



Agenda Item Executive Summary

Title: Willow Road STADI Project Engineering: Change Order #2: Initial Permit Submittals

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 06/02/2015

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input checked="" type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input type="checkbox"/> | Informational Only |

Item History:

On April 28, 2015, and again on May 12, 2015, the Village Council discussed a project update for the Willow Road Stormwater Tunnel and Area Drainage Improvements (STADI) project prepared by MWH, the Village's consulting engineering firm for the project. The Council reviewed the preliminary design process undertaken over the last nine months (site-specific data collection, 30% design, preliminary opinion of probable construction cost, and draft permit applications).

Executive Summary:

The previous Opinion of Probable Construction Cost (OPCC), prepared in 2012, was \$34.6 million. MWH's current OPCC, is \$58.5 million. As a result of the significant cost increase, the Village Council has identified some limited next steps to advance the project. One such step is to complete the draft permit applications and submit them to the respective review agencies, while not advancing engineering from the current 30% stage. Based on Council direction, MWH has developed a scope of work to complete initial permit submittals. The goals of this effort are: 1) to initiate what is likely to be a lengthy permitting process, and 2) to facilitate more detailed discussions with the permitting agencies regarding their requirements for permit approval.

The fees associated with this work are as follows:

- \$63,690: Permitting Activities (June – Dec 2015)
- \$25,325: Additional Modeling and Process Development (allowance)
- \$21,865: Project Management (June – Dec 2015)

This results in a total expenditure of \$110,880 for the preliminary permitting work. It is important to note that this work is included in the scope of work for Phase 2 of the Village's contract with MWH, so this Change Order #2 DOES NOT INCREASE THE OVERALL CONTRACT COMPENSATION. The total contract compensation for Phase 2 of the contract is \$1,225,000. If the Council authorizes this work, MWH is only being authorized to complete this portion of the work contracted in Phase 2. None of the remaining Phase 2 engineering is authorized.

Recommendation:

Consider approval of Change Order #2 for Engineering Services the Willow Road Stormwater Tunnel and Area Drainage Improvements Project to authorize expenditure of \$110,880 from Phase 2 of the current contract with MWH Americas, Inc., for initial permit submittals. This Change Order does not change the total compensation due in the Village's contract with MWH.

Attachments:

- 1) Agenda Report
- 2) MWH Contract Change Order #2

Agenda Report

**Subject: Willow Road STADI Project Engineering: Change Order #2:
Initial Permit Submittals**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: May 27, 2015

Background

On April 28, 2015, and again on May 12, 2015, the Village Council discussed a project update for the Willow Road Stormwater Tunnel and Area Drainage Improvements (STADI) project prepared by MWH, the Village's consulting engineering firm for the project. The Council reviewed the design process undertaken over the last nine months, the preliminary design (site-specific data collection, 30% design, preliminary opinion of probable construction cost, and draft permit applications). The previous Opinion of Probable Construction Cost (OPCC), prepared in 2012, was \$34.6 million. MWH's current OPCC, is \$58.5 million. As a result of the significant cost increase, the Village Council has identified some limited next steps to advance the project. One such step is to complete the draft permit applications and submit them to the respective review agencies, while not advancing engineering from the current 30% stage. The time schedule associated with the permit application, review, and approval, is approximately 12 months.

There are several benefits to this approach. Despite several discussions with the Illinois EPA, permitting and water quality aspects are still key feasibility aspects of the project. While the EPA has helpfully engaged in these discussions, they have also been very clear that they will need a full permit application with all necessary details before they will be able to begin officially reviewing the project. Feasibility will ultimately rest on permitability, and there is no way to ascertain this feasibility until the completion of the permit process is reached. This process is estimated to take 12 or more months from time of submittal, so submitting at this time will begin that process and allow the project to move forward, without significant additional expenditure for engineering.

Scope of Services

Based on Council direction, MWH has developed a scope of work to complete initial permit submittals. The goals of this effort are: 1) to initiate what is likely to be a lengthy permitting process, and 2) to facilitate more detailed discussions with the permitting agencies regarding their requirements for permit approval. Permit applications to be submitted under this scope of services will be based on the current 30% design for the STADI Project as presented in MWH's Review Point 2 documents dated April 22, 2015. It is understood that the agencies will require future submittal of more advanced design documents before any final permitting decision is made. Given the anticipated high level

of public interest in the Joint Permit process, it is also possible that permit agencies will require additional studies, analyses, and/or information to be able to proceed with the permit process. Development of design details beyond the current 30% design is not included in this scope of services except as specifically noted. Likewise, additional studies, analyses, and information requested by agencies are not included in this scope of services.

This scope of work includes the following general tasks:

- Meeting with environmental stakeholder groups (Alliance for Great Lakes, N.R.D.C., Sierra Club, etc.) as has been directed by Illinois EPA
- Pre-submittal meeting with review agencies
- Permit submittal
- Response to initial review comments
- Permit review progress meeting with agencies
- Project management, reporting, and communications

MWH's Scope of Work is contained in **Attachment #1**.

Cost of Services

The fees associated with this work are as follows:

- \$63,690: Permitting Activities (June – Dec 2015)
- \$25,325: Additional Modeling and Process Development (allowance)
- \$21,865: Project Management (June – Dec 2015)

This results in a total expenditure of \$110,880 for the preliminary permitting work. It is important to note that this work is included in the scope of work for Phase 2 of the Village's contract with MWH, so this Change Order #2 **DOES NOT INCREASE THE OVERALL CONTRACT COMPENSATION**. The total contract compensation for Phase 2 of the contract is \$1,225,000. If the Council authorizes this work, MWH is only being authorized to complete this portion of the work contracted in Phase 2. None of the remaining Phase 2 engineering is authorized.

Schedule

MWH has proposed the following timeline and milestones for the work:

- Change Order 2 Notice-to-Proceed: June 3, 2015
- NGO Coordination Completed: July 3, 2015
- Pre-Application Coordination Completed: July 24, 2015
- Initial Permit Application Submittals – Draft to VILLAGE: August 26, 2015
- Receipt of Comments from VILLAGE: September 9, 2015
- Permit Application Submittals to Agencies: September 16, 2015

- Follow-up Meeting with Permit Agencies: November 24, 2015
- Permit Review Meeting Summary: December 2, 2015
- Council Briefing: December 2015

Recommendation:

Consider approval of Change Order #2 for Engineering Services the Willow Road Stormwater Tunnel and Area Drainage Improvements Project to authorize expenditure of \$110,880 from Phase 2 of the current contract with MWH Americas, Inc., for initial permit submittals. This Change Order does not change the total compensation due in the Village's contract with MWH.

Attachments:

1. MWH Contract Change Order #2

CHANGE ORDER 02
WILLOW ROAD STORMWATER TUNNEL AND AREA DRAINAGE IMPROVEMENTS
INITIAL PERMIT SUBMITTALS

Contract No. 2014-0000059
Change Order No. 02
Effective Date _____

In accordance with Article 7 of the Consulting Services Agreement (Lump Sum) dated January 21, 2014 (“Agreement”) between the Village of Winnetka, Illinois (“CLIENT”) and MWH AMERICAS, INC. (“CONSULTANT”), this Change Order modifies the Agreement as follows:

1. **Change in Services:**

The goals of this effort are: 1) to initiate what is likely to be a lengthy permitting process, and 2) to facilitate more detailed discussions with the permitting agencies regarding their requirements for permit approval. Permit applications to be submitted under this scope of services will be based on the current 30% design for the STADI Project as presented in MWH’s Review Point 2 documents dated April 22, 2015. It is understood that the agencies will require future submittal of more advanced design documents before any final permitting decision is made. Given the anticipated high level of public interest in the Joint Permit process, it is also possible that permit agencies will require additional studies, analyses, and/or information to be able to proceed with the permit process. Development of design details beyond the current 30% design is not included in this scope of services except as specifically noted. Likewise, additional studies, analyses, and information requested by agencies are not included in this scope of services.

Specific activities to be completed by CONSULTANT under this scope of services shall include the tasks described below. Tasks represent a portion of the scope defined under the existing Agreement between CLIENT and CONSULTANT and are referenced to the Agreement task numbers.

Completion of Review Point 2 Permitting Activities (Task 1.1.6)

Review Point 2 Documents submitted to the CLIENT in April 2015 included draft permit applications as listed below:

- Joint Permit Application (U.S. Army Corps of Engineers, Illinois Department of Natural Resources, Illinois Environmental Protection Agency)
- MWRD Watershed Management Ordinance Permit Application
- Union Pacific Railroad (UPRR) Crossing Permit Application

The draft permit applications prepared for the MWRD and UPRR are complete and suitable for submittal to the reviewing agencies based on the current preliminary design for the project. Several attachments to the Joint Permit Application were not completed prior to Review Point 2 as they would have involved release of project information prior to review by the Village Council. Upon authorization of this change order by the CLIENT, CONSULTANT will proceed with the activities required to complete the attachments as summarized below and generate a copy of the Joint Permit Application suitable for submittal to the reviewing agencies.

- CONSULTANT shall submit an on-line IDNR EcoCAT query for the proposed project site to determine whether any proposed project elements would impact sensitive environmental areas or habitat for threatened or endangered species. Documentation of the EcoCAT review will be incorporated into the Joint Permit Application document. Submittal of the EcoCAT query may trigger additional information requests from IDNR.
- CONSULTANT shall prepare and submit to the Illinois Historic Preservation Agency (IHPA) a letter describing the location and extent of the proposed project, and requesting evaluation of the project by the IHPA for potential impacts on important historic or cultural resources. A copy of the letter and the response received from IHPA will be incorporated into the Joint Permit Application.
- CONSULTANT shall contact the North Cook County Soil and Water Conservation District via phone to introduce the proposed project and confirm the conditions that will have to be met for the project to comply with NCCSWCD permitting requirements. Documentation of the discussion with the NCCSWCD and a general narrative describing the proposed approach to soil erosion and sedimentation for the STADI Project will be incorporated into the Joint Permit Application. Detailed soil erosion and sedimentation control plans will not be developed as part of this effort. These plans will be developed in conjunction with subsequent detailed design activities for the project.
- CONSULTANT shall prepare and submit to the United States Coast Guard (USCG) a letter describing the location and extent of the proposed project as well as select drawings from the 30% design set. The letter will request evaluation of the project by the USCG for potential impacts on navigation. A copy of the letter and the response received from USCG will be incorporated into the Joint Permit Application.
- CONSULTANT shall prepare and submit to the Illinois Coastal Management Program (ICMP) a letter describing the location and extent of the proposed project as well as a copy of the Water Quality Management Plan and select drawings from the 30% design set. The letter will request feedback on the project by the ICMP for potential impacts on the coastal zone along the Lake Michigan shoreline in Winnetka. A copy of the letter and the response received from ICMP will be incorporated into the Joint Permit Application.

Effort to complete the above activities is included in the budget previously authorized by the CLIENT for tasks leading up to Review Point 2. No additional budget is authorized for these tasks under this Change Order 02.

Additional Permitting Activities (Phase 2)

Interactions with permitting agencies to date have indicated that additional activities beyond those performed to reach Review Point 2 will need to be completed to obtain clear direction regarding the permitting standards that will be used to evaluate the Willow Road STADI Project. These activities were originally anticipated to occur during Phase 2 Engineering. Change Order 02 authorizes CONSULTANT to proceed with the performance of these tasks as described herein so as to advance the initial permit applications to a point where the CLIENT can be provided with additional information regarding the overall feasibility of the project from a permitting viewpoint.

CONSULTANT does not anticipate that this effort alone will result in permits being issued by agencies for the STADI project. But, it is critical in the permit process to elicit agency feedback to an official permit application, in particular with regards to the proposed water quality management strategy. Additional efforts will likely be required beyond this scope of work to satisfy the requirements of the overall permitting process.

NGO Coordination (Task 2.2.2). CONSULTANT shall host one (1) informational meeting (4 hours) with representatives of non-governmental organizations (NGO) to review the project concept, answer questions related to the project, and solicit feedback regarding specific issues or concerns related to the project.

CONSULTANT shall work with CLIENT to develop a list of NGOs to be invited to the meeting. The meeting shall take place at either the CONSULTANT or CLIENT office and participants shall be given at least 2 weeks of notice before the meeting. CONSULTANT will be responsible for preparing an agenda/invitation to the meeting for distribution by the Village, facilitating the discussion during the meeting, and preparing a written meeting summary for submittal to the CLIENT.

- Deliverables:
 - NGO Meeting invitation/agenda (pdf format only)
 - NGO Meeting summary (pdf format only)

Pre-Submittal Agency Meeting (Tasks 2.1.3, 2.1.4). CONSULTANT shall attend one (1) meeting with the Illinois Department of Natural Resources Office of Water Resources (IDNR-OWR) prior to submitting a permit application. IDNR-OWR shall invite sister regulatory agencies to participate in the meeting. The intention of the meeting is to provide an update on the project progress and solicit pre-application feedback from the regulatory agencies. This meeting shall take place after the NGO meeting. CONSULTANT will be responsible for giving a short presentation to update the attendees on project progress and then for soliciting pre-application feedback from the agencies. CONSULTANT shall prepare a written meeting summary for submittal to the CLIENT.

- Deliverables:
 - Pre-Submittal Agency Meeting agenda (pdf format only)
 - Pre-Submittal Agency Meeting summary (pdf format only)

Additional Permit Development Efforts (Tasks 2.1.3, 2.1.4). CONSULTANT shall review comments from the NGO meeting with Village staff in a phone call and identify elements of the project plan (e.g., Water Quality Management Plan, Outfall Structure) that can be modified with limited effort to address NGO comments as appropriate. CONSULTANT shall prepare a comment and response matrix for issues identified during the NGO meeting. This matrix will be included as an attachment to the Joint Permit Application.

CONSULTANT shall update the Review Point 2 design materials as appropriate to reflect specific comments from the NGO coordination effort and comments from other agencies listed above. A total of 100 person-hours of effort are allocated for updates to the design materials. Revisions that would require more effort than allocated will not be made without prior authorization of additional budget by the CLIENT.

CONSULTANT shall prepare three (3) printed sets of updated permit applications (Joint Permit Application, MWRDGC Watershed Management Ordinance Permit Application, UPRR Crossing Permit Application) for review by Village staff. CONSULTANT shall also submit one electronic (pdf) copy of each of the draft permit applications to the Village.

- Deliverables:
 - Three (3) printed sets of updated permit applications for review by Village staff
 - One (1) electronic (pdf) copy of each draft permit application

CLIENT may consider retaining the services of an environmental attorney to review the draft permit application prior to submittal to the Joint Permit agencies.

Upon receipt of one (1) round of comments on the updated draft applications from the CLIENT, CONSULTANT shall review and revise the applications as appropriate to create a final set of permit applications based on the current preliminary design for the project for submittal to the permitting agencies. CONSULTANT shall submit on behalf of the Village, copies of the initial permit applications to the permitting agencies as listed below.

- Deliverables:
 - Joint Permit Application
 - 1 copy to U.S. Army Corps of Engineers
 - 1 copy to Illinois Department of Natural Resources
 - 1 copy to Illinois Environmental Protection Agency
 - MWRD Watershed Management Ordinance Permit Application
 - 1 copy to MWRD
 - Union Pacific Railroad Crossing Permit Application
 - 1 copy to UPRR
 - Permit Application copies to CLIENT
 - Three (3) printed copies of each permit application
 - One (1) electronic (pdf) copy of each permit application

CONSULTANT understands that fees associated with the permits to be submitted may be deferred until the agencies are prepared to issue a public notice regarding the applications. Estimated permit application fees that would need to be paid to the agencies at a future point in the permitting process are summarized below:

Permitting Agency	Anticipated Permit Application Fee
U.S. Army Corps of Engineers	\$ -0-
Illinois Department of Natural Resources	\$ 5,000
Illinois Environmental Protection Agency	\$ 10,000
Metropolitan Water Reclamation District	To be determined
Union Pacific Railroad	\$ -0-
North Cook County Soil and Water Conservation District	approximately \$4,000

These fees are not included in the budget for services under this change order or in the budget for the overall project design effort. Permit application fees will be paid directly by the CLIENT to the respective permitting agencies when due.

Permit Application Follow-up (Tasks 2.1.3, 2.1.4). The permit applications to be submitted at this point in the project design process will include permitting materials based on the preliminary 30% design and input from NGOs and permitting agencies. The goals for submitting the Joint Permit Application at this point in the design process include addressing the following: (1) Is the proposed water quality management approach reasonable? (2) Would a load reduction, number of exceedance, or mixing zone approach be used to evaluate water quality compliance? (3) What additional data or analyses are needed? (4) Do other agencies have any major issues with the project design?

Given the unique characteristics of the STADI Project, CONSULTANT anticipates that the permit submittals will prompt questions from the permitting agencies. CONSULTANT has budgeted 80

person-hours of staff time to respond to agency comments or questions that involve clarification of the current design. CONSULTANT will not expend effort beyond this limit or advance the current 30% design without obtaining prior written approval for additional budget from the CLIENT.

Additional Modeling/Process Development Activities (Tasks 2.1.3, 2.1.4). Two key areas where the permitting agencies may request further design development beyond the current preliminary design to support their review include:

- Simulation of system operations and estimated annual pollutant load reductions, and
- Analysis of the effectiveness of the proposed stormwater treatment system.

An allowance for up to 160 person-hours of effort is included in the budget for these design development activities as described below. However, CONSULTANT shall not initiate this work without written authorization from the CLIENT.

- Enhancement of the existing hydrologic/hydraulic model to support continuous simulations of runoff and discharge – The current hydrologic/hydraulic model of the Willow Road STADI Project is not capable of supporting continuous simulations over periods of multiple rainfall events. Such simulations are likely to be required to provide additional support for the proposed water quality management plan for the project. If authorized by the CLIENT, CONSULTANT will modify the hydrologic representation of the project area to support continuous simulations. Results from the enhanced model will be compared against results from the existing model for select events to confirm that the overall project representation has not been significantly changed. The enhanced model will then be used to simulate project conditions for the typical rainfall year (Water Year 2004) and update estimates of discharge volumes under current and proposed conditions.
- Development of additional details/research regarding the proposed stormwater treatment system – If required by the permitting agencies and authorized by the CLIENT, CONSULTANT will develop additional details related to the configuration and operation of the proposed end of pipe stormwater treatment system. Details would be developed to address specific questions/concerns raised by the permitting agency, such as the performance characteristics of the filtration system, the configuration of the peracetic acid chemical feed system, or the basis for use of peracetic acid without neutralization.
- Deliverables:
 - Printed copies of supplemental materials for transmittal to permitting agencies (number of copies based on number of copies of original permit materials submitted)
 - Three (3) printed copies of supplemental materials submitted to permitting agencies for CLIENT files
 - One (1) electronic (pdf) copy of supplemental materials submitted to permitting agencies for CLIENT files

Permit Status Review (Tasks 2.1.3, 2.1.4). After allowing 60 days for agency review of the submitted Joint Permit Application, CONSULTANT shall schedule and conduct a four (4) hour meeting with joint permit agency representatives (attendees may participate in person or by phone) to assess the status of the current permit application and document actions required to advance the applications further toward permit issuance. Results from this meeting will be documented in a memorandum for submittal to the CLIENT. This meeting will serve as the endpoint for services authorized under this Change Order 02.

- Deliverables:
 - Permit Status Review agenda (pdf format only)
 - Permit Status Review Memorandum (pdf format only)

Phase 2 Project Management Activities (Task 2.2.1)

CONSULTANT shall continue to implement its project management processes to manage, direct, and administer project activities in a manner that supports the successful completion of the authorized tasks. CONSULTANT will attend up to six (6) progress meetings and one Village Council meeting in Winnetka over the anticipated 30 week duration of these activities.

Exclusions

Items that are specifically excluded from the scope of services under this change order include:

- Mixing zone/dispersion modeling at the lake outfall
- Additional water quality monitoring
- Revision of relief sewer/tunnel design
- Additional studies, analyses, and information requested by regulatory agencies that exceed the allotted level of effort
- Permit fees

2. **Change in time of Performance** (attach schedule if appropriate):

Services outlined in this Change Order 2 are anticipated to begin June 3, 2015. Interim milestones for specific tasks are presented below. Milestone dates are dependent upon the cooperation of other parties (NGOs, permitting agencies). CONSULTANT will monitor the project schedule and advise CLIENT of any factors that would have significant impacts during regular progress updates. All activities included in the scope of services for this Change Order are anticipated to be completed by December 31, 2015.

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|--|--------------------|
| • Change Order 2 Notice-to-Proceed: | June 3, 2015 |
| • NGO Coordination Completed: | July 3, 2015 |
| • Pre-Application Coordination Completed: | July 24, 2015 |
| • Initial Permit Application Submittals – Draft to CLIENT: | August 26, 2015 |
| • Receipt of Comments from CLIENT: | September 9, 2015 |
| • Permit Application Submittals to Agencies: | September 16, 2015 |
| • Follow-up Meeting with Permit Agencies: | November 24, 2015 |
| • Permit Review Meeting Summary: | December 2, 2015 |
| • Council Briefing: | December 2015 |

Activities related to Task 1.4.3 and Phase 2 Engineering in the original Agreement, but not specifically included in this Change Order 2, are deferred pending further direction from the CLIENT. CONSULTANT will not proceed with activities related to these tasks without specific authorization from the CLIENT.

3. **Change in CONSULTANT’s Compensation:**

No change to the current lump sum contract amount for the Agreement is required for this change order. The scope of services defined herein includes activities previously included in the contract amounts for

Phase 2 – Engineering activities as shown in the attached Revised Schedule of Values. This table shall replace all previous Schedule of Values for this contract.

All other terms and conditions remain unchanged.

CLIENT

CONSULTANT

Signature

Signature

Name (Printed or Typed)

Name (Printed or Typed)

Date

Date

Revised Schedule of Values – Change Order 2
Willow Road Stormwater Tunnel and Area Drainage Improvements
May 22, 2015

Phase 1/Task/Subtask Description	Original Task Value	Adjusted Task Value	Status
Phase 1 – Permitting			
Task 1.1A – Preliminary Engineering: Review and Planning Task 1.1.1 – Concept Review Task 1.1.2 – Permit Plan Task 1.1.3 – Hydrologic and Hydraulic Model Verification	\$107,612	\$107,612	Authorized and Complete
Task 1.1B – Preliminary Engineering: Field Investigations/Design Task 1.1.4 – Phase 1 Field Investigations Task 1.1.5 – Preliminary Design	\$478,456	\$478,456	Authorized and Complete
Task 1.1C – Preliminary Engineering: Phase 1 Permitting	\$79,952	\$79,952	Authorized; Consultation letters to be obtained
Task 1.1D – Water Quality Monitoring Program Task 1.1.7 – Consulting Services Task 1.1.8 - Laboratory Services (includes 10% mark-up on actual costs)	\$48,500 \$22,000	\$48,500 \$22,000	Authorized and Complete
Task 1.2 – Phase 1 Project Management	\$49,328	\$49,328	Authorized and Complete
Task 1.3 – Phase 1 Project Outreach	\$29,250	\$29,250	Authorized and Complete
Task 1.4 – Construction Management Selection Process	\$54,220	\$54,220	Not Authorized
Phase 1 Total	\$869,318	\$869,318	

Phase 2/Task/Subtask Description	Original Task Value	Adjusted Task Value	Status
Phase 2 – Engineering			
Task 2.1 – Phase 2 Engineering	\$1,107,133		
Permitting Activities (June – Dec 2015)		\$63,690	Change Order 2
Add'l Modeling/Process Development		\$25,325	Change Order 2
Remaining Phase 2 Engineering		\$1,018,118	Not Authorized
Task 2.2 – Phase 2 Project Management	\$73,992		
Phase 2 Project Management (June – Dec 2015)		\$21,865	Change Order 2
Remaining Phase 2 Project Management		\$52,127	Not Authorized
Task 2.3 – Phase 2 Outreach	\$43,875	\$43,875	Not Authorized
Phase 2 Total	\$1,225,000	\$1,225,000	

Total Contract Amount	Original Value	Adjusted Value	
Total Contract Amount	\$2,094,318	\$2,094,318	