

Yearly Review of the Pilot Project: Job Order Contracting (JOC) 2014

Purpose and Scope

The purpose of this review is to evaluate the first year of using Job Order Contracts (JOC) during its pilot program to accomplish FHWA eligible preventative maintenance bridge work. Specifically, this review will discuss the procurement, scheduling, cost efficiency, and quality of work, as compared with the established delivery method employed by the NJDOT for Federal Preventative Maintenance Contracts.

Background

In December 2013, NJDOT obtained approval from FHWA for preventative maintenance bridge activities through the Federal SEP-14 program. A 1-year pilot program was designed using an alternative contracting method called Job Order Contracting. NJDOT solicited three JOC contracts regionalizing each as North, Central and South with an estimated annual value of \$2MM, \$1.5MM and \$1MM respectively. Below is a timeline of the bidding process:

January, 2014 Advertisement and Prebid Meeting

February, 2014 Bid Openings

March, 2014 JOC North Award

April, 2014 JOC Central and South Award

NJDOT issued its first Job Order to the North JOC contractor on May 28, 2014. As of the time of this writing, 48 proposals have been issued between all three contracts totaling approximately \$4MM. Typically, the repairs being done on the structures approved for this contract consist of deck patching, deck joint repair, and corrosion inhibiting sealing of the deck.

Procurement

The procurement procedures for JOC Contracts are essentially the same as the standard Preventative Maintenance Contracts. The differences between the two are the review of the Construction Task Catalog (CTC) containing preset unit prices for tasks related to bridge work, JOC Supplemental Provisions (which has been merged with Special Provisions for future bids), and the fact that JOC Contracts are classified as PoDI, and thereby subject to the FHWA PoDI review process, whereas standard Preventative Maintenance Contracts are non-PODI.

Briefly describing the procurement process, both federally funded programs have a level of initial review of the scope of work on selected structures throughout the State of New Jersey in determining their eligibility for Federal Funding. Key Maps of the locations are prepared, CED's are obtained along with any other permit or documentation required, and an estimate of the amount of work is generated. Upon initial review, NJDOT follows the standard procurement process of generating job numbers, receiving goals from the Civil Rights Department, determining funding and its allocation for PE (Preliminary Engineering) and CE (Construction Engineering) costs, and advertisement of the project.

It should be noted that the list of structures obtained during the initial scoping of structures between JOC Contracts and Federal Preventative Maintenance Contracts provides the NJDOT with an anticipated job list. While this list of structures is known to the contractors at the time of bidding the Federal Preventative

Maintenance Contracts, structures are undefined under JOC bid. Hence, the initial review of structures prior to bidding a Federal Preventative Maintenance Contract requires more time as opposed to JOC Contracts where the bidding process can be executed without defining structures upfront. Furthermore, JOC Contracts allow the inclusion of additional structures at any time, so long as the work is eligible, which enables NJDOT to respond more expeditiously to preventative maintenance work which may not have been identified at the time bid documents were being prepared.

In this aspect, the bid cycle is shortened for JOC Contracts compared to Federal Preventative Maintenance Contracts and gives NJDOT much more flexibility to handle needed work on planned or unplanned structures.

Scheduling

Because the job list is not defined at the time of bid, the first step in developing each Job Order after contract award is a Joint Scope Meeting to let the contractor know where the work is located and what work needs to be performed. The JOC contractor, NJDOT, FHWA, and any other applicable personnel are invited to a Joint Scope Meeting on site to discuss the scope of work, measure quantities, determine a work schedule and resolve any questions to clearly define what needs to be done.

Following the Joint Scope Meeting, NJDOT issues a Request for Proposal (RFP) to the contractor along with a Detailed Scope of Work (DSOW) defining what work is to be performed, when the proposal package is due and any submittal requirements.

Based on the RFP and DSOW, contractor prepares a proposal package which consists of a price proposal developed using the CTC in eGordian, work schedule and any other required submittals. A complete proposal package is submitted to NJDOT for review and approval.

After NJDOT reviews the contractor's proposal package, the proposal is submitted to FHWA for its final approval. Once approved, a Job Order is issued to the contractor.

In 2014, the time frame from the Joint Scope Meeting to Proposal Approval varied between two (2) to four (4) weeks. In general, larger projects tend to have a longer time frame. Between the North, Central, and South contracts, the time frames were usually consistent with one another.

This shows improvement in the Job Order development cycle compared to the mid-year review which showed a substantially longer time frame of three (3) weeks to seven (7) weeks. This can be accredited to a multitude of reasons, including but not limited to, having to learn the eGordian software and learning how to use and how to find the appropriate tasks in the CTC.

For the 2014 Contracts, this lead time was mitigated by scheduling the Joint Scope Meetings during the construction of other approved job orders. In doing so, work was not delayed by the reviewing process.

As a result, JOC Contracts should typically have the same efficiency in terms of scheduling work, with the first job order being the exception, as opposed to Federal Preventative Maintenance Contracts.

Cost Efficiency

Below is a table of two Federal Preventative Maintenance Contracts, DP 13441 and DP 13442, with the average unit pricing found in the 2014 CTC, as well as the new 2015 CTC, for commonly used items.

Description	Unit	DP13441 Rt. 55 Unit Price	DP13442 Rt. 295 Unit Price	2014 JOC	2015 JOC
Deck Corrosion Inhibitor	SY	\$9.25	\$6.75	\$20.70	\$6.48
Repair of Concrete Deck, TYPE B	SF	\$74.00	\$78.00	\$44.15	\$66.54
Deck Joint Reseal, Rubber Asphalt*	LF	\$10.00	\$6.00	\$3.00*	\$2.70*
Deck Joint Reseal, Silicon*	LF	\$45.00	\$42.00	\$25.92*	\$24.33*
Bridge Header Repair**	LF	\$125.00	\$150.00	\$142.00**	\$141.02**
Repair Concrete Curb***	LF	\$45.00	\$55.00	\$20.00***	\$17.61***

*- Presumed 2" Joint in the CTC

** - CTC priced in CF. To convert to LF, presumed the other two dimensions are 1'-3" wide and 8" depth

*** - CTC priced in CF. To convert to LF, presumed the other two dimensions are 4" wide and 8" depth.

With the exception of the Deck Corrosion Inhibitor, the most commonly used line items, are cheaper in the JOC Contract as opposed to the Federal Preventative Maintenance Contracts. Changes in the new CTC reflects prices that are more at-cost, based off quotes, invoices, and productivity as seen by the NJDOT.

In 2014, the Deck Corrosion Inhibitor was overpriced in the CTC, and as a result, it demonstrated that at times the JOC Contracts may not have been the most cost-effective. However, as stated above, this has been changed for next year to reflect a more accurate unit pricing.

A significant point needs to be made that Traffic Safety and Mobilization are charged differently between the two contracting methods. In the Federal Preventative Maintenance Contracts, there is one Lump Sum price for the Mobilization charge (\$100k for DP13441 and \$75k for DP13442). However, in the JOC Contracts, Mobilizations are charge per each job order at approximately \$1,200. Presuming these contracts average approximately 20 job orders, then this will equate to a total Mobilization charge for the whole JOC contract to be roughly \$24,000.

With regards to Traffic Safety, the Federal Preventative Maintenance Contracts pay by certain line items, such as Cones (UN), Barricades (UN), Signs (SF), Truck Mounted Attenuators (UN), etc. by the amount most seen used during the contract. In comparing this number, the Federal Preventative Maintenance Contracts may see a cost of \$3,000 or less for the duration of the contract. On the other hand, JOC Contract pays by daily lane closures done, at around \$2,000/day, which over the course of the contract, can add up.

Nine actual Job Orders have been priced out, as best as possible, with the Federal Preventative Maintenance Contracts to better compare the two styles of contracts.

	JOC	Preventative Maintenance	Difference (JOC-PM)/JOC
2014-South-035	\$77,297.97	\$72,892.56	6%
2014-South-036	\$82,173.94	\$90,044.86	-10%

2014-South-047	\$39,787.42	\$34,820.07	12%
2014-Central-021	\$18,319.84	\$19,155.02	-5%
2014-Central-022	\$15,411.27	\$16,333.97	-6%
2014-Central-025A	\$13,772.61	\$15,511.27	-13%
2014-North-001	\$26,966.25	\$25,157.27	7%
2014-North-012	\$40,933.53	\$48,492.27	-18%
2014-North-035	\$96,498.01	\$109,595.69	-14%

It is the general consensus from the NJDOT that the cost of the JOC Contract projects are comparable to that of the Federal Preventative Maintenance Contracts as the highs and the lows balance out. This analysis shows an average saving of 4-5% in cost of procuring federal fund eligible bridge preventative maintenance work through JOC.

Quality of Work

Between the JOC Contracts and the Federal Preventative Maintenance Contracts, NJDOT feels the level of quality in the work of the contractors is comparable. Both contracts follows the same Standard Specifications and Standard Details issued by NJDOT and both types of contracts have an inspector on-site to ensure correct construction practices and procedures.

Conclusion

Based on the evaluation conducted, NJDOT believes Job Order Contracting is a viable alternative to the established, standard Federal Preventive Maintenance Contracting method. The quicker procurement process in general for JOC Contracts, as well as allowing for the addition of new structures throughout the term of the JOC Contract without the need for procuring additional contracts, are time and cost saving qualities beneficial to the Department. In addition, the increase in efficiency of the JOC Contracts does not compromise the quality of work or direct cost of work within the Contracts, as both are comparable to that of the established standard Federal Preventive Maintenance Contracts.

It is believed that for every new contractor that is awarded a JOC contract, there may be a learning curve in getting acquainted with new software and pricing methodology. However, once learned, NJDOT anticipates receiving from new contractors the same expediency and responsiveness of current JOC contractors.

NJDOT sees JOC as an efficient and effective procurement method that should be employed further. After this initial pilot year, improvements were made to the new CTC for bidding the 2015 FHWA funded JOC contracts. The Department will continue working to improve the CTC to reflect more comprehensive tasks and accurate pricing.