to specific language in a scope of work. Specific language in one scope of work may overcome more general language in another scope of work.

These two scopes of work are different in their nature and focus, and lay out the differences between the work to be performed at these different wage rates. These differences are summarized and laid out most clearly in the introductory paragraphs of these scopes. The body of the scope details the specific and general work that is meant to be categorized. The table below shows both the introduction and body of these two scopes of work, side by side. I have bolded the text which I feel is most relevant and applicable to the decision at hand.

WAC 296-127-01339 Ironworkers.	WAC 296-127-01310 Carpenters.
For the purpose of the Washington state public works law, chapter 39.12 RCW, ironworkers perform all work in connection with field fabrication and/or erection, installation , removal, wrecking and dismantling of structural , architectural and reinforcing iron and steel , ornamental lead, bronze, brass, copper and aluminum, and plastics or other materials when used in place thereof.	For the purpose of the Washington state public works law, chapter 39.12 RCW, carpenters construct, erect, install and repair structures, structural members and fixtures made of wood, plywood, wallboard and materials that take the place of wood , such as plastic, metals, composites, and fiberglass, using carpenter hand tools and power tools.
The work performed by ironworkers includes, but is not limited to: <ul style="list-style-type: none"> • Steel and metal houses and packaged buildings. • Bridges, viaducts, cableways, 	The work includes, but is not limited to: <ul style="list-style-type: none"> • Build rough wooden structures, such as concrete forms, scaffolds, wooden bridges, trestles, coffer dams, tunnel and sewer support; welding and burning. • Install ladders, handrails, walkways, platforms and

<p>tramways, monorails.</p> <ul style="list-style-type: none"> • Locks, gates, metal forms, railings (including pipe). • Steel towers, energy producing windmill type towers, nuclear reactors. • Frames in support of boilers. • The installation of metal siding and metal roof decking, regardless of the fastening method, or what it is fastened to. • All reinforcing work in connection with field fabrication, handling, burning, welding and tying of all materials used to reinforce concrete structures. • The signaling, rigging, hoisting, aligning, bolting, riveting, or welding of structural-steel members. • The unloading, loading, distributing, stockpiling, hoisting, rigging, and handling of materials used by ironworkers and all cleanup work. <p>Work process:</p> <p>(1) Structural:</p> <p>(a) Erecting:</p> <ul style="list-style-type: none"> • Connecting • Fitting • Hooking on • Bolting up • Torquing • Signaling • Preengineered buildings • Sheeting <p>(b) Rigging:</p> <ul style="list-style-type: none"> • Cranes • Derricks • Land rigs • Cable splicing <p>(c) Maintenance of equipment:</p> <ul style="list-style-type: none"> • Dismantling • Field rigging • Moving field equipment <p>(2) Welding:</p> <p>(a) Acetylene welding</p> <p>(b) Electric arc welding</p> <p>(c) Cutting and burning</p> <p>(d) Heliarc.</p>	<p>gangways.</p> <ul style="list-style-type: none"> • Install door and window bucks (rough frames in which finished frames are inserted) in building frame work and brace them with boards nailed to frame work. • Install subflooring in buildings. • Nail plaster grounds (wood or metal strips) to studding. • Fit and nail sheathing on outer walls and roofs on buildings. • Construct, erect, install and repair commercial, industrial and residential structures. • Select specified type of lumber or other materials. • Prepare layout, using rule, framing square and calipers. • Mark cutting and assembling lines on materials, using pencil, chalk, and marking gauge. • Shape materials to prescribed measurements, using saws, chisels and planes. • Assemble, cut and shape materials and fasten them together with nails, dowel pins, or glue. • Verify trueness of structure with plumb bob and carpenter's level. • Apply decorative paneling to walls. • Erect frame work for structures and lay subflooring. • Cover subfloor with building paper to keep out moisture and lay hardwood, parquet and wood-strip-lock floors by nailing floors to subfloor or cementing them to mastic or asphalt base. • Build stairs and layout and install partitions and cabinets. • Install metal roof decking and metal siding, regardless of the fastening method, or what it is fastened to. • Install all other types of siding, regardless of composition, fastening method, or what it is fastened to. • Fit and install prefabricated wooden cabinets, window frames, door frames, doors, weather stripping, interior and exterior trim, and finish hardware, such as locks, letter drops and kick plates. • Apply acoustical tile to ceilings and walls of buildings to reduce reflecting of sound and to decorate rooms. • Cement tile to masonry surface. • Nail channels or wood furring strips to surfaces to provide mounting for tile. • Place building paper between tile and furring strip to keep out moisture. • Nail, screw, or staple tile to wooden furring strips. • Nail or screw moulding to walls to support and seal joint between ceiling tile and wall. Hang dry lines to wall mauling. • Drive hanger inserts into reinforced concrete ceiling, suspend and bend hanger wires at points touching dry lines. • Thread wires through holes in main runners and cut and attach cross supports to suspended runners and wall mauling. • Cut tiles for fixtures and borders and insert tiles into supporting frame work.
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In analyzing these two scopes:

Materials being installed: In this case, the material being installed on the Murray Morgan Bridge for the SIP metal form was galvanized steel.

Steel and metal elements are specifically described as a primary element in the Ironworker scope, whether it is structural, reinforcing, or architectural. Also mentioned is ornamental lead, bronze, brass, copper and aluminum, and plastics or other materials when used in place of these materials.

In the Carpenters scope, the primary element focused on is **structures, structural members** and fixtures made of wood, plywood, wallboard and **materials that take the place of wood**. In fact, in testimony from the Ironworkers, the Ironworkers acknowledged that if the forms had been made of wood, that this would have been Carpenter's work.

The "materials that take the place of wood" reference in the Carpenters Scope of Work could be construed very broadly, and taken without context to the primary intended focus of the scope, could potentially make the Carpenter scope apply across many other scopes in an unintended manner. The Ironworkers scope has a similar reference to "other materials when used in place thereof", and that has not been used to assign the work on structural wood to the Ironworkers in place of its more obvious assignment to the Carpenters.

In this case, the material used was metal, which is the primary element focused on in the Ironworker scope, and which is a secondary element in the focus of the Carpenters scope. Ultimately, I find that the most relevant scope for the materials being used on this project is the Ironworker scope.

Tools and Methods involved in the work: On the Murray Morgan Bridge, the SIP metal forms were permanently adhered to the angle haunch/edge forms through the use of spot welds. Following that, the SIP metal forms were fastened to the edgeforms through self-drilling screws.

In analyzing how the fastening method effects the decision, it is important to note that both scopes mention welding.

- The Carpenters scope states that carpenters "build rough wooden structures, such as concrete forms, scaffolds, wooden bridges, trestles, coffer dams, tunnel and sewer support; **welding and burning.**"
- The Ironworkers scope mentions welding in two places and goes into greater detail, stating that Ironworkers perform:
 - o All reinforcing work in connection with field fabrication, handling, burning, **welding** and tying of all materials used to reinforce concrete structures.
 - o The signaling, rigging, hoisting, **aligning, bolting, riveting**, or welding of structural-steel members.
 - o (2) **Welding: Acetylene welding, Electric arc welding, Cutting and burning, Heliarc.**

Relating to the fastening of the SIP metal forms to the edgeforms through self-drilling screws, neither scope specifically mentions self-drilling screws. However, other types of fastening are mentioned:

- The Ironworkers scope states that Ironworkers perform:
 - o "The signaling, rigging, hoisting, **aligning, bolting, riveting**, or welding of structural-steel members."
- The Carpenters scope states that they perform:
 - o "Construct, erect, install and repair commercial, industrial and residential structures."

- “Assemble, cut and shape materials and fasten them together with nails, dowel pins, or glue.”

The Ironworker scope goes into greater focus and detail about the methods of welding, and in doing so, puts more emphasis on the welding as a primary element for that scope of work. Taken in combination with the Ironworkers intended focus on steel and metal construction elements, in looking at the tools and fastening methods specifically utilized for this work, the methods and work described in the Ironworker scope more closely applies.

Purpose of the work: For this analysis, the question is whether the function and purpose of the structure being constructed and the work being performed aligns more closely with the Ironworkers scope or the Carpenters scope.

First, I will analyze the setting for the construction. The setting for the installation of these SIP metal forms was on a bridge in Tacoma. The Ironworker scope mentions bridges, without specific qualification around the material, other than the metal materials mentioned in the introductory statement:

- “The work performed by ironworkers includes, but is not limited to: **Bridges**, viaducts, cableways, tramways, monorails.”

The Carpenter scope mentions bridges, but with a specific qualifier within the clause relating to rough wooden structures. The language is below, with emphasis added:

- “The work includes, but is not limited to: **Build rough wooden structures, such as concrete forms, scaffolds, wooden bridges...**”

Next, I will look at the functional purpose of the objects being installed. The fact that the SIP metal forms were a metal form is important to the analysis. Both scopes of work discuss forms as an appropriate duty.

- In the Carpenters scope of work, the reference to forms states that the work is to “Build rough wooden structures, such as concrete forms, scaffolds...”,
- In the Ironworkers scope of work, the language more specifically states that the work “includes but is not limited to... Locks, gates, metal forms, railings (including pipe).”

Based on the testimony and evidence received, the SIP metal forms did serve as a concrete form – they were installed on the bridge for the purpose of concrete being placed into them, so that concrete would cure, and then serve as the structural mechanism to support the dead load of the bridge. In this way, the SIP metal form aligns with the purpose outlined in the Carpenter scope. However - while the function of being a concrete form could have been achieved by a number of different materials – in this case, the contractor chose SIP metal forms to construct the bridge deck, according to the contractor, due to the convenience and cost savings of not having to remove the form after the curing was complete. The Ironworkers scope delineates that it covers “metal forms,” which is a more specific reference than the more general reference to “rough wooden structures, such as concrete forms” that is in the Carpenters scope of work.

An important question relating to the purpose of the installation is whether the SIP metal forms installed on the bridge were merely a type of concrete form, comparable in function to a wooden form, or whether they were a metal form that contributed structural and reinforcing utility beyond that of a wooden concrete form which could have been used.

In looking at this matter, it is important to note that both the Ironworkers and Carpenters scopes mention structural purposes as contemplated focus of the work:

- Ironworkers perform **all** work in connection with **field fabrication and/or erection, installation**, removal, wrecking and dismantling of **structural**, architectural and **reinforcing** iron and **steel**, also do reinforcing work in connection with field fabrication, handling, burning, welding and tying of all materials used to reinforce concrete structures.
- The Carpenter scope states that carpenters **construct, erect, install** and repair **structures, structural members** and fixtures made of wood, plywood, wallboard and **materials that take the place of wood**, such as metal.

Whether the SIP forms had structural value beyond their usefulness as a concrete form which happened to be metal was a matter of contention in the testimony. A WSDOT bridge engineer, Marco Foster, provided an opinion that the form did provide some structural value, both in holding the concrete while it cured, and in its participation as a component in the overall superstructure of the bridge. Another WSDOT engineer, Mr. Dubigk expressed an opinion that the forms had structural value, as did Mr. Gaines. The three individuals from WSDOT, however, did not have direct experience with this project. In contrast, the PCL project engineer, Mr. VanderLinden testified that the SIP forms did not have structural value – the forms were constructed and designed so that they could hold the weight of the wet concrete alone, and were designed to hold no additional weight other than their own weight and the weight of the wet concrete that they were designed to withstand. Mr. Roody, another PCL engineer, also provided an opinion that the metal forms had no structural value. Mr. Roody also stated that “We do not consider the stay-in-place forms as a structural element and they do not affect the long term performance of the structure. *The deck itself is designed to support its self weight, the weight of the forms and traffic loadings.*” (emphasis added)

It seems clear to me that the SIP metal forms had the basic structural purpose of holding and reinforcing concrete, even if it was temporarily while the concrete was curing. In this setting, though, a wood form would likely have served the same temporary structural purpose.

The contrasting testimony of these structural engineers does not present a clear answer to the question on whether the forms had a structural purpose beyond the temporary function of holding the wet concrete. Because they were installed as a permanent feature, the metal forms may have only been meant to have temporary structural purpose, but they ultimately did become a part of the permanent structure of the bridge.

Additionally, Mr. Roody’s statement about the design of the deck indicates that the bridge was engineered to accommodate the SIP forms as a permanent part of the bridge structure. I am persuaded that this qualifies them as structural elements, in that they were a part of the permanent structure. Even though the SIP metal forms themselves were not engineered and designed to be structurally supportive of a load beyond that initial purpose, the rest of the bridge structure around them was structurally engineered to accommodate their lasting weight and presence.

While it may be true that that any initial structural value for the SIP metal forms would be no greater than the structural value that a wood form would have had if it would have been used and removed, ultimately, the contractor chose metal forms. In addition, the contractor chose to install the metal forms permanently. In choosing to support and temporarily reinforce the concrete deck through the use of metal forms, attached through both welding and self-drilling screws, the SIP forms would become a permanent part of the structure, which was a structural steel bridge.

CONCLUSION

After consideration of the Industrial Statistician's determination, and a careful review of the entire record, I am persuaded that the evidence supports the Industrial Statistician's July 26, 2012 determination be affirmed. The most appropriate prevailing wage scope of work for the installation of SIP metal forms on the Murray Morgan Bridge city approach segment is the Ironworkers scope of work.

In assessing the totality of the record relating to the methods, materials, tools and purposes necessary for the installation of the SIP metal forms, and closely reading both Scopes of Work and analyzing the evidence and testimony, the specific language in the Ironworker scope more closely pertains to the work performed, rather than more general language in the Carpenter scope. No one element in this review proved to be dispositive, but rather, the factors in combination established the appropriate result. The primary factors in the decision were:

- The project was on a bridge, a structural steel bridge, which is specifically mentioned in the Ironworkers scope
- The element being installed was a metal form, which is specifically mentioned in the Ironworkers scope
- The material involved, for both the edgeforms and the SIP metal forms, was steel/metal, and while it was intended to hold concrete until cured, it was designed and installed as a permanent component of the structure of the bridge. This aligns more with the structural steel material focused on throughout the Ironworkers scope.
- The work involved fastening structural steel edgeforms to the structural steel bridge "stringers," and welding of structural steel members is specifically mentioned in the Ironworkers scope.

This conclusion is limited to the facts of this case and this particular project. Should those facts change or are not the same as found herein, the conclusion may differ as well.

Should you disagree with my redetermination, I have included "*Prevailing Wage Determination Request and Review Process*" as information on the next steps in the process.

I greatly appreciate your participation and cooperation with the fact finding related to my inquiry. I apologize for the long delay in issuing this redetermination. The need to make an informed decision with regard to this matter was of most importance to me.

Sincerely,



Elizabeth Smith, Assistant Director
Fraud Prevention & Labor Standards

Cc: Tyler VanderLinden & Greg Yourechuk, PCL Construction Services Inc.
Steve Pendergrass, Chris McClain & Jeff Glockner, PNW Ironworkers Local #86
Randy Dubigk, WSDOT
Evelyn Shapiro-O'Connor, PNWRCC
Peter Roody, Project Engineer, WSDOT
Marco Foster, Project Engineer, WSDOT
Mark Gaines, Construction Engineer for Bridge Construction, WSDOT
Jim Christensen, Industrial Statistician and Prevailing Wage Program Manager

Prevailing Wage Determination Request and Review Process

RCW 39.12.015 is the basis for requesting a determination, since it provides:

All determinations of the prevailing rate of wage shall be made by the industrial statistician of the department of labor and industries.

If you disagree with a determination the industrial statistician provides, WAC 296-127-060(3) provides for a review process:

(3) Any party in interest who is seeking a modification or other change in a wage determination under RCW 39.12.015, and who has requested the industrial statistician to make such modification or other change and the request has been denied, after appropriate reconsideration by the assistant director shall have a right to petition for arbitration of the determination.

(a) For purpose of this section, the term "party in interest" is considered to include, without limitation:

(i) Any contractor, or an association representing a contractor, who is likely to seek or to work under a contract containing a particular wage determination, or any worker, laborer or mechanic, or any council of unions or any labor organization which represents a laborer or mechanic who is likely to be employed or to seek employment under a contract containing a particular wage determination, and

(ii) Any public agency concerned with the administration of a proposed contract or a contract containing a particular wage determination issued pursuant to chapter 39.12 RCW.

(b) For good cause shown, the director may permit any party in interest to intervene or otherwise participate in any proceeding held by the director. A petition to intervene or otherwise participate shall be in writing, and shall state with precision and particularity:

(i) The petitioner's relationship to the matters involved in the proceedings, and

(ii) The nature of the presentation which he would make. Copies of the petition shall be served on all parties or interested persons known to be participating in the proceeding, who may respond to the petition. Appropriate service shall be made of any response.

If you choose to utilize this review process, you must submit your request within 30 days of the date of the applicable industrial statistician's determination or response to your request for modification or other change. Include with your request any additional information you consider relevant to the review.

Direct requests for determinations, and for modification of determinations via email or letter to the prevailing wage industrial statistician:

Jim P. Christensen
Industrial Statistician/Program Manger
Department of Labor & Industries
Prevailing Wage
P O Box 44540
Olympia, WA 98504-4540
Jim.Christensen@Lni.wa.gov

Prevailing Wage Determination Request and Review Process

Direct requests via email or letter seeking reconsideration (redetermination) by the assistant director to:

Elizabeth Smith, Assistant Director
Department of Labor & Industries
Fraud Prevention and Labor Standards
P O Box 44278
Olympia, WA 98504-4278
Elizabeth.Smith@Lni.wa.gov

Direct petitions for arbitration to:

Joel Sacks, Director
Department of Labor & Industries
P O Box 44001
Olympia, WA 98504-4001

If you choose to utilize this arbitration process, you must submit your request within 30 days of the date of the applicable assistant director's decision on reconsideration (redetermination). Submit an original and two copies of your request for arbitration to the Director personally, or by mail. The physical address for the Director is 7273 Linderson Way, SW, Tumwater, WA 98501.

WAC 296-127-061 also contains the following provisions regarding petitions for arbitration:

In addition, copies of the petition shall be served personally or by mail upon each of the following:

- (a) The public agency or agencies involved,
 - (b) The industrial statistician, and
 - (c) Any other person (or the authorized representatives of such person) known to be interested in the subject matter of the petition.
- (2) The director shall under no circumstances request any administering agency to postpone any contract performance because of the filing of a petition. This is a matter which must be resolved directly with the administering agency by the petitioner or other party in interest.
- (3) A petition for arbitration of a wage determination shall:
- (a) Be in writing and signed by the petitioner or his counsel (or other authorized representative), and
 - (b) Identify clearly the wage determination, location of project or projects in question, and the agency concerned, and
 - (c) State that the petitioner has requested reconsideration of the wage determination in question and describe briefly the action taken in response to the request, and
 - (d) Contain a short and plain statement of the grounds for review, and
 - (e) Be accompanied by supporting data, views, or arguments, and
 - (f) Be accompanied by a filing fee of \$75.00. Fees shall be made payable to the department of labor and industries.