



## Legislation Text

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**File #:** 11-0592, **Version:** 1

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Resolution to Approve Third Amendment to Agreement with Northwest Consultants, Inc. (NCI) for Construction Engineering and Additional Design Engineering Services for the E. Stadium Boulevard Bridges Replacement Project (\$609,815.00)

Attached please find a resolution to increase the Professional Services Agreement (PSA) with Northwest Consultants, Inc. (NCI) in an amount of \$609,815.00, for the future construction engineering (\$299,597.00), and additional design engineering services (\$310,218.00) for the E. Stadium Boulevard Bridges Replacement Project. To date, the City Council has approved \$1,623,624.00 for the planning and the design engineering services with NCI. After this amendment, the new total contract with NCI will be \$2,233,439.00. The costs associated with this amendment will come from the appropriate City Funds that are responsible for the work, i.e. Street Repair Millage, Storm Sewer, Sanitary Sewer, and Water System Funds. The amount of each fund's responsibility will be its pro-rata amount.

### **ADDITIONAL DESIGN ENGINEERING**

During the course of the final design and the construction plan preparation and in the latter part of 2010 and in 2011 we were required to perform additional tasks as requested by FHWA/MDOT in order to be able to meet all needed federal-aid oversight requirements and procedures. Due to those additional engineering services by NCI for revisions to the design and the construction plans we expect an estimated savings of about \$1,560,000.00 in the project's future construction cost. The total cost of these additional design engineering services by NCI is \$310,218.00. The following are the detailed information for the cost of these additional services and the estimated construction savings.

- In total for the following tasks we expect to save about \$1,260,000.00 dollars in the future construction costs and to add \$130,696.00 to the design engineering costs. We participated in a Value Engineering Process (VEP) that was mandated by FHWA/MDOT policy (NCI \$8,797.00); additional foundation piling analysis (NCI \$23,839.00) and re-design the foundations for the bridges (NCI \$40,987.00) with a less costly and less disruptive construction method that will have significant reduction in noise and vibrations; relocation of the pedestrian refuge island near Kipke Drive (NCI \$20,008.00); revising the height of the retaining wall that is located at the University of Michigan's SC-7 Parking Lot to provide a flatter slope (NCI \$13,763.00); revising the grading plans for the project to accommodate the changes to the SC -7 wall (NCI \$6,250.00); additional research for the bridge's beam design (NCI \$10,161.00); calculations to "load rate" the bridges (NCI \$4,199.00); and revise the proposed expansion joint layout of the bridges (NCI \$2,692.00).
- In order to conclude the required ROW easements and the grading permits necessary for the project's construction phase we completed the following tasks for a total cost of \$38,217.00, and for an estimated savings of \$300,000.00 in the future construction cost. Those tasks included revising the legal descriptions and exhibit drawings for the right-of-way acquisition process (NCI \$2,394.00); staking utilities that needed to be relocated through the SC-7

parking lot in order to assure that they would not conflict with future construction that did not yet exist (NCI \$3,480.00); revising the design of a retaining wall at the U of M Golf Course (NCI \$32,343.00).

- Finally, to satisfy any and all other remaining stakeholders' requirements it was necessary to add seven tasks to NCI's Scope of Services for a total cost of \$141,305.00. They were re-designing the storm sewer system to detain first-flush and bank-full rain events for compliance with revised City's National Pollution Discharge Elimination System (NPDES) Permit (NCI \$31,071.00); performing a Ground Motion Attenuation Study and a Pre-construction Condition Assessment of six properties surrounding the project site to estimate the potential impacts of construction induced vibrations on the surrounding buildings (NCI \$24,950.00); incorporating constructability review comments in the final construction plans (NCI \$20,337.00); quantifying non-hazardous contaminated soils by work item type and preparing a Due Care Plan to properly notify the Contractor of the site conditions and define their responsibilities during construction (NCI \$11,579.00); additional assistance with the processes and the preparations for the \$16,772,000.00 federal and state grant applications (NCI \$43,368.00); and accelerated work schedule to obligating the remaining \$13,100,000.00 TIGER II fund (NCI \$10,000.00)

## **CONSTRUCTION ENGINEERING**

For satisfactory completion of the future construction phase of the project, and in addition to the construction engineering services provided by Parsons Brinckerhoff Michigan, Inc (PBM) (which is proposed via a separate resolution on June 20, 2011), we have determined a need to retain the services of NCI through the project's construction phase to perform special construction engineering services. The budget for the cost of these construction services is \$299,597.00 and will come from the appropriate City Funds that are responsible for the work, i.e. Street Repair Millage, Storm Sewer, Sanitary Sewer, and Water System Funds. The amount of each fund's responsibility will be the pro-rata amount. The new construction services by NCI include the following:

- NCI is fully-familiar with the project, its requirements, has the competitive fee schedule, and the "institutional memory" to quickly provide the needed information or resources. NCI will perform shop drawing review, will be available to attend project meetings as requested by the City, will be available to assist with resolving the field's technical challenges should they arise, and will meet with material suppliers and producers to assist with the approval and acceptance process.

NCI received Human Rights approval on May 11, 2011. All personnel with this project will receive a "living" wage. The form of the contract with NCI is the standard professional services agreement drafted by the City Attorney.

Prepared by: Homayoon Pirooz, P.E., Project Management Manager

Reviewed by: Sue F. McCormick, Public Services Area Administrator

Approved by: Tom Crawford, Interim City Administrator

Whereas, In 2006 Northwest Consultants, Inc., (NCI) was awarded a contract to provide professional engineering services for the E. Stadium Boulevard Bridges Replacement Project;

Whereas, On March 15, 2010 (R-10-068) the professional services agreement with NCI was amended for engineering design services for a total contract amount of \$1,623,624.00;

Whereas, It is now necessary to further amend NCI's professional services agreement to include construction engineering services for the project construction in 2011-2013 in the amount \$299,597.00;

Whereas, It is now necessary to amend NCI's professional services agreement to include additional design engineering services in the amount of \$310,218.00 for completing the project design and the construction plans in accordance with FHWA and MDOT requirements; and

Whereas, NCI has received Human Rights approval on May 11, 2011, and pays its employees a living wage;

RESOLVED, That Council approves the Amendment to the Agreement with Northwest Consultants, Inc. (NCI) for Construction Engineering and Additional Design Engineering Services for the E. Stadium Boulevard Bridges Replacement Project (\$609,815.00)

RESOLVED, That Council approves a \$30,000.00 contingency amount for additional construction engineering services by NCI with the approval of the City Administrator;

RESOLVED, Funding for this work exists with the approved Capital Budgets from the following funds in the approximate amounts listed. The specific amount of the funds to be obligated from each City funding source will be determined after bids for the project have been opened by the Michigan Department of Transportation in September 2011 and the equitable distribution of costs are determined. An estimate of these values will be provided when the City-State Agreement is presented to City Council for their approval. This is expected to occur in August 2011.

Water Fund (pending sale of bonds) Fund 0042))	\$81,151
Storm Water Fund (Fund 0069)	\$139,211
Sanitary Sewer Fund (pending sale of bonds Fund 0043))	\$31,278
Street Repair Millage Fund (Fund 0062)	<u>\$388,175</u>
Total	\$639,815

RESOLVED, That the Mayor and City Clerk be authorized and directed to execute said amendment after approval as to form by the City Attorney and approval as to substance by the City Administrator; and

RESOLVED, That the City Administrator be authorized to take all necessary administrative actions to implement this resolution.