



POST-CONSTRUCTION REPORT ON A+C+D CONTRACTING

**DENNIS EDWARDS TUNNEL
BRIDGE NO. 02552
SUNSET HIGHWAY
WASHINGTON COUNTY
CONTRACT NO. 14285
KEY NO. 11948**

November 30, 2011

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1- INTRODUCTION

1-1 Purpose

This report is an end of construction project evaluation of the A + C + D Best Value Contracting Process used for the Dennis Edwards Tunnel Project. This report is required under Oregon Revised Statutes (ORS) 279C.355 “Evaluation of certain public improvement projects not contracted by competitive bidding” for any public improvement contract in excess of \$100,000. It is also required by the Federal Highway Administration (FHWA), under its Special Experimental Project No. 14 (SEP-14) Innovative contracting, which approved Federal participation using this contract method. The Exemption Order (5-1) and the approved SEP-14 Work Plan (5-4) are included as appendices.

2- BACKGROUND

2-1 The Project

This project is located between mile point (MP) 17.35 and MP 18.20 on the Sunset Highway, US 26. The tunnel is 800 feet long with a 26 foot roadway. The tunnel was constructed in 1940. The average daily traffic is 6,700 vehicles per day, peaking at 15,000 vehicles per day in August.

US 26 is one of the main routes to the Oregon coast for both commercial and recreational travel. Because of the lack of acceptable alternative routes and the fragile nature of the coastal economy, full closures had to be minimized during construction. Work had to be scheduled and prosecuted to minimize construction time and interference with traffic flow while maintaining safe driving conditions. It was essential that the work be vigorously pursued and completed with minimum impact to the traveling public.

The tunnel liner is a composite of the original arches and ribs (lagging) and various repairs using steel reinforced concrete (shotcrete). The ribs were beginning to show rot and the liner had been leaking. The illumination system was old and not functioning well. A portion of the tunnel collapsed in 1999 and required emergency repairs at that time.

2-2 A+C+D CONTRACTING

For this project ODOT used the form of Best Value that is expressed as “Price plus Technical Qualifications (Experience) plus Technical Approach (Work Plan)” also referred to as A+C+D where the procurement process includes the evaluation of a price component (A element), a qualifications component (C element) and a technical approach component (D element). The contract is awarded to the contractor whose proposal is most advantageous to the owner, gives the most quality per price and has a minimal impact to the traveling public.

2-3 SCORING

The complete scoring criteria of the A, C and D components are detailed in appendices 5-3 with the heaviest scoring based on “**PRICE**”

A. PRICE SCORING (“A” Component)

80 points maximum, deduct of 15 points for each next lowest bid position

	BID POSITION	POINTS
Lowest Bidder	1	80
2 nd Low Bid	2	65
3 rd Low Bid	3	50
4 th Low Bid	4	35
5 th Low Bid	5	20
6 th Low Bid	6	5
7 th Low Bid	7	0

C-1. TECHNICAL QUALIFICATIONS (“C-1” Component)

40 points maximum

This portion of the bid was based on the qualified bidder’s general experience on eight Highway Projects with and without tunnel work. This element was broken down into four sections based on total project costs and amount and type of tunnel work.

C-2. SPECIFIC TUNNEL EXPERIENCE (“C-2” Component)
24 points maximum

Within the eight projects submitted, the bidders identified 4 projects to be considered “TUNNEL” projects. To be scored, the work had to be on the overhead structure within a tunnel for this set of scoring questions.

D. TECHNICAL APPROACH (“D” COMPONENT)
16 points maximum “Work Plan”

Work Plan: This portion of the bid scoring was based on the contractors Work Zone Traffic Control Plan that would be needed for the period of time that work would be performed within the tunnel at night alternating with traffic use of the tunnel during the day. This technical information had to include the following information:

- How to transition from night time work with a detour route into daytime traffic configurations.
- A plan to accommodate “Emergency Vehicles”
- A communication plan for on site, throughout the detour and with local agencies and emergency services.
- A safety plan for the contractor’s employees as well as ODOT inspection staff and visitors.

2-4 PROCUREMENT PROCESS

The Best Value Contracting (including Price plus Technical Qualifications plus Technical Approach or A+C+D procurement process consisted of opening Bidder Price components, (A element), and evaluating and scoring Qualifications component (C element) and Technical Approach component (D element). ODOT issued an Invitation to Bid (ITB) to all interested parties via the ODOT Procurement Office – Construction Contracting Section web site on September 30, 2010 as well as advertisements in the Oregon Daily Journal of Commerce and Reed Construction Data. The ITB consisted of a Qualifications component covering Bidder’s qualifications and past experience with similar projects and a Technical component covering Bidders approach to traffic planning and safety.

2-5 EVALUATION and SCORING

The bidder's evaluation and scoring was based on the three components of A+C+D Best Value Contracting method.

The award was based 50% on the A element – Price, 40% on the C element Technical Qualifications and 10% on Technical Approach.

The technical component bids (C and D elements) were opened on November 4, 2010, before the price component bids. The Technical Evaluation Committee evaluated and scored each bidder's technical component bid using an established method of reviewing and scoring each bidder's qualifications and technical approach. Scoring consisted of the Technical Evaluation Committee assigning points to individual criteria factors within the maximum available 80 points or half of the total score.

2-6 SELECTION

Price Component Bids (A element) were opened at the beginning of the Price Opening meeting on November 18th, 2010. Bidder's prices and the A+C+D component scores were announced at that meeting. Price bids were worth a maximum of 80 points or half of the total score.

The A+C+D method used for this Project resulted in the Best Value Scoring and Best Value Bidder selection as shown in the table on the following page.

BIDDERS:	SUBMITTED Bid Price	Total Technical Component Score	Price Score	Apparent Best Value Score	Overall Rank
Bidder: Johnson Gunite	\$3,882,099.00	54.00	80	134.00	1
Bidder: Kiewit	\$9,575,450.00	69.00	35	104.00	4
Bidder: LRL	\$4,286,998.39	66.50	65	131.50	2
Bidder: Wildish	\$4,645,964.50	56.75	50	106.75	3

Johnson Western Gunite Company had the highest best value score. Johnson Western Gunite Company also had the highest price score, but the lowest technical score. As a result of the highest best value total score, Johnson Western Gunite Company was selected as the Best Value Bidder for the project.

The project was awarded to Johnson Western Gunite Company on December 10, 2010. The awarded bid price was approximately 54% below the Engineers Estimate of \$8,639,415.36.

The bidder’s interest in this project was moderate and had the following participation results:

- Six firms attended ODOT’s constructability meeting in September 2009.
- Four prime firms submitted Price and Technical Component bids

A protest letter was received from the second highest best value bidder, LRL Construction Co., Inc. (see appendices 5-7). LRL stated that their fax number was listed incorrectly resulting in fewer quotes from subcontractors than they should have received.

LRL also stated that the contract was awarded to the least technically competent contractor. LRL asserted that the price scoring system was distributed inversely of what was intended to obtain the best value.

The protest was denied by ODOT on December 7, 2010 and the contract was awarded to Johnson Western Gunite Company on December 10, 2010.

After the opening of the bids for the St Johns Bridge Rehabilitation project, (awarded January 2003) with A + C components, ODOT gave consideration to modifying the price scoring system to prevent bidders who knew they would receive low technical scores from making up the point difference in the price component by bidding very low. (REF: Post Construction Report for St Johns Br. Pg 6/17.)

3– REPORT

3-1 SCOPE

The purpose of this contract was to remove and dispose of the existing lining of the tunnel lining and construct a canopy comprised of rock dowels and fiber reinforced shotcrete. Much of this design was modified to a steel fiber reinforced shotcrete with 3 mats of steel reinforcing bars over the original tunnel lagging which was left in place to contain the drainage material between the soil and the lagging.

Improved drainage was scheduled to be installed and a new lighting system and service was installed. The existing lighting had to be maintained throughout the project. The concrete roadway was ground to remove rutting and failing areas of concrete were removed and replaced. Bicycle warning systems consisting of push buttons and flashing beacons at the portals were installed. All signing and delineation is to be updated.

The tunnel lining replacement work had to be done with full roadway closures at night. The tunnel had to be open to traffic each morning at 6:00 a.m. Single lane closures were allowed Monday through Thursday during daytime hours. All lanes were to remain open from noon on Fridays until 10:00 p.m. on Sundays. There was very little contract work that could be accomplished outside of the traffic lanes so most work was dictated by lane closure restrictions.

A detour route was established at for westbound Highway US26 traffic detouring at Staley's Junction northbound onto Highway OR47 to Timber Road and then southbound onto Timber Road to reconnect with Highway US26. Striping, delineation and signage was upgraded on this detour route before putting it into use. ODOT maintenance had a State Force Order to finance the costs of the improvements before and after the project.

The project was estimated to cost approximately \$10 million. The bid let date was November 18th, 2010. Construction was to be completed in May of 2011.

As a result, ODOT with Federal Highway Administration approval, proposed to conduct a Best Value Alternative contracting method described in section 2-2.

The project will include construction, quality management, contract administration and all necessary support services required to rehabilitate the tunnel.

3-2 CONSTRUCTION PROGRESS

Workload & Structure of the Contract Administration Office

At the time this project was awarded, the Beaverton PM office was working on three other large, high profile projects. The Project Manager, a Project Coordinator, and two Project Inspectors were assigned to the inspection and administration duties of this project. The Project Coordinator worked closely with the Contractor's PM to maintain the schedule and plan the work as well as coordinating inspection schedules to assure coverage of all work.

The Project Manager played a vital role in public relations and information contact for this project. Due to long work shifts and 2 hours of drive time round trip, the inspectors worked a staggered work shift in order to have ODOT inspection available on the site at all times. This meant that each inspector had to be up to date and have a full understanding of every item of work. Communication was the key to keeping everyone updated and current on construction activities, scheduled activities and changes. Regularly scheduled day and night on site meetings and phone conferences were set up at the beginning of this contract.

Additional Resources

The PM office was able to secure the part time help of several people from the Milwaukie Bridge Crew, a Maintenance worker and the Region Office at Flanders. These people were used to man the closure sites and assist the ODOT Inspectors as needed. This help was primarily needed at the beginning of each shift when the full highway closure was coordinated and again when the highway was reopened to traffic each morning at 6:00 a.m.

The ODOT Region One Public Affairs Office was instrumental in providing advance notice to the traveling public of the nightly closures. Keeping the Portland

area communities as well as the coastal communities up to date on the progress of this very high profile project was key to a friendly attitude towards the nightly highway closures.

The ODOT Manning Maintenance Crew was able to provide one person each night to ensure the detour route was safe and passable at all times. Other members of the Manning Maintenance Crew were responsible for snow and ice removal on the closed sections of highway leading to the tunnel (SFO #1). Their role was to ensure the tunnel would be open for traffic every morning even in the worst weather conditions.

The ODOT Photo/Video Unit had the task of recording every aspect of this project from start to finish. With the combined effort of ODOT Community Affairs and the ODOT photography crew, a public information video was created at the tunnel and aired on local and coastal television. Radio reports were regular and dependable for airing up to the minute information regarding closures and times.

H.W. Lochner was the primary design consultant and Engineer of Record for this project along with their geologic/hydro consultant Shannon and Wilson. All communications and design support was directed through one contact person at H.W. Lochner.

An experienced geologic technical inspector was provided by Shannon and Wilson during the demolition of existing timber lining, scaling, and initial shotcrete applications.

The contract was completed without the assessment of Liquidated Damages after reviewing and adjusting time for the number of days the tunnel could not be closed and outside of the control of the contractor. Some days the tunnel was not closed as a courtesy to the coastal communities for special events. Emergency vehicles were required to be allowed to pass through the tunnel even during closure times. The delays due to stopping work, clearing the tunnel of equipment and employees and resetting the equipment and manpower was also considered. These time delays were outside the control of the contractor. After evaluating and adjusting the contract time for the delays due to coastal events, land slides on the detour and on other routes affecting the tunnel closures, emergency vehicle delays and courtesy non-closures, the contractor completed the contract on time.

Johnson Western Shotcrete prosecuted this contract aggressively and creatively. They rapidly conceived innovative solutions to all hurdles encountered. Their

cooperation and professionalism along with a strong partnering attitude and cooperation with the inspection staff and management staff of the contract administration office made it possible for this complex tunnel lining project to be successfully completed.

3-3 TRAFFIC CONTROL

A critical part of this contract was the Traffic Control Plan. In accordance with the Special Provisions of this Project, the roadway was required to be open by 6:00 a.m. daily, with no lane closures occurring before 8:00 p.m. Monday through Friday, and 10:00 p.m. on Sundays.

No lane closures or full tunnel closures were allowed from Noon on Friday until 10:00 p.m. on Sundays. All tunnel lining work had to occur at night during the week to avoid daytime and weekend traffic delays.

It was critical to coordinate the highway closures and equipment mobilization into the tunnel in a short timeline in order take advantage of as much time as possible during the tunnel closure.

A detour route was set up to accommodate traffic during the hours of full closure. West bound traffic left US 26 at MP 45.45 and was directed by detour signing to travel north on OR 47 for a distance of approximately 13 miles to Timber Road. Traffic was directed onto Timber Road in a south westerly direction for ten miles to a point where they were reconnected to US 26 at Timber Junction. (MP 37.5.)

East bound traffic would leave US 26 at Timber Junction, travel northeast on Timber Road for 10 miles to OR 47 then 13 miles to US 26 at Staley's junction. This route was approved for all vehicle traffic except oversized loads. Oversized loads were directed to US 30 and connecting to US 101. The Oregon State Police (OSP) regularly drove the detour route during the tunnel closure periods. After a few weeks OSP suggested that we add more detour signing. Additional signs were ordered and placed along the detour route in both directions. With the additional signing, detour traffic would travel no more than 3 miles before seeing another detour route sign. Under normal weather conditions, the detour would take 25 to 30 minutes.

ODOT Maintenance performed work on this detour route from project award up until first note. Improved striping, additional delineation and surfacing repairs were

completed on the detour route. State Force Order allotted \$192,000 to prepare before construction, maintain during construction, and repair any damages caused by the added traffic volumes at the end of the contract.

Intergovernmental cooperation was achieved as the detour route crossed through three counties. ODOT Maintenance provided one person each night to drive the detour route after the initial closing to assure the route was safe and passable. The duties of that Maintenance worker included snow and ice removal as needed, pothole repair, and ensuring the portable and post mounted signs were up and legible. Each morning before opening the tunnel to traffic, the ODOT Maintenance worker would drive the approaches to the tunnel on US 26 and clear any ice, snow and forest debris that accumulated during the night closure. The Contractor was responsible for keeping up with snow and ice removal in the immediate vicinity of the tunnel portals.

US 26 is one of three major routes connecting Portland to the northern Oregon coast. Temporary signing for advisory information was the key to minimizing the inconvenience of closing a major highway. Four portable changeable message signs (PCMSs) were placed on the Oregon Coast Highway (US Highway 101) and the Necanicum Highway (State Highway OR53) for information regarding closure times. At the request of the coastal community and with the cooperation of ODOT and the contractor, the tunnel was not closed on four special occasions to accommodate higher than normal traffic volumes for events on the coast. Mud slides on the detour route and on OR6 prevented tunnel closures on three occasions. The PCMS's advised the public that the tunnel was open and alternate routes were not necessary on these occasions.

44 post mounted signs were used for construction advisory and detour directions. At least six PCMSs were used for such advisory and detour directions. 10 type 3 barricades, and four temporary sign supports were also used to advise and direct the traveling public. Two portable light plants were also set up each night of closure on US26 to ensure maximum visibility of road closure locations.

ODOT'S Community Affairs department played a very important role in keeping the traveling public informed and up to date during the entire construction period. A public service video was made at the tunnel which was then aired on television and made available to the public on the project web site. This was an informative video showing the work that was to be done and why the detour routes were necessary. Community Affairs also maintained an up to date project web site that made construction information readily available to the public. Finally, Community Affairs sent numerous emails to a distribution list in excess of 300 individuals and

agencies. Such proactive communications with the public greatly assisted the public in understanding the many changes to this challenging project.

To construct the new lining in the tunnel required full closures to accommodate the types of equipment and shotcrete operations required perform this work. Even though the tunnel was completely closed to through traffic during construction hours, Contract Provisions required that emergency vehicles (Police, Fire, and Ambulance) passage at all hours. This was achieved by the installation of an early warning system mounted inside the tunnel and connected directly to the Transportation Management Operations Center (TMOC), which in turn had a direct line to the inspectors on site. The system consisted of an array of flashing lights near each portal, coupled with an alarm that could not be mistaken for any equipment audible alarms. The system was manually tested before each shift. No personnel were allowed access in the tunnel until this test was performed successfully. The system could be activated by TMOC or by the onsite inspector in the event of a cave in or other unforeseen event requiring the evacuation of the tunnel. Normally, Police, Fire, or Ambulance crews would contact TMOC of their intent to use the tunnel as well as an estimated time of arrival (ETA).

When TMOC received the Emergency Vehicle intent to pass message, a call was placed to the inspector on site via the dedicated line attached to the alarm system. The alarm would sound and flashing lights were activated as soon as the call from TMOC was placed. Upon hearing and seeing the alarm, the Contractor had no more than 20 minutes to ensure that at least one 12 foot lane was passable in the tunnel. This system was used flawlessly at least once a month and likely played a major role in several life and death situations.

The Special Provisions for this contract required that the tunnel will be open for traffic at 6:00 a.m. every day. These requirements were met all but 3 occasions where the contractor had unanticipated problems that caused a late opening.

This project was successful in moving traffic, including trucks, through the tunnel on a daily basis following the night time closures for construction. This success was due to a coordinated effort between ODOT construction crew, the prime contractor and the flagging company including their traffic control supervisor. Motor Carrier Division was very cooperative and helped by keeping 2 way communications open with the construction crew. During the concrete approach pours which narrowed the lanes to a point that trucks could minimally clear the activity zone, MCD coordinated and distributed information to the trucking industry and prevented any delays to the Motor Carriers using this route.

3-4 ACTUAL COSTS COMPARED TO ORIGINAL ESTIMATES

Below is a comparison of the actual project construction costs as compared with the original engineering estimate. ODOT Procurement used the Best Value, A+C+D contracting method for this project. There was no incentive/ disincentive of work completion by the Contractor on any phase of this project.

<u>Original Engineering Estimate</u>	
Total of Bid Work	\$8,582,097
Anticipated Items	\$300,373
Contingencies	\$275,050
Engineering	<u>\$1,000,000</u>
Total Estimated Cost:	\$10,157,520

<u>Best Value Awarded Bid</u>	
Total of Bid Work	\$3,882,099
Anticipated Items	\$275,050
Contingencies	135,873
Engineering	<u>\$1,611,243</u>
Total Awarded Cost:	\$5,904,266

<u>Final Project Cost</u>	
Bid Item Final Work	\$2,399,783
Contract Change Orders, Adjustments	\$2,229,306
State Force Orders	\$189,700
Engineering	<u>\$736,436</u>
Final Project Cost	\$5,555,225

3-5 AMOUNT OF GUARANTEED PRICE

This project does not have provisions on the “Guaranteed Maximum Pricing” on the work bid items or liquidated damages.

3-6 NUMBER OF CHANGE ORDERS ISSUED BY ODOT

To complete the construction of the tunnel and preserve the intent of the contract, several key changes were made in order to resolve the following issues:

- During the early stages of this project, it became evident that the means and method of supporting the tunnel canopy were not working using the design canopy construction sequence.
- The rock nails and application of shotcrete for type I and type II ground support had to be reevaluated. The rock nails were not achieving their designed pull out strength. As the half way mark in the contract approached, none of the nails installed by that time had passed the pullout tests.

In order to complete this project within the scope of the design, a total of five (5) Contract Changes were issued.

Change Order #1 allowed the use of Polymer Resin Rock dowels.
(-\$334.00)

Change Order #2 modified the tunnel canopy construction method, including deleted and/or reduced quantity bid items.
(-\$10,019.00)

(Change Order #3 was rolled into CCO #2 and was not issued for this project.)

Change Order #4 dealt with plain, undowelled concrete pavement. It allowed the use of a mobile mixer and deleted the requirement for air and slump tests on the concrete.
(\$0.00 = no cost change order)

Change Order #5 added illumination sheet I-1787 to the plan set.
(\$0.00 = no cost change order)

Change Order #6 modified the completion date.
(\$0.00 = no cost change order)

This project met budget with only minor modifications to the work. The Contract Change Orders were a net cost savings to this contract.

In addition to the CCO's, five State Force Orders (SFO's) were issued.

- **SFO 1** was created to supply funding to ODOT Maintenance for the preparation, maintenance, and repairing of the 23 mile long detour route.
(\$149,650.00)
- **SFO 2** covered the cost of adding state radios to inspectors' vehicles so they would have contact with the maintenance crews in plows and sanders.
(\$3,082.00)
- **SFO 3** covered the cost of an on site trailer. This provided a heated, dry enclosure for the inspectors on this remote, cold and often snowy location.
(\$1,935.00)
- **SFO 4** was written to pay for the installation of the Emergency Vehicle Warning System.
(\$27,395.00)
- **SFO 5** was needed to pay Western Oregon Electric to supply 2 new transformers and supply power to the new tunnel lighting system.
(\$8,422.00)

There were no Extra Work Orders (EWO's) issued for this project.

SUMMARY OF CHANGES

Bid line item net quantity changes	(\$1,482,316)
Engineering net quantity change	(\$874,807)
CCO's (five total) for a total cost of	\$2,229,287
SFO's (five total) for a total cost of	\$190,848
Net change to contract work:	\$62,648

3-7 COST OVERRUN OF CONTRACT WORK BID ITEMS

BID ITEM	Original Authorization	Final Quantity	Overrun	Reason For Overrun
Temporary Signs	\$26,775.00	\$30,017.50	\$3,242.50	Qty not enough for 23 mile detour route
Temporary Plastic Drums	\$3,129.00	\$6,630.00	\$3,501.00	Required better delineation at detours & 6 PCMS locations
Traffic Control Supervisor	\$33,900.00	\$41,400.00	\$7,500.00	During day/night 24 hour work double TCS shifts were required.
Tunnel Grout	\$40,000.00	\$76,400.00	\$36,400	The voids at the interface of the 1999 repair were greater than anticipated
Permanent Striping	\$15,336.00	\$16,002.00	\$666.00	Roadway repair was extended farther than plan
Wood Sign Posts	\$5,100.00	\$5,503.92	\$403.92	Overrun Item to update existing signs within project limits
Flaggers	\$35,200.00	\$42,988.00	\$7,788.00	Flaggers were provided during OR6 slide and detour and 24 hour double shift periods.
Plane Undowelled Concrete Pavement	\$92,000.00	\$133,000.00	\$41,000.00	Extended repairs to encompass failed subgrade at each approach

3-8 COST UNDERRUN OF CONTRACT WORK BID ITEMS

BID ITEM	Original Authorization	Final Quantity	Underrun	Reason for Underrun
Training	\$15,600	\$10,790	\$4,810	CCO #2 eliminated some of this work
Flagger Station Lighting	\$12,000	\$6,000	\$6,000	Only two (2) positions were manned
Check Dam	\$14,000	\$4,900	\$9,400	Design miscount
Construction Entrance	\$8,000	\$0	\$8,000	Contractor used private property adjacent to tunnel
Rock Surface Preparation	\$125,000	\$0	\$125,000	RE CCO #2 eliminated this item
Drainage Material	\$23,400	\$0	\$23,400	CCO #2 eliminated this item
Ground Support Type I	\$206,500	\$16,100	\$190,400	CCO #2 eliminated most of this item
Ground Support Type II	\$329,400	\$3,150	\$326,250	CCO #2 eliminated most of this item
Cement Grout Holes	\$14,280	\$13,440	\$840	Completed as per spacing tables
Rock Reinforcing dowel	\$382,660	\$17,860	\$364,800	CCO #2 eliminated most of this item
Wood Lining Disposal	\$35,700	\$9,176	\$26,524	CCO #2 Eliminated much of this item
Tunnel Lining Demolition	\$539,505	\$50,085	\$489,420	CCO #2 Eliminated much of this item
Mile Post Markers	\$1400	\$600	\$800	Some of these had recently been replaced and were in like new condition
Pavement Line Removal	\$2,130	\$1,892	\$238	Some of the line removal was done while grinding the tunnel floor
Diamond Grind Concrete Pavement	\$41,458	\$35,159	\$6,299	Some areas to be ground were removed and repaved

4– Summary

4-1 Reporting

HOW THE A+C+D CONTRACTING METHOD CAN BE IMPROVED

After evaluation and scoring, Johnson Western Gunitite Company had the LOWEST technical score of the combination of technical experience and technical approach of the four bidders. Because Johnson Western Gunitite Company had a very low price proposal in their price bid and the price component was weighted highly by the scoring method, Johnson Western Gunitite Company was awarded the contract. The intent of Best Value Contracting is to evaluate and score how each bidder describes their project specific technical experience and applies it to the specific project. The scoring attempts to evaluate and score the technical expertise and approach proposed by each bidder in addition to the traditional cost component (lowest bidder) into the final score.

For this project, this bidding process did not result in getting a higher degree of technical expertise in the contractor that was awarded this contract. This has been an issue in the past with SEP-14 projects. ODOT gave consideration to the weighting of the components to avoid having contractors bid very low in an attempt to offset a potential low score on the technical component of the bid. This bid went to the lowest bidder with the worst technical scoring. The cost component may have been weighted too high on this contract. Additionally, the approach component may also have been weighted too high on this project. In hindsight, it would appear the technical experience is the most important factor for a bidder on a project such as this.

Proper weighting of the scoring components is the key to achieving the results desired by A+C+D bidding. The weighting of the components on this bid process did not achieve the desired balance of technical experience and price ODOT was expecting.

One positive outcome of the A+C+D contracting method is that this method most certainly identified highly experienced bidders for this proposed project. None of the bidders were unqualified.



Oregon

Theodore R. Kulongoski, Governor

APPENDIX 5-1

Department of Transportation
ODOT Procurement Office - Construction

455 Airport Rd. SE, Bldg. K
Salem, Oregon 97301-5348

Voice: (503) 986-2819

Fax: (503) 986-6910

Date: September 10, 2010

To: Matt Garrett, Director
Oregon Department of Transportation

From: 
Michelle Remmy, Chief Procurement Officer

Subject: Request for Approval of Exemption from Competitive Bid Process
Dennis L. Edwards Tunnel (Sunset Highway)
Exemption Number 2010-10

Your approval is requested for exemption of the subject project from the competitive low bid process per authority of ORS 279C.335. A public hearing to receive input from the public was held on September 2, 2010, with no written or oral comments received.

It is proposed to use an alternative procurement method known as "best value" where award is based on cost, qualifications, and technical approach (A + C + D contract), and is solicited by a request for proposals.

The Dennis L. Edwards Tunnel (Sunset Highway) project consists of removing and replacing the existing lining, improving the wall drainage, and improving the lighting system of the tunnel. The project also involves the installation of a bike warning system. The project proposes to remove the aging composite timber liner, install a new steel fiber shotcrete and rock dowels tunnel liner. It is anticipated that construction will require total closure of the highway for some duration.

US26 is one of the main routes to the Oregon coast for both commercial and recreational travel. Because of the lack of acceptable alternative routes and the fragile nature of the coastal economy, full closures must be minimized during construction. Work must be scheduled and prosecuted to minimize construction time and interference with traffic flow while maintaining safe driving conditions. It is essential that the work be vigorously pursued and completed with minimal impact to the traveling public. Once the Project is complete, motorists will have a safe and reliable tunnel that provides efficient traffic flow along this important highway.


Your signature below and on the enclosed Findings-for-Exemption (FFE) will execute the project exemption from the competitive low bid process.



Reviewed by ODOT Highway Division Administrator, Paul Mather

9/14/10

Date



Approved by ODOT Director, Matt Garrett

9-16-10

Date

Attachment: Findings for Exemption

Exemption Number 2010-01

FINDINGS AND ORDER
SUPPORTING AN EXEMPTION FROM COMPETITIVE BIDDING REQUIREMENTS AND
THE USE OF THE PRICE PLUS QUALIFICATIONS PLUS TECHNICAL BEST VALUE
ALTERNATIVE CONTRACTING METHOD

Before the Director of Transportation
 Of the State of Oregon

In the Matter of the Exemption Request by the)	
Oregon Department of Transportation for)	FINDINGS OF FACT,
Dennis L. Edwards Tunnel (Sunset Highway))	CONCLUSIONS AND ORDER
Project located in Washington County)	

ORS 279C.335(1) requires, with certain exceptions, that all public contracts be based on competitive bidding and, under ORS 279C.375, be awarded to the lowest responsive and responsible bidder. ORS 279C.335(2) permits the Director of Transportation to grant exemptions to the Oregon Department of Transportation (ODOT) from the requirement for competitive bidding upon the approval of specified findings. ORS 279C.330 defines "Findings" and identifies specific information to be provided as part of the agency justification. Under ORS 279C.335(5) a public hearing must be held before the findings are adopted, allowing an opportunity for interested parties to comment on the draft findings.

This request for exemption was advertised in the *Daily Journal of Commerce* on August 19, 2010 and *Reed Business Information* on August 19, 2010. Additional advertisements were in *Cannon Beach Gazette*, *Seaside Signal*, *Tillamook Headlight Herald*, and *Daily Astorian* on August 19, 2010. It was also posted on the ODOT Highway & Bridge Construction web site at:

http://www.oregon.gov/ODOT/CS/CONSTRUCTION/Alternative_Contracting.shtml

The hearing for review of these findings was held on September 2, 2010 in Room 337 of the Oregon Department of Transportation, Region 1 Headquarters Building, 123 NW Flanders Street, Portland, Oregon. There were no comments from the public, either oral or written, during this hearing or during the time for comments.

ORS 184.610 to 184.733 describes the Oregon Department of Transportation (ODOT) and the responsibilities of the Oregon Transportation Commission (OTC), the Director of Transportation and managers. ORS 366.400 authorizes ODOT to enter into all contracts deemed necessary for the construction, operation, maintenance, improvement, or betterment of highways. ORS 279A.050(3)(b) provides ODOT with independent contracting authority for public improvement contracts relating to the operation, maintenance or construction of highways, bridges and other transportation facilities. ORS 366.505 describes the composition and use of the Highway Fund, including Federal funds.

FINDINGS OF FACT

A. BACKGROUND

1. Project Description: Dennis L. Edwards Tunnel (Sunset Highway) Project located in Washington County.

This Project is located between mile point (MP) 17.35 and MP 18.20 on the Sunset Highway, US 26. The existing tunnel is 800-ft long with a 26-ft roadway and was built in 1940. The average daily traffic is 6,700 with a seasonal peak in August of 15,000 and a low of 2,200 in January. The tunnel liner is a composite of mostly the original timber arch ribs and various repairs using steel reinforced concrete (shotcrete). The timber

ribs are beginning to show rot and the liner is leaking. The illumination system is old and not functioning well. A portion of the tunnel collapsed in 1999 and required emergency repairs. Oversized loads using the tunnel are required to cross the center line and the associated disruption of traffic is a safety concern.

ODOT proposes to enter into a Best Value construction contract on or about November, 2010. The Project has been placed in the Statewide Transportation Improvement Plan. The Project consists of removing and replacing the existing tunnel lining, improving the wall drainage, and improving the lighting system of the tunnel. The Project also involves the installation of a bike warning system. The Project plans include removing the aging composite timber liner and installing a new steel fiber reinforced shotcrete and rock dowels tunnel liner. It is anticipated that construction will require total closure of the highway for some duration.

The total estimated Project budget is approximately \$9 to 12 million. The Project will be funded with a combination of Federal Highway Administration and state funds. Work on the Project is anticipated to begin in 2011 and is expected to take a single construction season to complete. Commitments to the coastal communities require construction to be completed no later than May 17, 2011. The work will include construction, quality management, contract administration and all necessary support services. The work will be done in accordance with ODOT-approved construction standards, performance requirements, and specifications.

US26 is one of the main routes to the Oregon coast for both commercial and recreational travel. Because of the lack of acceptable alternative routes and the fragile nature of the coastal economy, full closures must be minimized during construction. Work must be scheduled and prosecuted to minimize construction time and interference with traffic flow while maintaining safe driving conditions. It is essential that the work be vigorously pursued and completed with minimal impact to the traveling public. Once the Project is complete, motorists will have a safe and reliable tunnel that provides efficient traffic flow along this important highway.

For these reasons, this Project is being procured using the Best Value method as described below.

2. Agency Considerations: ODOT has been contracting for road improvement projects since 1914. In recent years, the average number of projects has been approximately 100 to 120, at a cost of approximately \$250 to \$500 million annually.

ODOT performed an internal evaluation of the delivery goals and alternative contract delivery mechanisms for the Project. ODOT reviewed other available procurement options that could provide maximized benefit to the public and determined that an alternative contracting process that considers key elements for project success beyond price is most appropriate for the Project. ODOT proposes an alternative contracting process that addresses Project needs by evaluating components which include the contractor's qualifications and technical approach, as well as price, and results in a "Best Value" selection.

The Best Value contracting process assigns weight to price as well as specified non-price factors that are important to the success of the Project, such as schedule, qualifications and technical approach. There are various contracting methods that may be used under the Best Value process, commonly referred to as "A + B", "A + C", or "A + D", with "A" referring to "Price" and "B" or "C" or "D" referring respectively to "Time", "Qualifications", or "Technical" evaluation components. For this Project, ODOT proposes to use the form of Best Value that is expressed as "Price plus Qualifications plus Technical" (also referred to as "A+C+D"), wherein the procurement process includes the evaluation of a Price component (A element), a Qualifications component (C element) and a Technical approach component (D element). The Qualifications component covers a proposer's qualifications and history. The Technical component covers how a proposer addresses select technical issues. The contract is awarded to the contractor whose proposal is most advantageous to the owner, and gives the most quality per price.

The purpose for using the A+C+D contracting method is to best meet Project requirements by using a knowledgeable and experienced contractor that will perform this specialized Project under a price proposal that will realistically deliver the best value project to the State. Some of the features of Best Value contracting beyond price are: reduction in contract time or time needed to achieve critical milestones; focus on the execution of complex technical aspects and planning for technical constraints; encouraging innovations; and

integration of the locally affected and traveling public's needs into the execution of projects. This method should reduce the potential for Project work delays and large cost overruns, and avoid or minimize adverse impacts to local communities and the traveling public.

On typical construction projects with routine levels of complexity, the low bid contracting process has demonstrated predictable success in providing the best value to the public. For complex and complicated projects, there is a growing body of data extending back to the early 1990s that supports alternative contracting methods, including Best Value, that consider other elements beyond low price in order to achieve the best value for the public. This data and information from other states and the federal government continue to support the need to consider alternatives to competitive bidding for certain projects. The Best Value contracting method is being used by federal agencies, such as the U.S. Army Corps of Engineers, the Department of Defense, the U.S. Department of the Navy, and the Federal Aviation Administration, and other state transportation agencies. ODOT has successfully utilized the Best Value selection method for its Design-Build program.

Based on its successes on federally funded projects, ODOT has received a federal programmatic Special Experimental Project Number 14 (SEP-14) exemption from the Federal Highway Administration (FHWA) for continued use of the Best Value contracting method. This means that FHWA approval of alternative contracting methods can occur at the FHWA Oregon Division level rather than at the FHWA Headquarters. FHWA still requires project level engagement on such unique projects. A Project Work Plan and this Findings of Fact for Exemption document are submitted to the local FHWA office for approval to contract the Project under the SEP-14 exemption.

The use of A + C Best Value contracting allowed ODOT to accomplish the Lift Span Trunnion Replacement Project on the Columbia River (NB) Section of the Pacific Highway (I-5), and the St. John's Bridge Rehabilitation Project. Additionally, ODOT is using the A + C + D form of Best Value contracting on the Martin Luther King, Jr. Blvd. OR99E: MLK/Grand Viaduct O-Xing UPRR 02115 & 08905 Section Project, the OR43: Willamette River Bridge (Oregon City) Project, and the I-84: Sandy River – Jordan Rd Section (Bundle 210) Project.

The results of both the Lift Span Trunnion Replacement Project and the contracting method employed were deemed to be successful and subsequent evaluation of the Best Value contracting process showed that it can provide a number of benefits on transportation projects. The objective of using the Best Value method was to select the construction contractor most likely to successfully deliver this difficult and unusual project with minimum delays, problems and rework, while ensuring a competitive price. This objective was met. The project resulted in fewer traffic and safety issues, with less adverse impact on local jurisdictions and businesses than would have been expected from a low bid process. The project was completed approximately two weeks earlier than the original schedule anticipated. The reduced construction time on this project was extremely beneficial to the traveling public by reducing delays. Through the Trunnion Project, ODOT learned that quality can be sought and found through a competitive Best Value contracting method.

The St John's Bridge Project, a \$35 million deck replacement, lead paint removal and recoating project with significant restoration of historical detailing to this landmark bridge, also used Best Value contracting. The method was selected by applying a unique Value Engineering approach that looked at all possible contracting methods, including incentives, to ensure a high quality and cost-effective result. The project was completed in summer 2005, and has been profiled in *The Oregonian* newspaper as a highly successful project. The results of the St. John's Bridge Project led ODOT's Bridge and Contracts Sections to conclude that ODOT was in a far better position to work with the contractor than if the project had been low bid and that this method reduces the State's risks on critical projects.

ODOT has experience using several other alternative contracting methods including Price plus Schedule (A+B), Construction Manager/General Contractor, and Design-Build. These contracts illustrate ODOT's ability to identify projects and implement alternative contracting methodology when it best suits project and public needs. These ODOT projects have benefited from the reduction of risk, quicker execution, and lower impacts to the traveling public. ODOT expects that its continued use of alternative contracting methods may actually reduce the total construction and ownership costs of projects.

3. Procurement Process: This is a request to the Director of the Oregon Department of Transportation, on behalf of ODOT, for a contract-specific exemption from competitive bidding requirements. The exemption would allow ODOT to solicit proposals for construction of this Project using the Price plus Qualifications plus Technical alternative contracting method through a single step procurement process.

A Request for Proposals (RFP) will be issued for the Project and proposals must be submitted by a specified date. The proposals submitted will be required to contain a price proposal component and a technical proposal component containing a qualifications component and technical approach component. The price component presents the total cost to ODOT for delivering the project. The technical proposal may be required to describe such factors as the proposer's qualifications history and understanding of the Project, the proposer's success in delivering similar projects and the proposer's approach to delivering project key elements described in the Project RFP.

The qualifications and technical approach components of each proposer's technical proposal will be evaluated and scored by the proposal evaluation committee. This committee will consist of individuals from ODOT, including the Project's development team, but may include non-scoring members who are not from ODOT. Other ODOT and ODOT consultant personnel may act as observers, technical support or facilitators during evaluation and scoring, but will act as non-scoring members during the scoring process.

Once the technical proposal scoring is completed, the price proposals will be publicly opened, the final scores calculated and initial determination of the Best Value proposer announced. The final scores and ranking, and notice of intent to award, will be announced by ODOT in accordance with the procedures set forth in the RFP. Based on the final scores and ranking, the responsive and responsible proposer who provides the best value to ODOT will be selected for award and finalization of contract terms and conditions. In the event that, prior to contract execution, the selected proposer is found to be non-responsive or not responsible, or contract finalization proves unsuccessful, ODOT may, if it is in the public's best interest, select the proposer who offers the next best value for contract finalization and award.

The contract form to be used will be the standard ODOT Construction Contract form, modified to facilitate the "Price" plus "Qualifications" plus "Technical" (A+C+D) components. Development of the modified contract will be coordinated with the Department of Justice.

B. FINDINGS REGARDING REQUIRED INFORMATION

ORS 279C.330 states that: "*Findings*" means the justification for a contracting agency conclusion that includes, but is not limited to, information regarding: (1) Operational, budget and financial data; (2) Public benefits; (3) Value Engineering; (4) Specialized expertise required; (5) Public safety; (6) Market conditions; (7) Technical complexity; and (8) Funding sources.

Many of these criteria support the use of the Price plus Qualifications plus Technical Best Value contracting process. This request for exemption is supported by the following facts:

1. Operational, Budget and Financial Data: The Project was approved in the 2008-2011 Statewide Transportation Improvement Plan. The total Project budget is in the range of \$9 - \$12 million. The Project is anticipated to be funded with a combination of state and federal funding resources.

In ODOT's view, the A+C+D Best Value method of contracting is the best available procurement method that allows this Project to begin in the next construction season and be completed on time, while ensuring that ODOT will not incur additional costs beyond those budgeted. This method stresses technical expertise and quality while minimizing construction time delays.

Best Value contracting is a recognized mechanism for agencies to obtain more value for their money, not necessarily at the lowest original contract price, but over the life cycle of a project. Best Value contracting is also a means of contracting for technically complex projects that require assurance of special knowledge or past experience of a contractor.

Best Value contracting will reduce ODOT's risk that the selected contractor might not be able to construct this Project within budget and schedule constraints. A contractor with demonstrated qualifications and a sound approach will provide better overall value and should reduce change orders and overruns. As a result, cost savings to ODOT and the public are anticipated by using this method of contracting on the Project.

2. Public Benefits: The Best Value contracting method focuses on project components that are most valuable to ODOT through the ability to evaluate proposers based on their technical approaches. Overall success will be more likely as a result of application of this alternative contracting method on this Project. Benefits, along with price reasonability, include on-time completion of six months of scheduled work, which is critical in maintaining ease of mobility within the corridor, as well as collateral effects on coastal communities.

3. Value Engineering: Value Engineering is encouraged on all projects by ODOT and has resulted in both initial savings as well as long-term savings for other ODOT projects. The A plus C plus D contracting method is anticipated to result in more reliable and higher quality Value Engineering solutions for the Project. ODOT will evaluate individual Value Engineering proposals on a case-by-case basis. In addition, the contractor will be able to submit cost reduction proposals under Section 00140.70 of the Oregon Standard Specifications for Construction.

4. Specialized Expertise Required: The Price plus Qualifications plus Technical model emphasizes expertise and innovation in management and coordination, providing scheduling and estimating, assessing risk, managing mobility, public relations and safety and quality needs and providing a complete project that is sensitive to wide public participation by all in contracting opportunities. As is typical of Best Value contracts, the most qualified prime construction services are sought, rather than just simply contracting with the lowest bidder.

By using the Best Value contracting method ODOT will ensure that the prospective prime contractor has the necessary experience and expertise to complete this specialized tunnel work. The proper sequencing of operations will be critical to maintain the daily access through the tunnel by the traveling public. In addition, specialized expertise is required to successfully address the public safety issues noted below.

5. Public Safety: The traffic volumes on US26 require that all lanes remain open during the day. Closing any lanes at the Project site during the day would create traffic backups and safety concerns for the traveling public. As a result, safe traffic flow must be maintained during the day while construction proceeds at night. The highway will be closed to traffic at night, with a detour in place, while the existing tunnel lining is removed and the new lining is constructed. As the Project is staged, the contractor will be required to maintain temporary traffic detours that provide the same level of traffic carrying capacity and meet with current standards. If the contractor is unable to meet the specified completion time, the traffic volumes and associated safety issues on US26 greatly increase after the end of May.

6. Market Conditions: ODOT does not anticipate any measurable difference in market conditions if this Project is contracted under the traditional low bid or the Price plus Qualifications plus Technical Best Value method. As described in Section A, contractors have some experience with alternative contracting methods in Oregon and have become more accepting of alternative contracting processes, in particular when bidding technically complex projects with specialized needs for traffic control, ensuring adequate competition.

The Governor and the Legislature have encouraged ODOT to contract projects quickly to take advantage of lower construction prices in the current market, and to improve employment. Economic studies have shown that highway construction projects nationally create between 30 and 40 jobs per million dollars spent.

7. Technical Complexity: To be successful in completing this Project the contractor must be able to develop and follow an accurate work plan that incorporates the need for traffic control and access through a tunnel reconstruction project. The consequences of relatively small errors in planning, erection, construction staging work, and problems with the completion of sections of tunnel supports and shotcrete have the potential to delay the Project work and produce large cost overruns. The Project's work activities present a complex technical challenge to the construction contractor and ODOT.

8. Funding Sources: As mentioned earlier, this Project is anticipated to be funded with state and federal funds, the use of which has been approved by the Oregon Transportation Commission.

C. FINDINGS ADDRESSING COMPETITION

ORS 279C.335(2) requires that an agency make certain findings as a part of exempting public improvement contracts or classes of public improvement contracts from competitive bidding. ORS 279C.335(2)(a) requires an agency to find that: *It is unlikely that the exemption will encourage favoritism in the awarding of public improvement contracts or substantially diminish competition for public improvement contracts.* It is anticipated that competition for this Project's construction contract will be similar to that expected in other projects of this type. ODOT finds that selecting a contractor through the Price plus Qualifications plus Technical contracting method will not inhibit competition or encourage favoritism. This finding is supported by the following:

As outlined below, ODOT anticipates that competition will be similar to that experienced on other ODOT projects. ODOT has early indications of interest and intent to participate in this procurement, and ODOT processes for procurement of a Best Value contractor have been developed with maintenance of competition in mind.

1. The competition remains open to all qualifying proposers. The contracting community is aware of ODOT's use of alternative contracting processes and success with contractors on similar past projects. ODOT expects that with this experience, normal competition will prevail.
2. ODOT has been communicating with the construction contracting community through direct contacts and at scheduled ODOT/Associated General Contractors meetings about various Best Value and other unique contracting methods. ODOT met with industry for a constructability review on February 5, 2010, which included discussing the procurement approach for this Project. Six construction firms participated in this voluntary meeting.
3. The Price plus Qualification plus Technical evaluation and selection process ODOT intends to employ is summarized in Section A.3. The process is open, impartial, and proposers will be evaluated equally based on criteria that is reflective of the significant work elements of this type of project. Selection will be made on the basis of final proposal scores derived from a price component and technical proposal component that includes qualifications and technical approach elements as described in Section A. This method expands the grounds of competition in the evaluation process beyond price alone to include qualifications, technical approach, safety, timely completion of previous work, and past experience in similar work in order to deliver the best value project to the State.
4. Pursuant to ORS 279C.360, the solicitation will be advertised in *Daily Journal of Commerce, Reed Business Information, Cannon Beach Gazette, Seaside Signal, Tillamook Headlight Herald, and Daily Astorian*. The solicitation advertisement will also be posted on the ODOT Highway & Bridge Construction web site at:

http://www.oregon.gov/ODOT/CS/CONSTRUCTION/Alternative_Contracting.shtml

5. The objective of using the Price plus Qualifications plus Technical Best Value contracting method is to select the construction contractor most likely to successfully deliver this difficult Project, with minimal delays and a maximum degree of safety to the public as it accesses the tunnel, and provide a timely completion to the work while ensuring a competitive price.

D. FINDINGS REGARDING SIGNIFICANT COST SAVINGS

ORS 279C.335(2) requires that a public agency make certain findings as part of exempting public improvement contracts or classes of public improvement contracts from competitive bidding. ORS 279C.335(2)(b) requires an agency to find that: *The awarding of public improvement contracts under the exemption will likely result in substantial cost savings to the contracting agency, to the state agency based upon the justification and information described in ORS 279C.330 (not applicable here) or, if the contracts are for public improvements described in ORS 279A.050(3)(b) (such as this Project), to the contracting agency or the public.* These findings consider whether cost savings accrue directly to ODOT as the contracting agency or indirectly to the general public (particularly for

highway users). ODOT finds that on this Project, substantial cost savings will likely accrue to ODOT and the general public.

This Project finding is supported by the following;

1. Direct Contract Cost Saving: In general, initial contract prices are expected to be comparable between A+C+D Best Value and conventional contracting methodologies, but considerable time savings for the public can be reasonably anticipated. Through A+C+D alternative contracting ODOT will select the proposer who is most capable of handling specialized work identified for this Project based on the comprehensive set of tasks and cost presented in the bid packages, which will become part of the contract. Cost saving will be realized in the reduction of change orders, inspections, and potential claims. The current estimated cost of this Project is between \$9,000,000 and \$12,000,000. ODOT uses an inflation rate of 4.3% when estimating Project costs. ODOT will save approximately \$35,833 in inflation for each month the Project is not delayed. Project-related delays totaling one year could cost ODOT approximately \$430,000.

2. Indirect Savings: Indirect savings are real and recognizable by the public and for this Project. By awarding to a contractor who can realistically meet ODOT's quality, technical approach, schedule and safety expectations, the State and the contractor jointly save the traveling public significant inconvenience due to traffic delays, detours and slower posted speeds. ODOT uses these factors, based on our experiences with other projects, to judge impacts of construction on road users. The Sunset Highway has traffic volumes that fluctuate significantly based on recreational volume. Winter (January through May) road user costs average up to \$13,723 monthly, with a low of approximately \$9,192 in January and a high of \$18,077 in May. ODOT estimates that it can avoid an estimated road user cost for summer traffic of \$46,132 per month by avoiding extension of construction completion beyond the original contract completion date. In addition, the potential exists for a contractor to complete the work early, ultimately saving detour costs to the traveling public

3. Total Expected Savings: The competitive nature of selecting a Best Value contractor will maximize total expected savings to ODOT for the Project. There is an estimated savings to ODOT and the public by not delaying the scheduled Project completion date. The total minimum estimated monthly savings, based on the direct and indirect savings described above, is expected to exceed \$81,965 by ODOT selecting a contractor that has the experience and most efficient technical approach and schedule in completing the work within the constrained timelines for this Project.

4. Post-Project Evaluation Process: This Project will be evaluated in accordance with the requirements of ORS 279C.355, including analysis of project cost and savings. In addition to the matters to be evaluated under ORS 279C.355(2), the Price plus Qualifications plus Technical Best Value contracting method will be evaluated based upon the accomplishment of ODOT's primary objectives as noted below:

- The Project was executed using a high level of technical quality expected of a contractor team experienced in the work (specifically tunnel lining).
- The Project was successful in safely moving traffic, including trucks, through the tunnel on a daily basis following the night time closures for construction.
- The Project met the completion date, including allowed closure and delay impacts
- The Project met budget with a minimum of modifications based on a final analysis of the Project change orders.

CONCLUSIONS OF LAW

An exemption from competitive bidding requirements is justified under the criteria outlined in ORS 279C.330, findings have been developed in compliance with ORS 279C.335(2) through 279C.335(4), and ODOT will perform the post-project evaluation required by ORS 279C.355. Based upon the previously listed findings, ODOT concludes that:

1. Following the described selection process, an exemption is unlikely to encourage favoritism in the awarding of public improvement contracts or substantially diminish competition for public improvement contracts; and

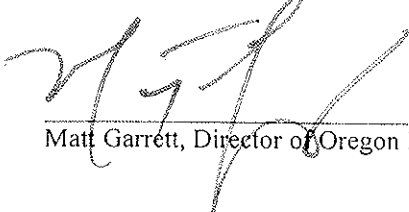
2. Award of a public improvement contract pursuant to the exemption will likely result in a substantial cost savings to ODOT and the public.

ORDER OF DIRECTOR

An exemption from public competitive bidding requirements is hereby granted to the Oregon Department of Transportation to enter into a public improvement contract utilizing the Price plus Qualifications plus Technical Best Value alternative contracting method as described in the preceding findings. This order is subject to the following conditions:

1. To the extent possible and consistent with this exemption, this procurement will follow the provisions of ORS Chapters 279A and 279C, ORS Chapter 291; OAR Chapter 137, Division 149.
2. ODOT, in concert with the Department of Justice (DOJ), shall establish and follow standards for evaluating proposals under this procurement.
3. ODOT shall work with DOJ to adapt standard contract language for the contract and shall incorporate into the contract such additional or substitute additional terms that DOJ may determine to be necessary for compliance with Oregon law.

THE FINDINGS OF FACT SUBMITTED IN SUPPORT OF THIS REQUEST ARE HEREBY APPROVED.



Matt Garrett, Director of Oregon Department of Transportation

9-16-10

Date

REVIEWED BY THE DEPARTMENT OF JUSTICE



Glen Driveness, Assistant Attorney General

9/7/10

Date



U.S. Department
of Transportation
**Federal Highway
Administration**

Oregon Division

September 17, 2010

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In Reply Refer To:
HEO.1-OR
430.200

X-Ref: BRF-S047(089)
KN 11948

Ms. Michelle Remmy
Oregon Department of Transportation
Procurement Office - Construction
455 Airport Road SE, Bldg. K
Salem, Oregon 97301-5348

RE: Value Contracting Approval on the US 26: Dennis L. Edwards (Sunset Highway) Tunnel Rehabilitation Project, KN 11948

Dear Ms. Remmy:

The Oregon Department of Transportation (ODOT) has requested use of Best Value contracting for the Dennis L. Edwards Tunnel rehabilitation project. Best Value contracting is proposed for this complex project to ensure that prospective general contractors have the necessary knowledge and expertise to complete the work in a timely and satisfactory manner. Under this contracting method ODOT would award the contract based on price, technical qualifications, and technical approach to the work.

Project work includes removing and replacing the existing tunnel lining, improving drainage, and improving the illumination system in the tunnel. Complete closure of the tunnel is not possible because no suitable detour is available for commercial vehicles. Work will be done at night during a full closure of the tunnel and then reopened to traffic during the day. Closure of the tunnel will only be allowed on weeknights and no weekend closures will be permitted.

The liner is a composite of mostly the original timber arch ribs and repairs that have been made over time using steel reinforced concrete. The work sequence for this project will require the contractor to close the tunnel to traffic at 8 pm and remove segments of the existing lining, drill and install rock dowels, apply a fiber reinforced shotcrete tunnel liner, and reopen the tunnel to traffic by 6 am the following morning.

The purpose for using Best Value contracting is to meet the project requirements by having a knowledgeable and experienced contractor perform the work that will deliver the best value project to the state. Some of the benefits of Best Value contracting beyond price include reducing contract time, focusing on the execution of complex technical aspects, anticipating and planning for technical constraints, and encouraging innovation. Best Value contracting should reduce work delays and cost overruns, and avoid or minimize adverse impacts to the environment, local communities, and the travelling public.



It is not expected that use of Best Value contracting will diminish bidding competition. All qualifying contractors will be able to submit bids. In cooperation with the Association of General Contractors, ODOT conducted a constructability review in which six construction firms voluntarily participated. Overall, the contracting community is aware of ODOT's use of alternative contracting and the success that contractors have had on similar past projects.

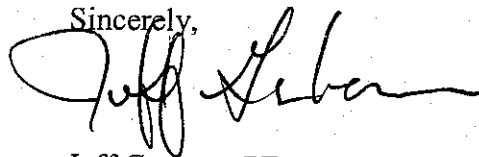
Under Best Value contracting the bid prices are expected to be comparable with bid prices for conventional low bid contracting methods. However, time savings for the public can be anticipated. By selecting the most qualified and experienced contractor ODOT can expect that the work will be completed on time. It is estimated that project delays could cost ODOT over \$30,000 per month. Delay to the traveling public could result in a road user cost of over \$18,000 per month. Best Value contracting should result in an overall cost savings to the public of over \$48,000 per month.

Use of A+C+D/Best Value contracting is approved for the US 26: Dennis L. Edwards (Sunset Highway) Tunnel Rehabilitation Project under the Special Experimental Project Number 14 (SEP-14). Award of the contract will be based 50% on price, 40% on technical qualifications, and 10% on technical approach. Using this method of contracting technique will ensure that the contractor will have the necessary knowledge and expertise to successfully complete the Dennis L. Edwards Tunnel project.

On September 6, 2005 FHWA Headquarters delegated approval authority to this office to use the Best Value contracting concept on a programmatic basis provided that: a) ODOT submit an annual program evaluation covering all Best Value projects, and b) the Oregon Division office monitors the use of Best Value contracting to ensure it is used appropriately. We look forward to these future evaluations to learn how well Best Value contracting delivers the anticipated benefits on this and other projects around the state.

Future use of Best Value contracting should be coordinated with the appropriate Oregon Division operations engineer for the project for which it will be requested. At that time we will review the project work plan, or method of program evaluation, and take the necessary approval action here at the Division office to ensure that this contracting method is used appropriately.

Sincerely,



Jeff Graham, PE
Operations Engineer

cc: ODOT (Cathy Nelson, Technical Services Manager)
(Wynette Gentemann, Construction and Oversight Manager)
(Eryca Martin, Office of Project Letting Manager)
(Nathan Potter, Region 1)
(Ron Larson, Region 1)

JG/rm



**US26: Dennis L. Edwards Tunnel Bridge No. 02552
Bridge Rehabilitation, Illumination & Signing**

SECTION 00125 - SCORING OF BIDS

Section 00125 which is not a Standard Specification is included for this Project by special provision.

00125.00 Scope - This Project will be awarded to the Bidder who meets the requirements of Section 00120 and receives the highest Bid score, comprised of the combined Price component score and Technical component score based on the criteria contained in this section.

00125.01 Submittal Limitations - "Technical components" shall be prepared simply and economically, providing a straightforward, concise description of the Bidder's capabilities to satisfy the requirements outlined in this Section. The maximum page limitation for the Technical component is 20 pages.

- Construction and General Tunnel Project Experience, Form C-1 (8 pages, 1 project per page)
- Specific Tunnel Work Experience, Form C-2 (4 pages, 1 project per page)
- Traffic Planning and Safety Work Plan Form D-1 (maximum 8 pages)

Any material submitted in pages that exceed the maximum page count will not be considered in the evaluation and scoring process.

For portions of paper Bids for which no forms have been provided, Bidders shall use 8.5" x 11" white paper a minimum of 12 point black font with a footer including the page number of each page. The Agency will allow exceptions to the font size for graphics, charts and headers and footers. Submission of technical literature, display charts, or other supplemental materials are the responsibility and within the discretion of the Bidder. The submission of general promotional material is discouraged.

All projects submitted by the Bidder for review by the Technical Evaluation Committee shall have been substantially completed after November 1, 1995. ODOT provides a "Second Notification" document which establishes the project as substantially complete. Projects submitted for owners other than ODOT require equivalent documentation to have been issued by the project owner.

To be included in scoring, no outstanding project deficiencies may exist on submitted projects, including claims for incomplete work, outstanding test reports, and non-compliance of Disadvantaged Business Enterprise (DBE) goals. Any project determined to contain deficiencies or outstanding claims will receive a zero score on all questions associated to the project.

00125.02 Technical Component - Using Agency-supplied forms and Bidder-provided documents, submit the Technical component ("C" and "D" components). Bidders shall submit documents required below. The Technical component will be scored on conformance, clarity and completeness. Missing or incomplete Technical components will be accepted and scored accordingly.

**US26: Dennis L. Edwards Tunnel Bridge No. 02552
Bridge Rehabilitation, Illumination & Signing**

- (a) **Bidder's Expertise:** Using Form C-1 provide up to eight project examples completed in the last 15 years with the specific criteria listed, including costs over \$10 million, major work consisting of tunnel work, restricted access, and work open to public traffic with overhead construction obstructions or falsework.

Form C-2 requires up to four project examples completed in the last 15 years that match the individual project specific criteria. Projects must come from the original list of eight projects (Form C-1).

Identify the experience of the Bidder, or Subcontractor, in delivering projects with specific techniques that will be used in the prosecution and progress of the Work on this Contract.

- (b) **Work Plan:** Describe practices and processes to be used to address the following complex elements for a Project Site. Provide narrative information related to your firm's approach for the following technical Project elements:

- Opening the tunnel to public traffic each day
- Transitioning public traffic to and from the detour, including communication of transitioning with ODOT, local agencies, and emergency services
- Any construction restrictions or obstacles (such as falsework) anticipated within the tunnel during the day while open to public traffic
- Passage of Emergency Vehicle Traffic through the tunnel during the work shift
- Safety Plan for Contractor's Employees, ODOT Personnel, and Project Site visitors (such as City and State Officials) during the work shift

No Technical component will be rejected or disqualified for not having all information submitted. However, missing information or blank forms will receive zero points.

00125.10 Price Scoring System - The following criteria will be used to score the Price component part, which will be added to the score of the Technical component part to determine which Bid is most advantageous to the Agency and the general public.

The maximum score for the Price component is 80 points. Points for the Price component will be based on the Price Bid positions of the technically qualified responsible Bidders (see Section 00130.10) as follows:

PRICE SCORING		
	BID POSITION	POINTS
Lowest Bidder	1	80
2 nd Low Bid	2	65
3 rd Low Bid	3	50
4 th Low Bid	4	35
5 th Low Bid	5	20
6 th Low Bid	6	5
7 th Low Bid	7	0

Any subsequent disqualification or rejection for cause of any Bidder will not change the lowest of all submitted Price components.

**US26: Dennis L. Edwards Tunnel Bridge No. 02552
Bridge Rehabilitation, Illumination & Signing**

00125.20 Technical Qualifications and Technical Approach Scoring System – The following criteria will be used to score each Technical component Bid to determine which Proposal is most advantageous to the Agency and the general public, as provided by ODOT Exemption Number 2010-01: The Technical component Bid score for a Bidder will be the total of that Bidder's Technical Qualifications score (“C” component) and the Technical Approach score (“D” component).

The 80 points maximum available for the Technical component will be split between the elements listed below. Scoring within each major element will be as follows:

Project scoring is limited to a maximum of eight projects. Only the first eight projects in the last 15 years within the submittal package will be reviewed by order of submission within the packet. Additional projects and information will not be considered by the scoring team.

Technical Qualifications (“C” component):

Construction and General Tunnel Experience Form C-1 (40 points maximum)

Within the eight submitted general projects identify those projects to be scored that contain the following qualifications:

1. List up to eight highway projects (with or without tunnel work) original bid cost – scoring based on the following schedule:
Under \$5 million dollars 0 POINTS EACH PROJECT
Greater than \$5 million and less than \$10 Million 1 POINT EACH PROJECT
\$10 million and above 2 POINTS EACH PROJECT
16 POINTS MAXIMUM FOR THIS SCORING ELEMENT
2. List up to eight highway projects where majority of project cost was in tunnel work (> 50% tunnel work).
1 POINT EACH PROJECT
8 POINTS MAXIMUM FOR THIS SCORING ELEMENT
3. List up to eight highway project sites with restricted construction access to either project end only and no side access.
1 POINT EACH PROJECT
8 POINTS MAXIMUM FOR THIS SCORING ELEMENT
4. List up to eight highway projects open to traffic with overhead construction obstructions/falsework.
1 POINT EACH PROJECT
8 POINTS MAXIMUM FOR THIS SCORING ELEMENT

Specific Tunnel Experience Form C-2, 24 points maximum

Within the eight submitted general projects, identify four of the eight projects to be scored as Tunnel Projects by the questions 5 & 6a – 6d. Tunnel projects may be any project but will only be scored by the questions below and the work must be on the overhead structure within a tunnel to qualify for this set of scoring questions.

**US26: Dennis L. Edwards Tunnel Bridge No. 02552
Bridge Rehabilitation, Illumination & Signing**

5. List up to four Tunnel Projects where all tunnel work is complete and open to unrestricted flow of traffic in its final configuration.
- Project Tunnel work that is completed after the original bid completion time receive 0 points.
 - Project Tunnel work completed on the original bid schedule will receive 1 point.
 - Project tunnel work completed at least seven calendar days prior to original bid schedule opening of the tunnel to traffic will receive 2 points.

Project tunnel completion time will be determined by the following priority:

1. Completion date for tunnel work provided in the contract, or
2. Total time allowed (i.e. days) for tunnel work provided in the contract, or
3. Completion date, if both completion date and total time allowed listed in the contract.

Projects with no completion times will receive zero score.

8 POINTS MAXIMUM FOR THIS SCORING ELEMENT

6. Structural lining removal/replacement/supported/bolted
- a. List up to four Tunnel Projects where the structural lining work was removed and replaced.
1 POINT EACH PROJECT
4 POINTS MAXIMUM FOR THIS SCORING ELEMENT
 - b. List up to four Tunnel Projects where installation of structural lining included replacement with shotcrete.
1 POINT EACH PROJECT
4 POINTS MAXIMUM FOR THIS SCORING ELEMENT
 - c. List up to four Tunnel Projects where installation of rock-bolting was a structural component installed with the wall lining work.
1 POINT EACH PROJECT
4 POINTS MAXIMUM FOR THIS SCORING ELEMENT
 - d. List up to four Tunnel Projects with removal/dispose or removal/salvage of timber lining members.
1 POINTS EACH PROJECT
4 POINTS MAXIMUM FOR THIS SCORING ELEMENT

Technical Approach (“D” component)

Traffic Planning and Safety, Form D-1, 16 points Maximum

For this project a Contractor provided Work Zone Traffic Control Plan will be needed for the period of time that work will be performed within the tunnel at night alternating with traffic use of the tunnel during the day. The Contractor plan is a technical component to be scored as follows:

7. Contractor’s Work Zone Traffic Control and Safety Plan

**US26: Dennis L. Edwards Tunnel Bridge No. 02552
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- a. Furnish the work plan with sufficient detail which allows traffic to navigate the tunnel on a daily basis after work is completed each night. Include enough detail to identify the plan to transition traffic to and from the detour, through the tunnel and any construction restrictions/obstacles to traffic anticipated within the tunnel.
0 – 8 POINTS FOR THIS SCORING ELEMENT
- b. Furnish the work plan with sufficient detail that allows for emergency vehicle traffic through the tunnel during the night work shift. Identify the contractor's plan to maintain safe passage of emergency vehicle traffic.
0 - 4 POINTS FOR THIS SCORING ELEMENT
- c. Furnish the work plan with sufficient detail to establish and maintain communication for traffic transition on and off the detour route including communications with ODOT, local agencies and emergency services.
0 – 2 POINTS FOR THIS SCORING ELEMENT
- d. Furnish the safety plan for the Contractor's employees, ODOT personnel and project visitors to the site during construction process.
0 – 2 POINTS FOR THIS SCORING ELEMENT

Regardless of the score assigned to any Technical Component, only those portions of the Technical component Bid Proposal that meet or exceed the minimum Contract requirements, as determined by the Agency in its sole discretion, will be incorporated into the Contract. Those portions that fail to meet the minimum Contract requirements will not be incorporated nor will they modify the terms and conditions of the Contract.

00125.30 Technical Evaluation Committee - The Technical Evaluation Committee shall consist of two technical experts, one from ODOT Bridge Engineering Section and one from Region 1 Technical Center, an ODOT Project Manager (other than the Project Manager for this project), and a representative from Federal Highway Administration. The ODOT Procurement Officer may act as a non-voting facilitator.

Each Technical Evaluation Committee member will separately evaluate and score the Technical Qualifications ("C" Component) and the Technical Approach ("D" Component) for each Bidder. The Technical Qualifications scores from all committee members for a Bidder will be averaged together to obtain a final Technical Qualifications score for that Bidder. The Technical Approach scores from all committee members for that Bidder will be averaged together to obtain a final Technical Approach score for that Bidder. That Bidder's final Technical Qualifications score and final Technical Approach score will then be added together to obtain that Bidder's final Technical component Bid score. If an averaged score is not a round number, it will be rounded up to the nearest full point.

00125.40 Combining Price plus Technical - To determine the combined score, each Bidder's Technical component Score (0 to 80 points) will be added to the Price component score (0 to 80 points). The final score (0 to 160 points) will be the Best Value basis for Award.

In the event the highest final score is the same for two or more Bidders, the Bidder with the highest Technical Qualifications score among those Bidders who tied as provided in

**US26: Dennis L. Edwards Tunnel Bridge No. 02552
Bridge Rehabilitation, Illumination & Signing**

this sentence shall be deemed to have the highest final score for purposes of awarding the Contract. If two or more Bidders have the highest final score as well as the same Technical Qualifications score, the Bidder with the highest Price score among those Bidders who tied as provided in this sentence shall be deemed to have the highest final score for purposes of awarding the Contract. If two or more Bidders have the highest final score, the same Technical Qualifications score and the same Price score, the Bidder with the highest Technical Approach score among those Bidders who tied as provided in this sentence shall be deemed to have the highest final score for purposes of awarding the Contract. If two or more Bidders have the highest final score, the same Technical Qualifications score, same Price Bid score, and same Technical Approach score, the Bidder with the highest combined score for the four projects submitted on Form C-2 among those Bidders who tied as provided in this sentence shall be deemed to have the highest final score for purposes of awarding the Contract.

Any subsequent disqualification, non-responsiveness or rejection for cause of any Bidder after Bid Opening will not change the calculation of the Price component or Technical component factors used in the scoring.

**SPECIAL EXPERIMENTAL PROJECT NO 14 (SEP-14)
WORK PLAN**

Best Value Contracting

For The

US26: Dennis L. Edwards (Sunset Hwy) Tunnel

**Oregon Department of Transportation
Technical Services Branch
Salem, OR 97301**

September 13, 2010

US26: Dennis L. Edwards (Sunset Hwy) Tunnel
Key # 11948

1.0 Purpose

Best value contracting (also known as Price Plus Technical Qualifications Plus Technical Approach and A+C+D Contracting) is the alternative contracting practice that the Oregon Department of Transportation seeks permission to evaluate on the US26: Dennis L. Edwards (Sunset Hwy) Tunnel project. Exemption to the low bid process shall still be obtained as provided for in the Oregon Revised Statutes.

ODOT has completed two projects using this contracting method:

Lift span Trunnion Replacement Project: Best Value Contracting was used to obtain highly specialized manufacturing and construction services to replace the counterweight cable sheaves, shafts, bearings, and cable assemblies on the North tower of the historic, circa 1916, North Bound Interstate 5 crossing of the Columbia River (Bridge #1377A).

St. John's (Portland) Suspension Bridge Rehabilitation Project: Best Value contracting was used to manage complex traffic staging issues, replace the deck and damaged suspender cables, replace the frozen truss bearing, and manage lead based paint waste on the historical and culturally-significant structure.

ODOT has three projects currently using this contracting method still under contract:

OR99E: MLK/Grand O-Xing UPRR 02115 & 08905 Viaducts Section: Best Value Contracting was selected for this highly technical and complex project whose challenges include traffic staging and detours in an urban environment with high Average Daily Traffic and confined work space, shoring requirements on the MLK structure, unusual soil properties (wood waste, unconsolidated industrial fill), unique architectural finishes, demolition/construction over the main Union Pacific Railroad line, and noise and vibration considerations for businesses and neighborhoods in the area. The current expected construction completion is February 2011.

I-84: Sandy River – Jordan Rd, Bundle 210: Best Value Contracting was used to ensure a qualified contractor with experience working with constrained traffic control space, in water work restrictions, and diverse subcontractors. The current project completion date is November 2013.

OR43 Willamette River Bridge (Oregon City) Project: Best Value Contracting was used to ensure successful completion of this historic bridge, specifically maintaining the bridge's historic significance and meeting contract environmental requirements and completion times.. The bridge is listed on the National Register of Historic Places and consists of specialized construction and material. Construction requires closure of the structure. The current contract completion date is March 2013.

By using the contracting technique we will ensure prospective general contractors have the necessary knowledge and experience to successfully complete the complex US26: Dennis L. Edwards (Sunset Highway) Tunnel Project.

US26: Dennis L. Edwards (Sunset Hwy) Tunnel
Key # 11948

2.0 Scope

Best Value Contracting will be used on the US26: Dennis Edwards (Sunset Highway) Tunnel project where a contractor's technical expertise is deemed highly important to the success of the project.

Dennis L. Edwards Tunnel (Sunset Highway) project consists of removing and replacing the existing lining, improving the wall drainage, and improving the lighting system of the tunnel. The project also involves the installation of a bike warning system.

The existing tunnel is 800-ft long with a 26-ft roadway and was built in 1940. The average daily traffic is 6,700 with a seasonal peak in August of 15,000 and a low of 2,200 in January. The liner is a composite of mostly the original timber arch ribs, which are beginning to show some rot and leakage, and various repairs using steel reinforced concrete (shotcrete). The illumination system is old and not functioning well. A portion of the tunnel collapsed in 1999 and required emergency repairs. Oversized loads using the tunnel are required to cross the center line and the associated disruption of traffic is a safety concern.

The project proposes to remove the aging composite timber liner, install a new steel fiber shotcrete and rock dowels tunnel liner. It is anticipated that construction will require total closure of the highway for some duration.

The cost of this project is estimated to be approximately \$10 million. The anticipated construction bid let date is in November 18, 2010. Construction shall be completed in May 2011.

As a result, ODOT proposes to conduct a procurement using the Best Value alternative contracting method described in this document.

The Project work will include construction, quality management, contract administration and all necessary support services to rehabilitate the tunnel. The work will be done in accordance with ODOT-approved construction standards, performance requirements, and specifications.

Accomplishing the above work is a complex process due to significant technical, specialized and complex work items including highly specialized expertise in tunnel lining rehabilitation. The consequences of relatively small errors in planning and accomplishing the work could extend the project timelines especially.

3.0 Schedule

Project Advertises to Contractors	September 30, 2010
Proposals Received	November 4, 2010
Price Bids Opened and Scores Read	November 18, 2010
Contract Award	December 2010
Notice To Proceed	January 2010
Tunnel Work Completion	May 2010
Submit SEP-14 Report	4 months after project completion

US26: Dennis L. Edwards (Sunset Hwy) Tunnel
Key # 11948

4.0 Measures

The success of this contracting method for this project will be based on the following key objectives:

- The Project was executed using a high level of technical quality expected of a contractor team experienced in the work (specifically tunnel lining).
- The Project was successful in safely moving traffic, including trucks, through the tunnel on a daily basis following the night time closures for construction.
- The Project met the completion date, including allowed closure and delay impacts
- The Project met budget with a minimum of modifications based on a final analysis of the Project change orders.

5.0 Reporting

For this and subsequent projects using the SEP-14 authorization, ODOT will:

1. Identify in early project development that best value contracting will be used.
2. Submit an informal procurement summary within sixty (60) days of receipt of bids for each project
3. Provide annual status reports, and continue to invite FHWA involvement on all aspects of the projects.
4. Provide final evaluation reports within 4 months after each project completion.



Oregon

John A. Kitzhaber, M.D. Governor

**Department of Transportation
ODOT Procurement Office - Construction**

455 Airport Rd. SE, Bldg. K

Salem, Oregon 97301-5348

Voice: (503) 986-2987

Fax: (503) 986-6910

DATE: January 11, 2011

TO: Mike Morrow
Field Operations Engineer
Federal Highway Administration
Oregon Division
530 Center Street NE, Suite 100
Salem, OR 97301

FROM: Wynnette Gentemann
Procurement Oversight & Construction Manager
ODOT Procurement Office
(503) 986-2987

RE: SEP-14 Procurement Summary
US26: Dennis L. Edwards Tunnel Bridge No. 02552 Project
Key# 11948, Contract# 14285
Washington County

In accordance with the reporting requirements outlined in the SEP-14 Work Plan for the US26: Dennis L. Edwards Tunnel Bridge No. 02552 Project, approved by FHWA on September 17, 2010 Oregon Department of Transportation (ODOT) submits the enclosed SEP-14 summary of ODOT's procurement phase using Best Value, A+C+D contracting method for this project.

ODOT successfully completed the procurement phase for this project on December 10, 2010 and the contract was executed on December 28, 2010. The enclosed report provides a summary of the procurement phase for this Project.

Respectfully,

Wynnette Gentemann

Encl: SEP-14 Initial Evaluation Report – US26: Dennis L. Edwards Tunnel Bridge No. 02552 Project

US26: Dennis L. Edwards Tunnel Bridge No. 02552
SEP-14 Procurement Summary
Page 2

Cc: Jeff Graham, FHWA
Cathy Nelson, Chief Highway Engineer
Ron Larson, Project Manager
David Kim, Area Manager
Nathan Potter, Area Manager
Wynnette Gentemann, Construction and Oversight Manager
Brenda Marcus, Interim Office of Project Letting Manager

SPECIAL EXPERIMENTAL PROJECT NO 14 (SEP-14)

A+C+D Best Value Contracting

Procurement Summary

For The

US26: Dennis L. Edwards Tunnel Bridge No. 02552

Key Number: 11948

ODOT Contract Number: 14285

**Oregon Department of Transportation
ODOT Procurement Office
Salem, OR 97301**

January 10, 2011

US26: Dennis L. Edwards Tunnel Bridge No 02552
SEP-14 Work Plan Post-Procurement Initial Report

1.0 Introduction

The Oregon Department of Transportation (ODOT) submits this summary of the procurement phase of the Best Value, A+C+D contracting method, in accordance with the provisions of programmatic Special Experimental Project No. 14 (SEP-14) for the use of A+C+D alternative contracting for transportation projects. The purpose of the summary is to fulfill the requirements for this project's SEP-14 Work Plan, as provided by ODOT to the Federal Highway Administration (FHWA) on September 16, 2010 summarizing the procurement phase of the US26: Dennis L. Edwards Tunnel Bridge No. 02552 Project.

This summary covers project scope, procurement process, evaluation and scoring, selection and industry reaction to the procurement method. This summary will be followed by separate interim reports on an annual basis until completion of the experimental project. A final report will be submitted within four months of completion and ODOT acceptance of the project.

2.0 Project Scope

Dennis L. Edwards Tunnel (Sunset Highway) project consists of removing and replacing the existing lining, improving the wall drainage, and improving the lighting system of the tunnel. The project also involves the installation of a bike warning system, tunnel floor grinding, and roadway approach slab replacement.

The existing tunnel is 800-ft long with a 26-ft roadway and was built in 1940. The average daily traffic is 6,700 vehicles with a seasonal peak in August of 15,000 and a low of 2,200 in January. The liner is a composite of mostly the original timber arch ribs, which are beginning to show some rot and leakage, and various repairs using steel reinforced concrete (shotcrete). The illumination system is old and is not functioning well. A portion of the tunnel collapsed in 1999 and required emergency repairs. Due to the narrow lane widths, oversized loads using the tunnel are required to cross the center line and the associated disruption of traffic is a safety concern.

The project proposes to remove the aging composite timber liner, install a new steel fiber shotcrete and rock dowels tunnel liner. It is anticipated that construction will require total closure of the highway for some duration.

The construction bid let date was November 18, 2010. The construction of the tunnel will be completed by May 27, 2011. The project shall be completed by July 2011.

3.0 Procurement Process

The Best Value contracting (including Price plus Technical Qualifications plus Technical Approach or A+C+D) procurement process consisted of opening Bidder Price components, (A element), and evaluating and scoring Qualifications component (C element) and Technical approach component (D element). ODOT issued an Invitation to Bid (ITB) to all interested parties via the ODOT Procurement Office – Construction Contracting Section web site on September 30, 2010 as well as advertisements in the Oregon Daily Journal of Commerce and Reed Construction Data. The ITB consisted of a Qualifications component covering Bidder's

US26: Dennis L. Edwards Tunnel Bridge No 02552
SEP-14 Work Plan Post-Procurement Initial Report

qualifications and past experience with similar projects and a Technical component covering Bidder's approach to traffic planning and safety.

4.0 Evaluation and Scoring

Bidder proposal evaluation and scoring was based on an A+C+D procurement process consisting of a Bidder Price component (A element), a Qualifications component (C element) and a Technical Approach component (D element). The award was based 50% on Price, 40% on Technical Qualifications and 10% on Technical Approach.

The Technical component Bids (C and D elements) were opened on November 4, 2010, before the Price component bids. The evaluation committee held a scoring consensus meeting November 15, 2010. The Technical Evaluation Committee evaluated and scored Bidders Technical component bids using an established Bidder qualifications and technical approach scoring criteria. Scoring consisted of the Technical Evaluation Committee assigning points to individual criteria factors within the maximum available 80 points.

5.0 Selection

Price component Bids (A Element) were opened at the beginning of the Price Opening meeting on November 18, 2010. Bidder prices and the A+C+D component scores were announced. Price bids were worth a maximum of 80 points.

The A+C+D method used for this Project resulted in the best value scoring and Best Value Bidder selection as shown in the table below:

Bidders:	Submitted Bid Price	Total Technical Component Score	Price Score	Apparent Best Value Score	Overall Rank
Bidder: Johnson Gunite	\$3,882,099.00	54.00	80	134.00	1
Bidder: Kiewit	\$9,575,450.00	69.00	35	104.00	4
Bidder: LRL	\$4,286,998.39	66.50	65	131.50	2
Bidder: Wildish	\$4,645,964.50	56.75	50	106.75	3

Johnson Western Gunite Company had the highest best value score, resulting in Johnson Western Gunite being selected as the Best Value Bidder for the project.

The contract was awarded to Johnson Western Gunite Company on December 10, 2010. The awarded bid price was approximately 54% below the Engineer's Estimate.

US26: Dennis L. Edwards Tunnel Bridge No 02552
SEP-14 Work Plan Post-Procurement Initial Report

6.0 Industry Reaction

Bidder Interest in this Project was moderate and had the following participation results:

- 6 firms attended ODOT's constructability meeting in September 2009
- 4 prime firms submitted Price and Technical component Bids

A protest from the second highest best value bidder, LRL Construction Co., Inc. was denied by ODOT on December 7, 2010.

7.0 Reporting

Interim reports will be prepared and submitted to FHWA on an annual basis, until completion of the experimental project. Interim reports will focus on the primary objectives for project execution:

- The Project was executed using a high level of technical quality expected of a contractor team experienced in the work (specifically tunnel lining).
- The Project was successful in safely moving traffic, including trucks, through the tunnel on a daily basis following the night time closures for construction.
- The Project met the completion date, including allowed closure and delay impacts
- The Project met budget with a minimum of modifications based on a final analysis of the Project change orders.

A final evaluation report will be submitted within four months after completion of the project. The final report will contain a summary of how the Project met the objectives, lessons learned and recommendations pertaining to the use of the A+C+D project delivery and contracting method on other projects.



L.R.L. Construction Co., Inc.

Specializing in Tunnels, Shotcrete, Drilling and Soil Stabilization

7165 Fairview Road

P.O. Box 432 (Mailing)

Tillamook, OR 97141

Phone: (503) 842-5520 / Facsimile: (503) 842-5501

OR License # 116166 / WA License # LRLCOC041JQ

Email: lrl@oregoncoast.com Website: <http://www.lrlconstruction.com/>

November 30, 2010

Attention: Contracting Unit, ODOT Procurement

RE: Protest of Contract # 14285, Project # 02552, Dennis L. Edwards Tunnel

Dear Sir or Madam;

L.R.L. Construction Co., Inc. (LRL) is submitting this written protest of the Oregon Department of Transportation's intent to Award based on the following grounds:

1. LRL's fax number was listed incorrectly as 503-852-5501. This is a number listed for Robert Graham (503) 852-5501, 115 W Taylor St, Carlton, OR. We usually receive hundreds of quotes from subcontractors and we did not on this project. The website; <http://www.oregon.gov/ODOT/CS/CONSTRUCTION/contractorplans/2010/PHL/11-18-10planholderlist.pdf> list us as follows:

L.R.L. CONSTRUCTION COMPANY
 7165 FAIRVIEW ROAD PO BOX 432
 TILLAMOOK, OR 97141
 EMAIL: DANIKALAVIOLETTE@YAHOO.COM PHONE: 503-842-5520 FAX: 503-852-5501
 ADDED: October 01, 2010

LRL believes a mistake on a bid results in bid rejection. We feel ODOT has made a similar mistake that should result in a mandatory rebid.

2. LRL believes the goal of ODOT was to get a contractor who had high competence technically based on ODOT's published literature. We protest the intent to Award based on ODOT's intent to award the project to the least technically competent contractor.
3. The technical score of 54/80 (68%) is a failing grade (D+) in all respects and all disciplines.
4. Based on the above LRL believes ODOT has made a technical mistake in their combined (Price & Technical) scoring methodology that does not meet the intent of "*Exemption Order 2010-01 findings and Order*" as follows:
 - a) The project will not be executed using a high level of technical quality (instead it is using the lowest).
 - b) Quote of the *Order*: "*Best Value contracting is a recognized mechanism for agencies to obtain more value for their money, not necessarily at the lowest original contract price*". We protest the intent to award to the lowest price and the lowest technical score as this cannot be the best value described in the *Order*.

c) Budget during the signing of the *Order* was \$9,000,000 to \$12,000,000. The best value for ODOT is not $\$3,882,099/\$12,000,000 = (32\%)$ and a 68% technical grade (low bidder) compared to $4,286,998.39/\$12,000,000 = (36\%)$ and a 66.5/80 (83%) (2nd low bidder).

5. Quote of the *Order*: *“In the event that, prior to contract execution, the selected proposer is found to be non-responsive or not responsible, or contract finalization proves unsuccessful, ODOT may, if it is in the public’s best interest, select the proposer who offers the next best value for contract finalization and award. LRL contends that the Best Value has not been achieved as the price scoring system was distributed inversely of what was intended to obtain the Best Value. If ODOT’s scoring criteria were to mathematically and statistically seek the true Best Value, the scoring criteria would have been to award scores closer together for the lower bids, not closer together for the higher bids. See the following illustration.*

6.

PRICE SCORING FAVORING LOWEST BID			
	BID POSITION	POINTS	DIFFERENCE
LOWEST	1	80	
			15
2ND LOW BID	2	65	
			15
3RD LOW BID	3	50	
			15
4TH LOW BID	4	35	
			15
5TH LOW BID	5	20	
			15
6TH LOW BID	6	5	
			5
7TH LOW BID	7	0	

PRICE SCORING FAVORING TECHNICAL BID			
	BID POSITION	POINTS	DIFFERENCE
LOWEST	1	80	
			5
2ND LOW BID	2	75	
			15
3RD LOW BID	3	60	
			15
4TH LOW BID	4	45	
			15
5TH LOW BID	5	30	
			15
6TH LOW BID	6	15	
			15
7TH LOW BID	7	0	

LRL believes this may have been a typographic error in that it can be shown and proven that the scoring criteria favor the lowest bid and not the true Best Value that was being sought.

We thank you in advance for your review and consideration of this bid protest and attempting to obtain the true Best Value for ODOT and the citizens of this State.

Sincerely,

Denis “Dan” Laviolette
 Owner L.R.L. Construction Co., Inc.