



# Willowbrook

835 Midway Drive  
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 [www.willowbrookil.org](http://www.willowbrookil.org)

## Mayor

Frank A. Trilla

## Village Clerk

Leroy R. Hansen

## Village Trustees

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

## Village Administrator

Tim Halik

## Chief of Police

Mark Shelton

## Director of Finance

Carrie Dittman

## AGENDA

REGULAR MEETING OF THE MUNICIPAL SERVICES COMMITTEE TO BE HELD ON MONDAY, JANUARY 9, 2017, AT 5:30 P.M. AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS.

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES:
  - a) November 14, 2016 Regular Meeting of the Municipal Services Committee
4. DISCUSSION – Specifications and Bid Documents – Village Hall 500,000 Gallon Spheroid Tank Painting and Rehabilitation Project
5. DISCUSSION – Police Building Expansion/Renovation, Progress Update
6. REPORT – Municipal Services Department:
  - a) Nov. & Dec. 2016 Monthly Permit Activity Report
  - b) November 2016 Water System Pumpage Report
  - c) Nov. & Dec. 2016 Scavenger Report
7. VISITOR'S BUSINESS  
(Public comment is limited to three minutes per person)
8. COMMUNICATIONS
9. ADJOURNMENT



Proud Member of the  
Illinois Route 66 Scenic Byway

MINUTES OF THE REGULAR MEETING OF THE MUNICIPAL SERVICES  
COMMITTEE OF THE VILLAGE OF WILLOWBROOK HELD ON MONDAY,  
NOVEMBER 14, 2016 AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN  
THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS

---

1. CALL TO ORDER

Chairman Mistele called the meeting to order at 5:30 PM.

2. ROLL CALL

Those present at roll call were Chairman Michael Mistele, Trustee Paul Oggerino, and Village Administrator Tim Halik. Absent: None.

3. APPROVAL OF MINUTES

- a) After review of the draft minutes from the September 12, 2016 regular meeting of the Municipal Services Committee, Trustee Oggerino made a motion to approve the minutes as presented. Chairman Mistele seconded the motion. Motion Carried

4. DISCUSSION – Potential Annexation/Water Main Extension, William Drive

Administrator Halik advised the Committee that on Monday, October 31, 2016, Village staff was contacted by the property owner of 7939 William Drive. This location is currently unincorporated within DuPage County jurisdiction. The property is currently serviced by a private water well and the owner advised that the well requires costly maintenance repairs. The owner wished to explore possible annexation to Willowbrook to obtain Village water. Halik advised that the Village water system current does not extend south of 79th Street in this area. Given the property in question is the third lot south of 79th Street, a water main extension project would be required to bring a new section of water main across the frontage of the property in order to serve the residence. With assistance from the Village's engineering consultant, staff estimated the cost of installing approximately 360 lineal feet of eight-inch water main along the west right-of-way of William Drive. Including materials, labor, and site restoration, the construction cost of this project would be approximately \$64,000. As is Village policy, the Village would pay for the cost of engineering the project, and the property owner(s) would pay their proportionate share of the construction of the water main, based on the length of site frontage of the property. Annexation to Willowbrook would also be required. Halik advised that all information was conveyed to the property owner on Monday, October 31, 2016. The property owner thanked staff for their quick review of his request for information and response. The owner is currently considering his options and will respond if he decides to move forward with annexation to obtain Village water. If the owner does decide to move forward, staff can move quickly to obtain proposals from underground contractors to perform the work. In order to finalize the scope of the project, staff would also reach out to other nearby unincorporated properties to determine if there is interest among those property owners to obtain Village water. If there is substantial interest, the project could potentially be expanded with recapture agreements for those properties that are not yet interested in annexing and connecting to a new water main. The Committee thanked Halik for the information.

5. DISCUSSION – Police Building Expansion/Renovation, Progress Update

Administrator Halik shared with the Committee a two-page progress report on the police station construction that was prepared by Christine Keltner of Integrated Project Management, Burr Ridge. Halik advised that IPM was previously hired by the Village to serve as the owner's representative for the project and has been assisting Halik in overseeing and managing the project. The report is in a one-page "dashboard" type format containing key accomplishments, budget tracking, schedule updates, upcoming activities, and current issues/risks for the period in which the particular report covers. The Committee members reviewed the information contained within the report and determined it would be helpful to them in tracking the status of the project. Halik advised that he would include future reports in the upcoming committee agenda packets.

6. REPORT – Municipal Services Department

- a. Administrator Halik reviewed the monthly permit activity report for the month of September 2016. Halik advised that the Village received about \$63,000 in permit revenue for the month. The total amount collected to date represents about 79% of the total budgeted amount of revenue for fiscal year 2016/17. Halik then reviewed the monthly permit activity report for the month of October 2016. Halik advised that the Village received about \$133,000 in permit revenue for the month. The total amount collected to date represents about 136% of the total budgeted amount of revenue for fiscal year 2016/17.
- b. Administrator Halik shared the water system pumpage report for September 2016. The report indicates that the Village pumped 30,853,000 gallons of water in the month. The total amount of water pumped so far this fiscal year is about 2% more than was pumped in the same time period of FY 2015/16.
- c. Administrator Halik shared the August, September, and October 2016 scavenger reports, and advised that the report was for informational purposes only.
- d. Administrator Halik shared the September 2016 Clarke Environmental Mosquito Abatement Report, and advised that the report was for informational purposes only.

7. VISITOR'S BUSINESS

(None)

8. COMMUNICATIONS

Administrator Halik discussed water meter testing. Halik advised that within tonight's Board agenda packet was a resolution to accept a proposal from HBK Water Meter Service, Inc. for additional testing of large commercial water meters within the Village's water distribution system. The meters would be tested for accuracy. Halik advised that the FY 2015/16 budget included funding to perform meter testing of fifty meters. When this testing was completed, it was found that a majority of the meters that tested outside of the acceptable range of accuracy were under-registering. Therefore, the Village was billing those water accounts less than the amount of water that was actually being used. Therefore, staff would recommend that additional testing be performed on the remaining meters to ensure their accuracy. Halik advised that if the test results are similar to the prior test results, this additional testing would essentially pay for itself. The Committee members were in agreement.

9. ADJOURNMENT

Motion to adjourn was made by Trustee Oggerino. Seconded by Chairman Mistele.  
The meeting was adjourned at 5:50 PM.

(Minutes transcribed by: Tim Halik, 12/29/16)

## MUNICIPAL SERVICES COMMITTEE MEETING

### AGENDA ITEM SUMMARY SHEET

#### AGENDA ITEM DESCRIPTION

#### DISCUSSION – Specifications and Bid Documents – Village Hall 500,000 Gallon Spheroid Tank Painting and Rehabilitation Project

#### COMMITTEE REVIEW

- Finance/Administration
- Municipal Services
- Public Safety

Meeting Date:

January 9, 2017

- Discussion Only
- Approval of Staff Recommendation (for consideration by Village Board at a later date)
- Seeking Feedback
- Approval of Staff Recommendation (for immediate consideration by Village Board)
- Regular Report
- Report/documents requested by Committee

#### BACKGROUND

On June 10, 2013, the Village Board adopted Resolution No. 13-R-30 accepting a proposal from Strand Associates to perform an engineering analysis of the protective coatings on all three (3) of the Village's above grade water tower structures. These three water tanks were last sandblasted and re-coated in 1999, 2001 and 2002 and are experiencing varying degrees of wear. Based on the results of this analysis, the following rehabilitation schedule was approved by the Village Board, pending funding considerations:

STRUCTURE	ESTIMATED COST	ACTUAL COST	RECOMMENDED COMPLETION
67th Street Tank (500,000 gallon spheroid)	\$468,000	\$368,200	FY 2015/16
Executive Tank (3,000,000 gallon standpipe)	\$946,000	\$931,460	FY 2016/17
Village Hall Tank (500,000 gallon spheroid)	\$400,000 +/-	-	FY 2017/18

#### REQUEST FOR FEEDBACK

The 3 MG Standpipe rehabilitation work has now been completed and the tank is back in service— only landscape restoration work at the base of the tank remains. The FY 2016/17 budget includes funding to develop design specifications and bidding documents relating to the re-coating of the Village Hall 500,000-gallon spheroid tank. On September 26, 2016, the Village Board accepted a proposal from CBBEL to perform this work. Attached is the completed Bid Notice and Contract Document for the rehabilitation of the Village Hall 500,000-gallon spheroid tank to occur in FY 2017/18. The project is scheduled to be put out to public bid in January of 2017, with the project commencing after May 1, 2017 within the Village's 2017/18 fiscal year.

#### STAFF RECOMMENDATION

Although there may be minor changes made to the attached documents, staff recommends approval of the bidding schedule and attached contract document. This project will be funded from the Water Fund.

RECEIVED

JAN -5 2017

ADVERTISEMENT FOR BIDS

SECTION 00 11 13

**VILLAGE OF WILLOWBROOK** The Village of Willowbrook, DuPage County, Illinois will receive sealed proposals for the following improvements at the Village Hall, 835 Midway Drive, Willowbrook, IL 60527 until 10:00 a.m. local time on January 26, 2017.

VILLAGE OF WILLOWBROOK, IL  
500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK  
PAINTING AND REHABILITATION PROJECT

Proposals will be publicly read aloud in the Village Hall at 10:00 a.m. local time on January 26, 2017. No bid shall be withdrawn after the opening of the proposals without the consent of the Mayor and Board of Trustees for a period of forty-five days after the scheduled time of closing bids.

This project generally consists of painting work required for surface preparation and painting of existing potable water storage tanks, miscellaneous welding and tank maintenance repairs.

**A pre-bid meeting will be held at 10:00 a.m. on January 19, 2017 at the Village Hall site.** The purpose of the pre-bid meeting is to allow Bidders to inspect the facility scheduled for improvements. The address of the 3 MG Standpipe is 710 Willowbrook Centre Parkway.

All proposals shall be sealed in an envelope, addressed to the Village of Willowbrook, attention Village Clerk. The name, address and phone number of the bidder and the name of the project shall also appear on the outside of the envelope. Proposals must be submitted on the forms provided by the Engineer.

**The Contract Documents may be examined at the following locations:**

**Christopher B. Burke Engineering, Ltd., 9575 W. Higgins Road, Suite 600, Rosemont, IL 60018  
Village of Willowbrook, 835 Midway Drive, Willowbrook, IL 60527**

**The Contract Documents for the proposed improvements may be obtained at the office of the Engineer, Christopher B. Burke Engineering, Ltd., 9575 W. Higgins Road, Suite 600, Rosemont, Illinois 60018, telephone: 847-823-0500, upon payment of a non-refundable fee of fifty dollars (\$50.00) for each set of Contract Documents payable to Christopher B. Burke Engineering, Ltd.**

A certified check/bank draft drawn on a solvent bank, payable without condition to the Village of Willowbrook, or a bid bond in an amount not less than ten percent (10%) of the bid shall be submitted with each proposal as a guarantee that, if the proposal is accepted, a contract will be entered into and the performance of the contract is properly secured.

Contractors must purchase hard copy plans and be shown on the Bidders Plan Holder List in order to bid project. Bids received by Contractors who are not on the Bidders Plan Holder List will be rejected.

A Performance Bond and Payment Bond, each in a sum equal to one hundred percent (100%) of the amount of the bid with sureties to be approved by the Mayor and Board of Trustees, must be furnished by the successful bidder. All bids or proposals shall contain an offer to furnish bonds upon acceptance of such bid or proposal.

Contractors and Subcontractors shall conform to the "Public Works Preference Project" Act, (30 ILCS 560/1, et Seq.)

Contractors shall be required to pay not less than the prevailing wage rates on the Project as established by the United States Department of Labor and the State of Illinois Department of Labor. Copies of these wage rates are incorporated in the Contract Documents.

Bids will only be received from qualified contractors. The right is reserved to reject any or all proposals, to waive technicalities, to postpone the bid opening, or to advertise for new proposals, if in the judgment of the Mayor and Board of Trustees their best interests will be promoted thereby.

Mayor and Board of Trustees  
Village of Willowbrook

END OF SECTION

RECEIVED  
JAN 4 2017  
VILLAGE OF  
WILLOWBROOK

CONTRACT DOCUMENTS  
FOR  
500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK  
PAINTING AND REHABILITATION PROJECT  
FOR  
WILLOWBROOK, IL

BID SUBMITTED BY

---

COMPANY NAME

---

STREET ADDRESS

---

DATE

CBBEL PROJECT NO. 160507.00000

FOR BID

BID DUE JANUARY 26, 2017 (BEFORE 10:00 A.M. LOCAL TIME)



CHRISTOPHER B. BURKE ENGINEERING , LTD.

9575 West Higgins Road      Suite 600  
Rosemont, Illinois 60018-4920      Tel (847) 823-0500 Fax (847) 823-0520

PROJECT SPECIFICATIONS AND INFORMATION

FOR

500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK  
PAINTING AND REHABILITATION PROJECT

FOR

WILLOWBROOK, IL

OWNER: VILLAGE OF WILLOWBROOK  
835 MIDWAY DRIVE  
WILLOWBROOK, IL 60527

CONSULTANT: CHRISTOPHER B. BURKE ENGINEERING, LTD.  
9575 WEST HIGGINS ROAD  
SUITE 600  
ROSEMONT, IL 60018  
(847) 823-0500

CONTRACT DOCUMENTS CONSISTING  
OF

BIDDING REQUIREMENTS  
CONTRACTUAL DOCUMENTS  
TECHNICAL SPECIFICATIONS

## TABLE OF CONTENTS

### **BIDDING REQUIREMENTS**

<u>Section</u>	<u>Title</u>
00 11 13	Advertisement for Bids
00 21 13	Instructions to Bidders
00 41 43	Bid Form
00 43 43	Wage Rate Requirements
00 45 19	Affidavit of Non-Collusion
00 45 46	Bidder Certification Art. 33E, Criminal Code 1961

### **CONTRACT FORMS**

<u>Section</u>	<u>Title</u>
00 52 43	Contract Agreement
00 61 13.13	Performance Bond
00 61 13.16	Labor and Material Payment Bond
00 62 00	Certification of Contractor Responsibility
00 62 16	Insurance Requirements
00 63 13	Clarifications/Interpretation Request
00 68 00	Notice of Award
00 69 00	Notice to Proceed

### **GENERAL CONDITIONS**

<u>Section</u>	<u>Title</u>
00 72 43	Standard General Conditions of the Construction Contract
00 85 00	Drawings and Photos

### **GENERAL REQUIREMENTS**

<u>Section</u>	<u>Title</u>
00 73 93	Liquidated Damages
00 85 00	Project Drawings and Photos
01 01 20	General Requirements for Tank Painting
01 11 00	Summary of Work
01 11 13	Responsibilities of Contractor
01 31 19	Project Meetings
01 33 00	Equipment & Material Submittals
01 60 00	Material and Equipment
01 73 29	Cutting and Patching
01 74 00	Maintenance of Work Site and Daily Clean-Up
01 77 00	Testing, Chlorinating, Filling and Final Inspection and Acceptance

### **DIVISION 05 – METALS**

<u>Section</u>	<u>Title</u>
05 50 00	Miscellaneous Metal Repairs
05 52 13	Water Storage Tank Rehabilitation and Repairs

### **DIVISION 09 – FINISHES**

<u>Section</u>	<u>Title</u>
09 91 13	Painting Water Storage Tank

### **DIVISION 26 – ELECTRICAL**

<u>Section</u>	<u>Title</u>
26 00 10	General Provisions for Electrical Work
26 42 00	Cathodic Protection

### **DIVISION 33 – UTILITIES**

<u>Section</u>	<u>Title</u>
33 05 50	General Provisions for Mechanical Work

## ADVERTISEMENT FOR BIDS

### SECTION 00 11 13

The Village of Willowbrook, DuPage County, Illinois will receive sealed proposals for the following improvements at the Village Hall, 835 Midway Drive, Willowbrook, IL 60527 until 10:00 a.m. local time on January 26, 2017.

#### VILLAGE OF WILLOWBROOK, IL 500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK PAINTING AND REHABILITATION PROJECT

Proposals will be publicly read aloud in the Village Hall at 10:00 a.m. local time on January 26, 2017. No bid shall be withdrawn after the opening of the proposals without the consent of the Mayor and Board of Trustees for a period of forty-five days after the scheduled time of closing bids.

This project generally consists of painting work required for surface preparation and painting of existing potable water storage tanks, miscellaneous welding and tank maintenance repairs.

**A pre-bid meeting will be held at 10:00 a.m. on January 19, 2017 at the Village Hall site.** The purpose of the pre-bid meeting is to allow Bidders to inspect the facility scheduled for improvements. The address of the 3 MG Standpipe is 710 Willowbrook Centre Parkway.

All proposals shall be sealed in an envelope, addressed to the Village of Willowbrook, attention Village Clerk. The name, address and phone number of the bidder and the name of the project shall also appear on the outside of the envelope. Proposals must be submitted on the forms provided by the Engineer.

#### **The Contract Documents may be examined at the following locations:**

**Christopher B. Burke Engineering, Ltd., 9575 W. Higgins Road, Suite 600, Rosemont, IL 60018  
Village of Willowbrook, 835 Midway Drive, Willowbrook, IL 60527**

**The Contract Documents for the proposed improvements may be obtained at the office of the Engineer, Christopher B. Burke Engineering, Ltd., 9575 W. Higgins Road, Suite 600, Rosemont, Illinois 60018, telephone: 847-823-0500, upon payment of a non-refundable fee of fifty dollars (\$50.00) for each set of Contract Documents payable to Christopher B. Burke Engineering, Ltd.**

A certified check/bank draft drawn on a solvent bank, payable without condition to the Village of Willowbrook, or a bid bond in an amount not less than ten percent (10%) of the bid shall be submitted with each proposal as a guarantee that, if the proposal is accepted, a contract will be entered into and the performance of the contract is properly secured.

Contractors must purchase hard copy plans and be shown on the Bidders Plan Holder List in order to bid project. Bids received by Contractors who are not on the Bidders Plan Holder List will be rejected.

A Performance Bond and Payment Bond, each in a sum equal to one hundred percent (100%) of the amount of the bid with sureties to be approved by the Mayor and Board of Trustees, must be furnished by the successful bidder. All bids or proposals shall contain an offer to furnish bonds upon acceptance of such bid or proposal.

Contractors and Subcontractors shall conform to the "Public Works Preference Project" Act, (30 ILCS 560/1, et Seq.)

Contractors shall be required to pay not less than the prevailing wage rates on the Project as established by the United States Department of Labor and the State of Illinois Department of Labor. Copies of these wage rates are incorporated in the Contract Documents.

Bids will only be received from qualified contractors. The right is reserved to reject any or all proposals, to waive technicalities, to postpone the bid opening, or to advertise for new proposals, if in the judgment of the Mayor and Board of Trustees their best interests will be promoted thereby.

Mayor and Board of Trustees  
Village of Willowbrook

END OF SECTION

## INSTRUCTIONS TO BIDDERS

### SECTION 00 21 13

#### 00100 GENERAL

To demonstrate qualification for performing the Work of this Contract, Bidders may be requested to submit written evidence of financial position, previous experience, and/or current commitments.

Escalation of Contract price will not be allowed. All prices quoted must represent the entire cost in accordance with the Contract Document and no subsequent claim will be recognized for any increase in wage scales, material prices, cost indexes, or other rates affecting the construction industry or this project.

Bidders are required to attend the pre-bid meeting as described herein.

Project documents may be examined at the Owner's Office during normal office hours.

Project documents may be obtained at the offices of Christopher B. Burke Engineering, Ltd., 9575 W. Higgins Rd., Suite 600, Rosemont, IL 60018 during normal working hours.

Do not separate this Document. Bid Proposals must be submitted in the form of the completely bound Contract Documents.

#### 00101 BID DUE DATE, TIME AND PLACE

Signed bids, under seal, executed and dated for furnishing all services, labor, equipment, materials, and performing all Work necessary for the **500,000 Gallon Village Hall Spheroid High Tank** located at **835 Midway Drive, Willowbrook, Illinois** all in accordance with the Contract Documents, will be received from Pre-Qualified Contractors by the Owner located at the **Village Hall, 835 Midway Drive, Willowbrook, IL 60527** on or before **10:00 a.m.** local time on the **26<sup>th</sup> day of January 2017**.

Bids will be opened publicly and read aloud at the above address at 10:00 a.m. local time. No immediate decision shall be rendered concerning the proposals submitted.

If only one bid has been received on the day of the bid opening, this bid may not be opened, but instead be presented to the **Board of Trustees** at its next regular council meeting for consideration.

Bid offers submitted after the above bid opening due time will be returned to the Bidder unopened.

#### 00102 SUBMISSION OF BID

Bidders shall submit **one (1) copy** of their proposal, together with Bid Security, affidavit of non-collusion and all other documents bound herewith, including all Addenda issued, in sealed envelope addressed as follows:

**Village of Willowbrook  
835 Midway Drive  
Willowbrook, IL 60527**

**Subject:      Proposal for the 500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project**

In addition, the sealed envelope submitted by the Bidder shall include the following information on the envelope face: Bidders name and address, and the date and hour of bid opening as designated herein.

Where proposals are sent by mail, special messenger, courier service, etc. the Bidder shall be responsible for the delivery of the Bid as designated herein prior to the designated date and hour for the opening of the Bids. If delivery is delayed beyond the date and hour set for the bid opening, proposals thus delayed will not be considered and will be returned unopened to respective bidders.

## INSTRUCTIONS TO BIDDERS

### 00103 PROJECT DESCRIPTION & SCHEDULE

The Project in general consists of the painting of the interior and exterior of the standpipe and the rehabilitation and maintenance work related to the 3 MG Standpipe.

The location of the project site is **835 Midway Drive, Willowbrook, Illinois.**

Access to the project site during construction activities will be allowed by the Owner during normal working hours; Monday through Friday, 7:00 a.m. to 7:00 p.m. (or as otherwise directed by the Owner). Note: During the time proposed for this project there will be other construction activities at the site. The Willowbrook Police Station project will occupy sections of the same site simultaneously. Cooperation between Contractors will be required throughout construction of both projects.

Security Precautions. Contractor shall be responsible for any and all security precautions which may be required during the course of the Work.

Working Hours. The Owner will admit Contractors to the job site during working hours from 7:00 AM to 7:00 PM weekdays. Saturday and Sunday construction activities will only be allowed after request and approval by the Village Manager.

Project Schedule. Time is of the essence for the completion of the Work of this Contract. The Work of these Contract Documents is required to be completed within 120 calendar days. The successful Bidder shall submit in writing, a construction schedule showing sequence of operations for review by the Owner prior to commencement of Work.

### 00104 LICENSE OR ROYALTY FEES.

If the Project is designed to require or permit use of processes, articles, apparatus or equipment for which licenses, or royalty fees will be charged, fees shall be paid directly by Contractor to patentee, licensee or owner of such processes, and fees shall be included in bid.

### 00105 EXAMINATION BY BIDDER

The Bidder shall, before submitting his/her proposal, carefully examine the Contract Documents, proposal, and bond and insurance requirements. The Bidder shall inspect in detail the site of the proposed Work and familiarize themselves with the detailed requirements of all Work including the demolition Work, together with work to be performed by others, and with all the local conditions affecting the Contract under which he/she will be obligated to operate in performing the Work. By submission of a bid it is understood that the Bidder has satisfied this mandatory requirement. If his Bid is acceptable, the Bidder shall be responsible for, and the Owner will make no allowance for, any errors in his/her proposal resulting from his/her failure or neglect to comply with these instructions.

**A pre-bid meeting will be held on January 19, 2017 at 10:00 a.m. local time, with all prospective bidders for the purposes of clarification, questions, site inspection, etc. Bidders will be responsible for signing an attendance register. Meeting will be held at the site located at 835 Midway Drive, Willowbrook, Illinois. No other individual information session will be held by the Owner relating to this bid.**

### 00106 TANK EVALUATION REPORT

A tank inspection has previously been made and the results are available for inspection by prospective Bidders, but are not a part nor do they constitute a portion of these Contract Documents whether attached or not. The Owner nor the Owner's Consultant assumes any responsibility whatever with respect to the sufficiency or accuracy of these investigations, nor of their interpretation, and there is no guarantee, either expressed or implied, that the conditions indicated are representative of those existing, or that unforeseen developments may not occur.

## INSTRUCTIONS TO BIDDERS

### 00107 INTERPRETATION OF CONTRACT DOCUMENTS

Questions regarding documents, discrepancies, omissions, or intent of the Specifications or Drawings shall be submitted in writing to Owner at least ten (10) days prior to opening of Bids to provide time for issuing and forwarding an Addendum. Any interpretation of the Contract Documents will be made only by Addendum duly issued or delivered by the Owner to each person receiving a set of Contract Documents. The Owner will not be responsible for any other explanations or interpretations of the Contract Documents. Failure on the part of the prospective Bidder to receive a written interpretation prior to the time of bid opening will not be grounds for withdrawal of his/her proposal. The Bidder shall acknowledge receipt of each Addendum issued in the space so provided in the Bid Form. Oral explanations will not be binding.

**Direct questions to Mr. Gerry Hennelly, at (847) 823-0500.**

### 00108 APPROXIMATE QUANTITIES

On all items on which bids are to be received on a unit price basis the quantities stated in the Bid will not be used in establishing final payment due Contractor. The quantities stated, on which unit prices are invited, are approximate only. Bids will be compared on the basis of number of units stated in the Bidding Schedule. Payment on the Contract on unit price items will be based on the actual number of units installed (or otherwise performed) in the completed Work.

### 00109 PREPARATION OF PROPOSAL

The Bidder shall prepare his/her proposal on the attached Bid Form. Unless otherwise stated, all blank spaces of the Bid Form must be correctly filled in. Entries must be stated for each and every item, either typed in or written in ink. Only Bids which are made out on the Bid Form included in this Document will be considered. Amounts are to be shown in both words and figures. In case of discrepancy between words and figures the words shall prevail, unless it clearly appears in Owner's opinion that the words rather than the figures are in error. If any portion of the Bid is required to be given in unit prices and totals, and a discrepancy exists between the unit prices and totals, the unit prices shall prevail, unless it clearly appears in Owner's opinion that the unit prices rather than the totals are in error. If a discrepancy exists between the total base bid and the true sum of the individual bid items, the true sum shall prevail. A bid will be rejected if it does not contain a price for each and every item named in the Bidding Schedule. Bidders are warned against making any erasures or alterations of any kind, and bids which contain omissions, erasures, conditions, alterations, or additions not called for may be rejected.

### 00110 SIGNING OF BID

If the Bidder is a corporation, the legal name of the corporation shall be set forth together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If the Bidder is a co-partnership, the true name of the firm shall be set forth together with the signatures of all the partners. If the Bidder is an individual, his/her signature shall be inscribed. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a power of attorney must be on file with the Owner prior to bid opening or submitting bids; otherwise the Bid may be regarded as irregular and may be rejected.

### 00111 BID SECURITY

Each Bid shall be accompanied by a bid bond, cashier's check or certified check drawn on a solvent bank in the State of Illinois payable without condition to the Owner in an amount not less than ten percent (10%) of the Bidder's highest aggregate bid amount whether it be for the Base Bid or the Alternative Bid(s) (when Alternatives are requested), as a guarantee that the Bidder will within fifteen (15) days after the date of the award of a contract execute an agreement and file bond and insurance as required by the Contract Documents if his/her Bid is accepted. Bid not accompanied by a bid security will not be considered.

If an intended awardee fails to execute and file an agreement, bonds and insurance as required by the Contract Documents, the amount of the security submitted with his/her Bid shall be forfeited, not as a penalty, but as liquidated damages. No Bid will be considered unless accompanied by a Bid Security

## INSTRUCTIONS TO BIDDERS

as a guarantee that if the Bid is accepted the Bidder will execute the Agreement and file bonds and insurance as required by the Contract Documents within 15 days from the date of the award of the Contract.

The bid security of the three (3) lowest bidders will be retained until a contract has been entered into and executed with the successful bidder and the performance and labor and material payment bonds, each in the full amount of the Contract, have been posted with the **Village of Willowbrook** and Certificates of Insurance indemnifying and adding as Additional Insureds, the **Village of Willowbrook** and Christopher B. Burke Engineering, Ltd., and their officers, employees and agents, have been delivered to and reviewed by the Engineer.

### 00112 RETURN OF BID SECURITIES

The bid securities of the three lowest bidders will be held until the Agreement has been executed by the successful Bidder and he/she has filed with Owner the required bonds and insurance, after which bid securities will be returned to the three lowest bidders. The bid securities of the other Bidders will be returned within 15 days after the opening of the Bids.

### 00113 CONSIDERATION OF PROPOSALS

No proposal will be accepted from or Contract awarded to any person, firm or corporation that is in arrears or is in default to the Owner upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to the Owner, or had failed to perform faithfully any previous contract with the Owner.

The Owner reserves the right to accept or reject any or all bids, to waive any informalities in any bid, or to make awards in the best interest of the Owner. The Owner also reserves the right to award a partial amount of the Specification rather than the entire amount.

### 00114 BID SUBMITTAL

Any bid may be withdrawn at any time prior to the hour herein stated for the bid opening, provided that a request in writing, executed by the Bidder, or his/her duly authorized representative, for the withdrawal of such Bid is filed with Owner prior to the time specified for opening of Bids. The withdrawal of a Bid will not prejudice the right of a Bidder to file a new Bid.

No Bidder shall withdraw, cancel or modify his/her proposal for a period of forty-five (45) consecutive calendar days after the specified closing time for the receipt of proposals, nor shall the successful Bidder withdraw, cancel or modify his/her proposal after having been notified that said proposal has been accepted by the Owner.

Bidders shall guarantee their bids for a period of forty-five (45) consecutive calendar days from the date of receipt of bids.

### 00115 PENALTY FOR COLLUSION

If at any time it shall be found that the person, firm or corporation to whom the Contract has been awarded has, in presenting any Bid or Bids, colluded with any other party or parties, then the Contract so awarded shall be null and void, and Contractor and his/her sureties shall be liable to Owner for all loss or damage which Owner may suffer thereby, and Owner may advertise for new bids for said Work.

### 00116 LICENSE AND EXPERIENCE

Each Bidder shall possess state and local licenses as are required by law, and shall furnish satisfactory proof to Owner upon request that the licenses are in effect during the entire period of the Contract.

To be considered as eligible to submit a proposal, a Bidder shall have complied with all legal requirements to permit him/her to operate under applicable laws of the State of Illinois.

The Contractor bidding the project shall be actively engaged in Work of the nature of the project described and have adequate specialized workers and machines to do the Work.

## INSTRUCTIONS TO BIDDERS

### 00117 ACCEPTANCE/REJECTION OF PROPOSALS

The Owner expects to accept one of the proposals or reject all proposals within thirty (30) days from the date of bid opening, unless the lowest responsive Bidder, upon request of the Owner, extends the time of acceptance to the Owner.

The Owner reserves the right to reject any and all proposals when such rejection is in the interest of the Owner, to reject proposal of a Bidder who has previously failed to perform properly, or complete on time, contracts of a similar nature, and to reject proposal of a Bidder who is not, in opinion of the Consultant or the Owner, in a position to satisfactorily perform the Work of the Contract. The Owner also reserves the right to waive any informalities and technicalities in bidding.

Under normal circumstance Contract will be awarded to lowest responsible Bidder, plus any accepted alternates, unless all bids are rejected. However, the Owner reserves the right to award Contract in its best interest, and therefore, reserves the right to select a Bidder other than lowest.

### 00118 EFFECTIVE DATE OF AWARD

If a Contract is awarded by Owner, such award shall be effective when formal notice of such award, signed by the authorized representative of Owner, has been delivered to the Intended awardee, or mailed to him/her at the main business address shown on his/her Bid by an officer or agent of Owner duly authorized to give such notice.

### 00119 EXECUTION OF AGREEMENT

Copies of the Agreement in the number stated in the Contract Agreement will be supplied by the Owner and shall be executed by the successful Bidder, and returned, together with the required bonds and insurance, within fifteen (15) days from and after the date of the award of the Contract. Effective date of bonds shall be the same or later than the date of the Agreement.

### 00120 FAILURE TO EXECUTE AGREEMENT AND FILE BOND & INSURANCE

Failure of a successful Bidder to execute the Agreement and file required bonds and insurance within the required time shall be just cause for the annulment of the award. On failure of a successful Bidder to execute the Agreement and file the required bonds and insurance within the required time, he/she shall forfeit his/her Bid Security as agreed hereinbefore. Upon annulment of an award as aforesaid, Owner may then re-award the Contract.

### 00121 EXCEPTIONS

Any Bidder's exceptions to these terms or conditions or deviations from the written Specifications shall be shown in writing and attached to the Bid Form. However, such exceptions may be cause for rejection of the Bid.

### 00122 SUBSTITUTE MATERIAL

Where in the Technical Specifications one or more certain equipment/materials, trade names or articles of certain manufacture are mentioned, it is done for the express purpose of establishing a basis of durability and efficiency and not for the purpose of limiting competition. Other names of equipment/material can be used if, in the opinion of the Engineer and the Owner, they are equal in durability and efficiency to those mentioned and of a design in harmony with the Work as outlined; and the Engineer and Owner give a written approval of a substitution. Adequacy of the proposed substituted equipment and/or materials shall be determined during the shop drawing review process. Any substituted materials and/or equipment ordered by the Contractor prior to the shop drawing review process shall be at the Contractor's own risk. Should a substitution of equipment and/or materials be desired, the Contractor shall be required to request the change in writing within ten (10) days from the Bid due date.

## INSTRUCTIONS TO BIDDERS

### 00123 GUARANTEE

The Contractor shall furnish a satisfactory surety bond in the sum of the full amount of the Contract in dollars guaranteeing the proper completion of the Work and the maintenance of the Work during the period of one (1) year from and after the date of the completion and acceptance of the same. The maintenance, however, shall not include any damage to the Work or to any of the other obligations embraced by the Contractor which may be incurred by action beyond the control of the Contractor.

### 00124 PAYMENT BOND

The Contractor shall furnish a satisfactory payment bond in the full amount of the Contract guaranteeing payment of all material used and for all labor performed.

### 00125 PERMITS

The Contractor shall be responsible for any and all permits and permit fees as may be required to accomplish the work of this Contract. The Contractor shall be required to comply with all provisions of each of the permits issued, post the necessary bonds in the required amounts, and furnish the necessary insurance certificates.

### 00126 PREVAILING WAGE RATES

Not less than a prevailing wage rate shall be paid for labor on the Work to be performed under this Contract, as required by law. The rates for various phases of Work contemplated shall be in accordance with the prevailing wage scale. The Contractor shall be required to comply with all applicable federal, state and local laws pertaining to employment. Illinois workers shall be employed to perform Work in accordance with the provisions of Illinois Revised Statutes, Chapter 48, Section 2201 *et seq.*, latest revision. The Owner may at any time inquire of the Contractor as to the rates of wages being paid employees of the Contractor, any subcontractor or material men, where upon such information shall be promptly provided to the Owner. A certified payroll shall be submitted with each pay out request.

### 00127 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

Each Bidder agrees as evidenced by his/her submission of a bid to comply with all terms of the Equal Employment Opportunity Clause of the Illinois Fair Employment Practices Commission: and to comply with all Illinois labor laws, particularly with regard to:

- A. "Preference to Citizens Illinois on Public Works Projects Acts" (Illinois Revised Statutes, Chapter 48, Section 289 - 275).
- B. "Wages of Employees on Public Works" (Prevailing Wage Act) (Illinois Revised Statutes, Chapter 48, Section 395-1-12).

The Contractor, in performing under the Contract, shall not discriminate against any worker, employee or applicant, or any member of the public because of race, creed, color, age, sex or national origin, nor otherwise commit an unfair employment practice. The Contractor further agrees that this article will be incorporated by the Contractor in all contracts entered into with suppliers of materials or services, contractors and subcontractors and all labor organizations, furnishing skilled, unskilled and craft union skilled labor, or who may perform any such labor or services in connection with this Contract.

### 00128 TAXES

Federal Excise Tax does not apply to materials purchased by the **Village of Willowbrook** by virtue of its municipality status. The **Village of Willowbrook** is a not-for-profit agency which has a sales tax exemption status. Owner's Tax Exemption Number will be provided (if requested) to the successful Bidder upon execution of the Agreement.

## INSTRUCTIONS TO BIDDERS

### 00129 LIQUIDATED DAMAGES

Time is of the essence in completion of the Work. The **Village of Willowbrook** may collect liquidated damages in the amount of \$250.00 per day should the Contractor fail to complete the authorized work within the time allowed for the Project Schedule.

### 00130 DEFINED TERMS

The terms "**Village of Willowbrook**", "Proposal" and "Plans" mean the same as "OWNER", "BID", and "DRAWINGS" respectively.

**Where references are made to "Village" or "the Village", such references shall be understood to mean "Village of Willowbrook".**

Where **Owner's Representative** is referenced, such reference shall be understood to mean the Engineer (when appointed by the Owner), and/or any other individual(s) duly authorized by the Owner to act as the representative of the Owner.

Terms used in these Instructions to Bidders are defined in the General Conditions of Construction Contract Document (Section 00 72 00) Unless otherwise stated, these General Conditions of Construction Contract Document shall apply to the Work of this Contract; and shall be incorporated into this Contract as the General Conditions of the Contract all of which are as fully a part of this Contract as if herein set out verbatim.

END OF SECTION

BID FORM

SECTION 00 41 43

TO: VILLAGE OF WILLOWBROOK  
835 MIDWAY DRIVE  
WILLOWBROOK, IL 60527

PROJECT: 500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK PAINTING AND REHABILITATION PROJECT

**ACKNOWLEDGMENTS:** The undersigned has received the Contract Documents entitled: "500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK PAINTING AND REHABILITATION PROJECT" and the following addenda to these documents:

Addendum No. _____	Dated _____

All provisions of the Contract Documents and the addenda have been included in the Proposal submitted by the undersigned. The undersigned has carefully examined all of the Contract Documents and the sites and submits the following Proposal:

**AGREEMENT:** In submitting this Proposal, the undersigned agrees and/or understands:

1. Bids are to be held for 45 days with a "Notice of Award" expected to be issued to the apparent successful bidder within 60 days after the bid opening.
2. The prices in this bid have been arrived at independently, without consultation, communication or agreement, as to any matter relating to such prices with any other bidder or with any competitor and this Bid is in all respects fair and without collusion or fraud. Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed and will not knowingly be disclosed prior to opening directly or indirectly to any other bidder or to any competitor. No attempt has been made nor will be made by the undersigned to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.
3. To enter into and execute the Contract and furnish the properly executed bonds and insurance certificates within the time and with the forms and in the amounts required by the Contract Documents if the award is made to the undersigned.
4. To accomplish the Work strictly in accordance with the Contract Documents.
5. To complete all Work within the time periods specified and after Notice to Proceed is received. The Bidder, in submitting a bid offer, accepts the specified Contract Time for performing the Work. Completion of Work shall be in accordance with the phased construction schedule. Contractor shall submit with the Bid a copy of the proposed construction schedule. Contractor shall comply with the applicable requirements of Section 00 72 43 regarding the construction schedule.
6. The undersigned warrants that he/she has carefully examined the sites of the Work and all Contract Documents, that he/she is fully aware and knows of the character of the material, that he/she is fully satisfied as to the conditions to be encountered overhead, on the surface and in the spaces, and of the character, quality and quantities of Work to be performed and materials to be furnished, and the requirements of the Contract Documents. Furthermore, the undersigned has based the within Contract prices on his/her own independent examination in performing the Work and has not relied upon any information furnished to him/her by the Owner, any agent, servant or employee of the Owner. The undersigned agrees to assume all risks arising from any deficiencies in the Drawings, Specifications, or other Contract Documents and

## BID FORM

will make no claim against the **Owner** because of any such alleged deficiency or alleged breach of warranty by the **Owner**. The undersigned further assumes all risks of any unforeseen conditions to be incurred in performing the Work, either overhead, on the surface, or in spaces, and has taken these risks into consideration in preparing his/her Bid. The undersigned further warrants that he/she will perform such additional and/or corrective Work as may be required in order to insure that the Work performs its intended function satisfactorily, for the prices set forth in his/her proposal and at no additional cost to the **Owner**.

7. Before submitting this Proposal, the undersigned confirms that he/she has available the equipment, forces and materials necessary to perform the Work and made all necessary arrangements to insure that such equipment and materials be delivered to the site at such time as will enable him/her to perform all obligations of the Contract within the Construction Time herein stated. Furthermore, the undersigned also confirms that he/she has contacted the manufacturers and/or suppliers of the equipment and materials necessary to perform the Work and made all necessary arrangements to insure that such equipment and materials be delivered to the site at such time as will enable him/her to perform all obligations of the Contract within the Construction Time herein stated.
8. Accompanying this proposal is a Bid Bond complying with the provisions herein stated.
9. If this proposal is accepted and the undersigned fails to execute a contract and provide the bonds and certificate of insurance, as required, it is hereby agreed that the Bid Security shall be forfeited to the **Village of Willowbrook**, not as a penalty, but as liquidated damages.
10. Each pay item listed in the Bidding Schedule and in the Schedule of Prices shall have a unit price or lump sum price and a total price.
11. The unit price shall govern if no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity.
12. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
13. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
14. The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the **State of Illinois**, nor has the firm made an omission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of the State laws prohibiting bid-rigging or bid-rotating.

**NOTE:** Bidders shall submit a price for each Item in the Bidding Schedule and in the Schedule of Prices. Failure to do so may result in rejection of the Proposal. The completed Bidding Schedule included in this Section shall accompany the Bid Proposal.

## BID FORM

### BIDDING SCHEDULE:

The undersigned, having carefully examined all of the Contract Documents for the “**500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project**” as well as the site of the Work and all conditions affecting the Work, including adjacent surroundings, shall furnish all services, labor, equipment and materials necessary and to complete all the Work for the prices set forth in the following Schedule:

### **BASE BID**

Item No.	Description	Unit	Qty.	Unit Cost	Cost
05 50 00/01	Continuous Seal Weld Repairs	LIN FT	100		
05 50 00/02	Interior Pit Weld Repairs	EACH	50		
05 50 00/03	Replace Bolts and Gaskets on Manways	LSUM	1		
05 52 13/01	Remove and Replace Existing Roof Vent	LSUM	1		
05 52 13/02	Remove and Replace Existing Manway Hatch and Interior Wet Access Hatch	LSUM	1		
05 52 13/03	Installation of New Painters Rail, Safety Grabs and Rigging Couplings	LSUM	1		
05 52 13/04	Repair and Replace Existing Dry Interior Lighting	LSUM	1		
09 91 13/01	Exterior Surfaces; All Surface Preparation, Priming and Painting	LSUM	1		
09 91 13/02	Logos (Exterior) to match 3 MMG Standpipe	LSUM	1		
09 91 13/03	Full Containment (as required)	LSUM	1		
09 91 13/04	Interior (Wet) Coating System	LSUM	1		
09 91 91/05	Interior (Dry) Coating System	LSUM	1		
09 91 13/06	Proper and Legal Disposal of Paint Chips/Flakes and Other Debris	LSUM	1		
26 42 00/01	Cathodic Protection	LSUM	1		
26 42 00/02	Service Agreement	LSUM	1		
<b>TOTAL BASE BID</b>					

### **ALTERNATE BID**

Item No.	Description	Unit	Qty.	Unit Cost	Cost
05 52 13/05	Replace Existing Sump Pit Metal Grating	LSUM	1		
05 52 13/06	Install New Concrete Floor Slab in Interior Access Base Cone	LSUM	1		
05 52 13/07	Provide New Exterior Metal Step to Base Cone	LSUM	1		
09 91 13/07	Remove and Replace Existing 67 <sup>th</sup> St. Tank Logos	LSUM	1		
<b>TOTAL ALTERNATE BID</b>					

Total Base Bid + Alternate Bid \_\_\_\_\_  
In Numbers \_\_\_\_\_

Total Base Bid + Alternate Bid \_\_\_\_\_  
In Writing \_\_\_\_\_

## BID FORM

### EXCEPTIONS AND DEVIATIONS

The Bidder shall list herein all exceptions and deviations taken to the Contract Documents by Section and page number. (Use additional sheets if required and state number of sheets).

Exceptions and deviations taken to the Contract Documents are (check one): None (\_\_\_\_); As Stated Below (\_\_\_\_)/Sheet \_\_\_\_ of \_\_\_\_.

Section/Pg. No.

Description of Exception/Deviation

### SUBCONTRACTOR LISTING

The following list of subcontractors and class of work performed by each is submitted. Subcontractors are defined as persons, firms or corporations who supply labor and/or materials for work under this Contract.

Subcontractor

Class of Work

## BID FORM

### **BIDDER'S EXPERIENCE/QUALIFICATIONS**

To demonstrate the Bidder's experience/qualifications, the Bidder shall list herein at least five (5) similar projects equal or greater in capacity which the Bidder has successfully completed within the past five (5) years.

<u>Owner</u> <u>Or</u> <u>Municipality</u>	<u>General Project</u> <u>Description</u>	<u>Reference</u> <u>Name and</u> <u>Phone No.</u>	<u>Year</u> <u>Completed</u>
--	--	---	---------------------------------

**Note: Bid will be considered "Non-Responsive" if the above experience listing, qualifications and requirements are not fulfilled.**

**BID FORM**

## **BID CONDITIONS**

It is expressly understood and agreed that quantities in the Bidding Schedule for Unit Price Work Items are approximate only, and that payment on the Contract will be made only on the actual quantities of Work complete in place, measured on the basis defined in the Contract Conditions and the Contract Specifications.

The undersigned has carefully checked the above Bidding Schedule against the Contract Drawings and Specifications before preparing this proposal and accepts the items listed in this Bid as substantially correct, both as to classification and amount, and as correctly listing the complete Work to be done in accordance with the Contract Drawings and Specifications.

If this Bid is accepted and the undersigned shall fail to contract as aforesaid and to give the Performance Bond and Payment Bond and to provide all insurance as required by the Contract Documents within 10 days after the date of the award of the Contract, the Owner may, at his/her option, determine that the Bidder has abandoned his/her Contract, and thereupon this Bid and the acceptance thereof shall be null and void, and the forfeiture of such security accompanying this Bid shall operate and the same shall be the property of the Owner as liquidated damages.

## **BID SECURITY**

Accompanying this Bid is a \_\_\_\_\_  
in the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_\_).

Note: a. Insert the words "bid bond" or "cashier's check", or "certified check" as the case may be. In the case where bid security is not required by the contract insert the words "Not Required by Contract".

b. Amount must be equal to at least **ten percent (10%)** of the Total Bid Price. Where an Alternative(s) has been requested, the Bid Security shall be at least ten percent (10%) of the highest aggregate amount whether it be the Total Base Bid Price or the Total Alternative Bid Price.

**Attach Bid Security Here**

**PROPOSAL SIGNATURE:**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

\_\_\_\_\_, being first duly sworn on oath deposes and says that the Bidder on the above Bid is organized as indicated below and that all statements herein made are made on behalf of such Bidder and that his/her deponent is authorized to make them.

\_\_\_\_\_, also deposes and says that he examined and carefully prepared his/her Bid from the Contract Drawings and Specifications and has checked the same in detail before submitting this Bid, that the statements contained herein are true and correct.

## BID FORM

(Fill Out Applicable Paragraph Below)

If Bidder is:

An Individual

By \_\_\_\_\_ (SEAL)  
(Individual's Name)

doing business as \_\_\_\_\_

Business address: \_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_

A Partnership

By \_\_\_\_\_ (SEAL)  
(Firm Name)

\_\_\_\_\_ (General Partner)

Business address: \_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_

A Corporation

By \_\_\_\_\_  
(Corporation Name)

\_\_\_\_\_ (State of Incorporation)

By \_\_\_\_\_  
(Name of Person Authorized to Sign)

\_\_\_\_\_ (Title)

(Corporate Seal)

Attest \_\_\_\_\_ (SEAL)  
(Secretary)

Business address: \_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_

END OF SECTION

## WAGE RATE REQUIREMENTS

### SECTION 00 43 43

#### 1. GENERAL

- A. CONTRACTOR and Subcontractors shall pay wages not less than the prevailing hourly wage rate for each classification of employee engaged on the Work as determined by the United States Department of Labor and by the State of Illinois Department of Labor. In case of conflict, the wages paid by CONTRACTOR shall be not less than the higher of the prevailing wage determination.
- B. CONTRACTOR shall comply with the provisions of Wages of Employees on Public Works (Prevailing Wage) Act (Illinois Revised Statutes, Chapter 48, Section 39s-1 through 39s-12).
- C. The prevailing wage law does not prohibit payment of more than the prevailing rate of wages nor does it limit the hours of Work which may be performed by any employee in any particular period of time.
- D. A copy of the wage determination shall be posted by CONTRACTOR in a prominent place at the Site of the Work where it can be easily seen by the employees.
- E. If at the time the Contract is executed, or if during the term of the Contract, there is excessive unemployment in Illinois as defined in the Employment of Illinois Workers on Public Works Act, 30 ILCS 570-0.01 et seq., as two consecutive months of unemployment exceeding 5%, the Contractor agrees to employ Illinois laborers as stipulated by the Act. An "Illinois laborer" is defined as any person who has resided in Illinois for at least thirty (30) days and intends to become or remain an Illinois resident.

#### 2. WAGE DETERMINATIONS

- A. The following wage rate schedule(s) are the prevailing rate(s) of hourly wage applicable to this Contract.

If the Department of Labor revises the prevailing rate of hourly wages to be paid by the public body, the revised rate as provided by the public body shall apply to this Contract.

# Du Page County Prevailing Wage for July 2015

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
ASBESTOS ABT-GEN		ALL		39.400	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500
ASBESTOS ABT-MEC		BLD		36.340	38.840	1.5	1.5	2.0	11.47	10.96	0.000	0.720
BOILERMAKER		BLD		47.070	51.300	2.0	2.0	2.0	6.970	18.13	0.000	0.400
BRICK MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030
CARPENTER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
CEMENT MASON		ALL		43.750	45.750	2.0	1.5	2.0	13.05	14.45	0.000	0.480
CERAMIC TILE FNSHER		BLD		36.810	0.000	1.5	1.5	2.0	10.55	9.230	0.000	0.770
COMMUNICATION TECH		BLD		32.650	34.750	1.5	1.5	2.0	9.550	15.16	1.250	0.610
ELECTRIC PWR EQMT OP		ALL		37.890	51.480	1.5	1.5	2.0	5.000	11.75	0.000	0.380
ELECTRIC PWR EQMT OP		HWY		39.220	53.290	1.5	1.5	2.0	5.000	12.17	0.000	0.390
ELECTRIC PWR GRNDMAN		ALL		29.300	51.480	1.5	1.5	2.0	5.000	9.090	0.000	0.290
ELECTRIC PWR GRNDMAN		HWY		30.330	53.290	1.5	1.5	2.0	5.000	9.400	0.000	0.300
ELECTRIC PWR LINEMAN		ALL		45.360	51.480	1.5	1.5	2.0	5.000	14.06	0.000	0.450
ELECTRIC PWR LINEMAN		HWY		46.950	53.290	1.5	1.5	2.0	5.000	14.56	0.000	0.470
ELECTRIC PWR TRK DRV		ALL		30.340	51.480	1.5	1.5	2.0	5.000	9.400	0.000	0.300
ELECTRIC PWR TRK DRV		HWY		31.400	53.290	1.5	1.5	2.0	5.000	9.730	0.000	0.310
ELECTRICIAN		BLD		38.160	41.980	1.5	1.5	2.0	9.550	18.29	4.680	0.680
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600
FENCE ERECTOR	NE	ALL		37.340	39.340	1.5	1.5	2.0	13.05	12.06	0.000	0.300
FENCE ERECTOR	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
GLAZIER		BLD		40.500	42.000	1.5	2.0	2.0	13.14	16.99	0.000	0.940
HT/FROST INSULATOR		BLD		48.450	50.950	1.5	1.5	2.0	11.47	12.16	0.000	0.720
IRON WORKER	E	ALL		44.200	46.200	2.0	2.0	2.0	13.65	21.14	0.000	0.350
IRON WORKER	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
LABORER		ALL		39.200	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500
LATHER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
MACHINIST		BLD		45.350	47.850	1.5	1.5	2.0	7.260	8.950	1.850	0.000
MARBLE FINISHERS		ALL		32.400	34.320	1.5	1.5	2.0	10.05	13.75	0.000	0.620
MARBLE MASON		BLD		43.030	47.330	1.5	1.5	2.0	10.05	14.10	0.000	0.780
MATERIAL TESTER I		ALL		29.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500
MATERIALS TESTER II		ALL		34.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500
MILLWRIGHT		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
OPERATING ENGINEER	BLD 1	48.100		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 2	46.800		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 3	44.250		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 4	42.500		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 5	51.850		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 6	49.100		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	BLD 7	51.100		52.100	2.0		2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	FLT	36.000		36.000	1.5		1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 1	46.300		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 2	45.750		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 3	43.700		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 4	42.300		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 5	41.100		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 6	49.300		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER	HWY 7	47.300		50.300	1.5		1.5	2.0	17.55	12.65	1.900	1.250
ORNAMNTL IRON WORKER E	ALL	45.000		47.500	2.0		2.0	2.0	13.55	17.94	0.000	0.650
ORNAMNTL IRON WORKER W	ALL	45.060		48.660	2.0		2.0	2.0	10.52	20.76	0.000	0.700
PAINTER	ALL	41.730		43.730	1.5		1.5	1.5	10.30	8.200	0.000	1.350

PAINTER SIGNS	BLD	33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000
PILEDRIVER	ALL	44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
PIPEFITTER	BLD	46.000	49.000	1.5	1.5	2.0	9.000	15.85	0.000	1.780
PLASTERER	BLD	43.430	46.040	1.5	1.5	2.0	10.05	14.43	0.000	1.020
PLUMBER	BLD	46.650	48.650	1.5	1.5	2.0	13.18	11.46	0.000	0.880
ROOFER	BLD	41.000	44.000	1.5	1.5	2.0	8.280	10.54	0.000	0.530
SHEETMETAL WORKER	BLD	44.720	46.720	1.5	1.5	2.0	10.65	13.31	0.000	0.820
SPRINKLER FITTER	BLD	49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550
STEEL ERECTOR	E ALL	42.070	44.070	2.0	2.0	2.0	13.45	19.59	0.000	0.350
STEEL ERECTOR	W ALL	45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
STONE MASON	BLD	43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030
<del>SURVEY WORKER</del>	->NOT IN EFFECT	ALL	37.000	37.750	1.5	1.5	2.0	12.97		
9.930 0.000 0.500										
TERRAZZO FINISHER	BLD	38.040	0.000	1.5	1.5	2.0	10.55	11.22	0.000	0.720
TERRAZZO MASON	BLD	41.880	44.880	1.5	1.5	2.0	10.55	12.51	0.000	0.940
TILE MASON	BLD	43.840	47.840	1.5	1.5	2.0	10.55	11.40	0.000	0.990
TRAFFIC SAFETY WRKR	HWY	32.750	34.350	1.5	1.5	2.0	6.550	6.450	0.000	0.500
TRUCK DRIVER	ALL 1	35.920	36.120	1.5	1.5	2.0	8.280	8.760	0.000	0.150
TRUCK DRIVER	ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TUCKPOINTER	BLD	42.620	43.620	1.5	1.5	2.0	10.05	13.34	0.000	0.670

Legend: RG (Region)

TYP (Trade Type - All, Highway, Building, Floating, Oil & Chip, Rivers)

C (Class)

Base (Base Wage Rate)

FRMAN (Foreman Rate)

M-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.)

OSA (Overtime (OT) is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

## Explanations

DUPAGE COUNTY

IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

### EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the

removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

TRAFFIC SAFETY - work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

#### CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

#### COMMUNICATIONS TECHNICIAN

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

#### MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all

rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

#### OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

#### OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types; Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front

Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

#### OPERATING ENGINEER - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

#### TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics

Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yeards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

#### TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

#### Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

#### LANDSCAPING

Landscape work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators

(regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

#### MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".

## **AFFIDAVIT OF NON-COLLUSION**

**SECTION 00 45 19**

being first duly sworn on oath deposes and states:

a. That in connection with this procurement,

1. the prices in this Bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
2. the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening directly or indirectly to any other bidder or to any competitor; and
3. no attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.

b. The undersigned further states

1. He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he/she has not participated, and will not participate, in any action contrary to (a.1) through (a.3) above; or
2. He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he/she has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a.1) through (a.3) above, and as their agent does hereby so certify; and (b) he/she has not participated, and will not participate, in any action contrary to (a.2) through (a.3) above.

c. It is expressly understood that the foregoing statements, representations, and promises are made as a condition to the right of the Bidder to receive payment under any award made hereunder.

For Corporation:  
(Corporate Seal)

(Name) Indicate if corporation, partnership or sole proprietor

ATTEST:

(Office held in Bidder Organization)

**SUBSCRIBED AND SWORN TO before me**

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

---

## Notary Public

**END OF SECTION**

**BIDDER CERTIFICATION  
IN COMPLIANCE WITH ARTICLE 33 E TO THE  
"CRIMINAL CODE OF 1961"**

**SECTION 00 45 46**

I \_\_\_\_\_, do hereby certify that:

1. I am \_\_\_\_\_ of the \_\_\_\_\_  
Position Firm

and have authority to execute this certification on behalf of this firm.

2. This firm is not barred from bidding on this Contract as a result of a violation of either Section 33E-3, Bid-Rigging, or Section 33E-4, Bid Rotating, as set forth in Article 33E to the "Criminal Code of 1961".

Name of Firm \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Corporate Seal (where appropriate)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, before me appeared (Name) \_\_\_\_\_ to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of Firm) \_\_\_\_\_ to execute the affidavit and did so as his or her free act and deed.

Notary Public \_\_\_\_\_ Commission Expires \_\_\_\_\_

Notary Seal

END OF SECTION

## CONTRACT AGREEMENT

### SECTION 00 52 43

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between the **Village of Willowbrook** hereinafter called "Owner", and \_\_\_\_\_, hereinafter called "Contractor".

#### WITNESSETH:

WHEREAS, Owner has heretofore, solicited Bids for all the Work and improvements and for the doing of all things included within the hereinafter specified and related to the **500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project**.

WHEREAS, Owner did on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, find that Contractor was the lowest responsible bidder for hereinafter specified Work and did award Contractor a contract for said Work.

NOW, THEREFORE, for and in consideration of their mutual promises, covenants, undertakings and agreements, the parties hereto do hereby agree as follows:

#### ARTICLE I - WORK TO BE DONE BY CONTRACTOR

Contractor agrees, at his/her own cost and expense, to do all the Work and to furnish all the labor, materials, equipment and other property necessary to perform and complete all the Work and improvements required for and related to the **500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project** all in full accordance with and in compliance with and as required by the hereinafter specified Contract Documents, including any and all Addenda for said Work, and to do, at his/her own cost and expense, all other things required of the Contractor by said Contract Documents for said Work.

All Work shall be performed in accordance with applicable laws and government agency regulations and rules; Authorities having jurisdiction; OSHA regulations and rules; and any applicable rules and regulations of the **State of Illinois or DuPage County** agencies. Furthermore, and as related to the Work, the Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of all public authorities bearing on the safety of persons or property or their protection from damage, injury or loss.

#### ARTICLE II - CONTRACT DOCUMENTS

The Contract Documents herein named include all of the following component parts, all of which are as fully a part of this Contract as if herein set out verbatim, or if not attached, as if hereto attached:

1. Instructions to Bidders
2. Bidding Requirements
3. Bid Form
4. This Contract Agreement
5. General Conditions of the Contract
6. Supplementary Conditions (if any)
7. Contract Specifications
8. Contract Drawings
9. All Bonds, Insurance Certificates and Insurance Policies mentioned or referred to in the foregoing Documents.
10. Any and all other Documents or Papers included or referred to in the foregoing Documents.
11. Any and all Addenda to the foregoing.

## CONTRACT AGREEMENT

### ARTICLE III - CONTRACT PRICE

The Contractor agrees to receive and accept the following total lump sum bid price (and as may be adjusted for unit price work actually performed) as full compensation for furnishing all materials and equipment and for doing all the Work contemplated and embraced in this Agreement; also for all loss or damage arising out of the nature of the Work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by the Owner, and for all risks of every description connected with the Work; also for well and faithfully completing the Work, and the whole thereof, in the manner and according to and in compliance with the Contract Documents and the requirements of the Engineer under them; also for any and all other things required by the Contract Documents, to wit:

Owner agrees to pay Contractor for performance of Work in accordance with the Contract Documents in current funds as follows:

Total Contract Price of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).  
(in writing) (in figures)

This Total Contract Price shall consist of the itemized prices as indicated in the Contractor's Bidding Schedule.

Plus the following (List in detail additional work, if any, and corresponding amounts):

### ARTICLE IV - CONTRACT TIME

The Work of this Contract shall include all Work in accordance with the Contract Documents prescribed and specified and as related to the **500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project**. The Work of this Contract shall be completed within **120 days** from the date which the Notice to Proceed is issued. The Contractor agrees to commence Work under this Contract within **10 days** after the receipt from the Owner of a fully executed Agreement and Notice to Proceed and to fully complete all Work included in this Contract to the point of final acceptance by the Owner within the previously specified time period.

### ARTICLE V - LIQUIDATED DAMAGES

OWNER and CONTRACTOR recognize that time is of the essence in this Agreement and that OWNER will suffer financial loss if the Work is not completed within the time specified above, plus any extensions thereof allowed by the Owner in writing. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER, and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER **\$250.00 for each calendar day** that expires after the specified completion time until the Work is completed and Final Acceptance is made by the Owner. In addition, the Contractor agrees that additional liquidated damages shall be paid to the Owner as applicable and in accordance with Section 01 31 19 of the Specifications and/or other provisions of the Contract Documents.

## CONTRACT AGREEMENT

### ARTICLE VI - PAYMENTS TO CONTRACTOR

General: Owner agrees with said Contractor to employ and does hereby employ, the said Contractor to provide the materials and do all the Work and do all other things hereinabove mentioned according to the terms and conditions hereinabove contained or referred to for the Total Contract Price aforesaid and hereby contracts to pay the same at the time, in the manner and upon the condition set forth or referred to hereinafter; and the said parties for themselves, their heirs, executors, administrators, successors and assigns do hereby agree to the full performance of the covenants herein contained.

Application for Payment: CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

Progress Payments: OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the fifteenth day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values provided for in Paragraph 14.1 of the General Conditions.

Retention of Payment: Retention for payment shall be as follows: For the first 50 percent of completed Work, there shall be deducted 10 percent to be retained until after the completion of the entire Work to the satisfaction of the Owner. After 50 percent or more of the Work is completed, the Owner may, at his/her discretion, certify the remaining partial payments without any further retention, provided that satisfactory progress is being made and provided that the amount retained is not less than 5 percent of the total adjusted Contract Price.

Final Payment: Upon final completion and acceptance of the Work in accordance with Paragraph 14.13 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by the ENGINEER as provided in said Paragraph 14.13.

## CONTRACT AGREEMENT

IN WITNESS WHEREOF, the parties hereto have caused this Instrument to be executed the day and year first above written.

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

(SEAL) Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
TITLE: \_\_\_\_\_

### VILLAGE OF WILLOWBROOK

Owner

By \_\_\_\_\_

(SEAL) Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
TITLE: \_\_\_\_\_

### IMPORTANT

**NOTE:** If the Contractor is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Contractor is a co-partnership, the true name of the firm shall be set forth above, together with the signatures of all partners; and if the contractor is an individual, his/her signature shall be placed above. If signature is by an agent other than an officer of a corporation or a member of a partnership, a power-of-attorney must be attached hereto. Signature of Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

END OF SECTION

**PERFORMANCE BOND**

**SECTION 00 61 13-13**

KNOW ALL MEN BY THESE PRESENTS THAT \_\_\_\_\_

(insert the name and address or legal title of the Contractor)

as Principle, hereinafter called Contractor, and

(insert the legal title of Surety)

as Surety, hereinafter called Surety, are held firmly bound unto the **(OWNER)**

as obligee, hereinafter called the  
Owner in the full and just sum of

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)

lawful money of the UNITED STATES OF AMERICA for the payment of which sum of money well and truly to be made, we bind ourselves, heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents:

WHEREAS, the Principal has entered in to a certain written contract, dated the \_\_\_\_\_ day of  
\_\_\_\_\_, A.D. 20\_\_\_\_, with the \_\_\_\_\_

for \_\_\_\_\_

complete, as described in the foregoing Contract and Articles of Agreement.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal shall in all respects well and truly keep and perform the said Contract, and shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the purpose of constructing the Work provided in said Contract, and shall remove and replace any defects in workmanship or materials which may be apparent or may develop within a period of one (1) year from the Date of Final Acceptance, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the Specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Specifications.

**PERFORMANCE BOND**

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

Principal

Witness:

\_\_\_\_\_  
(If Individual or Firm)

Attest:

\_\_\_\_\_  
(If Corporation)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

Attest:

\_\_\_\_\_  
(Surety)

END OF SECTION

LABOR AND MATERIAL PAYMENT BOND

SECTION 00 61 13-16

KNOW ALL MEN BY THESE PRESENTS THAT \_\_\_\_\_

(insert the name and address or legal title of the Contractor)

as Principle, hereinafter called Contractor, and

(insert the legal title of Surety)

as Surety, hereinafter called Surety, are held firmly bound unto the (OWNER)

as obligee, hereinafter called the  
Owner in the full and just sum of

DOLLARS (\$ \_\_\_\_\_)

lawful money of the UNITED STATES OF AMERICA for the payment of which sum of money well and truly to be made, we bind ourselves, heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents:

WHEREAS, the Principal has entered in to a certain written contract, dated the \_\_\_\_\_ day of  
\_\_\_\_\_, A.D. 20\_\_\_\_, with the \_\_\_\_\_  
for \_\_\_\_\_  
complete, as described in the foregoing Contract and Articles of Agreement.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal shall in all respects well and truly keep and perform the said Contract, and shall pay all sums of money due or to become due, for any and all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the Work provided for in the Contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, and other fuels, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such Work, and all insurance premiums on said Work, and for all labor, performed in such Work whether by subcontractor or otherwise, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the Specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Specifications.

**LABOR AND MATERIAL PAYMENT BOND**

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

Principal

**Witness:**

\_\_\_\_\_  
(If Individual or Firm)

**Attest:**

\_\_\_\_\_  
(If Corporation)

\_\_\_\_\_ (SEAL)

\_\_\_\_\_ (SEAL)

**Attest:**

\_\_\_\_\_  
(Surety)

**IMPORTANT:** Surety companies executing BONDS must be authorized to transact business in the state where the Project is located.

**END OF SECTION**

**CERTIFICATION OF CONTRACTOR RESPONSIBILITY**

**SECTION 00 62 00**

(To be submitted at Preconstruction Meeting)

The following information is hereby submitted. It is understood that this Certificate shall be submitted prior to the initiation of executing the Work of this Contract and prior to or at the time of any change in the personnel assigned as the construction supervisor or safety supervisor. It is further understood that the construction supervisor and the safety supervisor shall be available on a twenty four (24) hour will call basis.

Date: \_\_\_\_\_ By: \_\_\_\_\_  
(Name and Title)

**PROJECT**  
**500,000 Gallon Village Hall Spheroid High Tank Painting  
and Rehabilitation Project**

Construction Supervisor:

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

Safety Supervisor:

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

**END OF SECTION**

## INSURANCE REQUIREMENTS

### SECTION 00 62 16

Before commencing Work, the Contractor shall obtain at his/her own expense, and agree to keep in effect during the life of this Contract, as a minimum requirement, the following insurance in a company or companies acceptable to the Owner; (and authorized to transact business under the laws of the **State of Illinois**):

1. The Contractor shall purchase and maintain liability insurance as required until all Work required under the Contract has been completed and accepted by the Owner, except as otherwise provided. The insurance required shall be written for not less than the following limits of liability:
  - a. **WORKER'S COMPENSATION INCLUDING OCCUPATIONAL DISEASE, AND EMPLOYER'S LIABILITY INSURANCE.** Procure and maintain worker's Compensation Insurance in strict accordance with requirements of applicable State Worker's Compensation Insurance Laws for all employees to be engaged in work under this Contract. Provide Employer's Liability Insurance in an amount of not less than five hundred thousand (\$500,000) for protection of employees not otherwise protected.
  - b. **PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.** Full Comprehensive General Liability and Property Damage Insurance coverage, providing protection from claims for damages for personal and bodily injury, including in part sickness, disease, or death, and from claims for damages to property (broad form), which may arise directly or indirectly out of, or in connection with, performance of Work, including completed operations, under the Contract by Contractor, or by any of his subcontractor or by anyone directly or indirectly employed by either of them, or under control of either of them; minimum amounts of such insurance as follows:
    - b.1 Public Liability Insurance not less than One Million Dollars (\$1,000,000) for damages arising out of personal injury and bodily injury, including in part sickness, disease, or death of one person and subject to same limit for each person and not less than One Million Dollars (\$1,000,000) in any one occurrence.
    - b.2 Property Damage Insurance (broad form) in an amount not less than One Million Dollars (\$1,000,000) for damages arising out of injury to or destruction of property of others in any one occurrence with an aggregate limit in same amount.
  - c. **AUTOMOBILE LIABILITY AND PROPERTY DAMAGE INSURANCE.** Comprehensive Automobile Liability and Property Damage Insurance coverage on all vehicles used in connection with contract, whether owned, un-owned, or hired. Liability limits not less than One Million Dollars (\$1,000,000) combined single limit.
  - d. **CONTRACTUAL LIABILITY COVERAGE.** Include "Broad Form Contractual Liability Coverage" endorsement with each and every policy for liability insurance carried by each Contractor and Subcontractor.
  - e. **UMBRELLA LIABILITY.** Umbrella liability insurance excess of primary insurance in amount of Five Million Dollars (\$5,000,000) per occurrence/Five Million Dollars (\$5,000,000) in the aggregate and following form on primary coverage as to additional insureds shall be carried by the Contractor. At the Owner's discretion, this amount may be reduced for sub-contractors.
2. Contractor shall renew any policy which expires during the performance of the Contract and shall notify Owner by appropriate Certificate of Insurance of such renewal prior to the expiration date.

## INSURANCE REQUIREMENTS

3. The **Village of Willowbrook** (Owner), **DuPage County, Illinois** and **Christopher B. Burke Engineering, Ltd.** (Engineer) shall be added as an additional insured to the Contractor's general liability/property damage policy, automobile liability and property damage policy and employer's liability coverage. Owner/Engineer shall be named as an alternate employer on Contractor's Worker's Compensation coverage. Contractor hereby waives the right of subrogation against Owner as to any claims under worker's compensation and employer's liability policies.
4. Certificates of Insurance naming Owner and Engineer as additional insured, with insurance companies which are acceptable to the Owner, shall be filed with the Owner prior to commencement of the Work. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least thirty (30) days prior written notice has been given to Owner.
5. All coverages shall be provided upon an occurrence basis, unless claims-made coverages are expressly approved, in writing, by Owner's Director of Risk Management and Insurance. Contractor shall renew any policy which expires during the performance of the contract and shall notify Owner by appropriate Certificate of Insurance of such renewal prior to the expiration date.
6. The Contractor agrees to indemnify and save harmless the Owner, **Christopher B. Burke Engineering, Ltd.**, and all of their officers, partners, agents and employees from and against all loss or expense (including court costs and attorney's fees) by reason of liability imposed by law upon Owner and **Christopher B. Burke Engineering, Ltd.**, for damages because of bodily injury, including death at any time, resulting therefrom sustained by any person or persons or on account of damage to or destruction of property, real or personal, including loss of use thereof, arising out of or in consequence of performance of this Work, whether such injuries to or death of persons or damage to property is due or claimed to be due to the negligence of the Contractor, his/her Subcontractors, the Owner, **Christopher B. Burke Engineering, Ltd.**, their officers, partners, agents, and employees except only such injury, death or damage as shall have been occasioned by the sole negligence of the Owner or **Christopher B. Burke Engineering, Ltd.**.

END OF SECTION

**CLARIFICATION/INTERPRETATION REQUEST**

**SECTION 00 63 13**

Project:	Date:
Contractor:	Clarification Request No.:
Contract:	Re:
Attn:	
This is a request for a clarification/interpretation on the following:	
Prepared By:	Date Response Needed:
Response:	
Response Prepared By:	
Response Returned to Contractor On:	
cc: Owner	

**END OF SECTION**

**NOTICE OF AWARD**

**SECTION 00680**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT Description: \_\_\_\_\_

The OWNER has considered the BIDS received on \_\_\_\_\_, 20\_\_\_\_, for the above described WORK in response to its Advertisement for Bids dated \_\_\_\_\_, 20\_\_\_\_ and Instructions to Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$\_\_\_\_\_.

You are required by the INFORMATION FOR BIDDERS to execute the AGREEMENT and furnish the required CONTRACTOR'S PERFORMANCE BOND, PAYMENT BOND and CERTIFICATE OF INSURANCE within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said AGREEMENT and to furnish said BONDS within ten (10) days from the date of this NOTICE, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledge copy of this NOTICE OF AWARD to the OWNER.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_ (Owner)

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_  
\_\_\_\_\_

this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION**

## **NOTICE TO PROCEED**

**SECTION 00690**

TO: \_\_\_\_\_ DATE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_, 20\_\_\_\_, on or before \_\_\_\_\_, 20\_\_\_\_, and you are to bring to completion the work of the scheduled improvements of the above referenced Project by September 2, 2011. The date of completion of all WORK is therefore \_\_\_\_\_, 20\_\_\_\_.

---

(Owner)

BY: \_\_\_\_\_

**TITLE:** \_\_\_\_\_

#### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by \_\_\_\_\_

this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

BY: \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**END OF SECTION**

**STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT**

**SECTION 00 72 43**

**PART 1- GENERAL**

1.01 Engineers Joint Contract Documents Committee 1910-8 (Latest Edition) Standard General Conditions of the Construction Contract shall apply to the Work in this Contract.

**END OF SECTION**

## LIQUIDATED DAMAGES

### SECTION 00 73 93

PART 1-

#### LIQUIDATED DAMAGES

In case of failure on the part of the Contractor to meet the Contract Completion Date, or any extensions thereof, as bid under the Bid Form (Section 00 52 43) for Completion of the Work, the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages the sum of **\$250.00 for each calendar day** that completion is delayed. However, the total amount of liquidated damages to be assessed by the Owner in case of such delays, shall not exceed 10 percent of the original contract price.

In the event that it becomes necessary to terminate the Contractor's right to proceed with the Work under the Contract, such termination shall not relieve the Contractor of any responsibility for liquidated damages as set forth herein. If the Owner so terminates the Contractor's right to proceed, any resulting damage will include, subject to the limitation stated above, such liquidated damages as provided for herein until such reasonable time as may be required for completion of the Work by the Owner.

END OF SECTION

## DRAWINGS AND PHOTOS

### **SECTION 00 85 00**

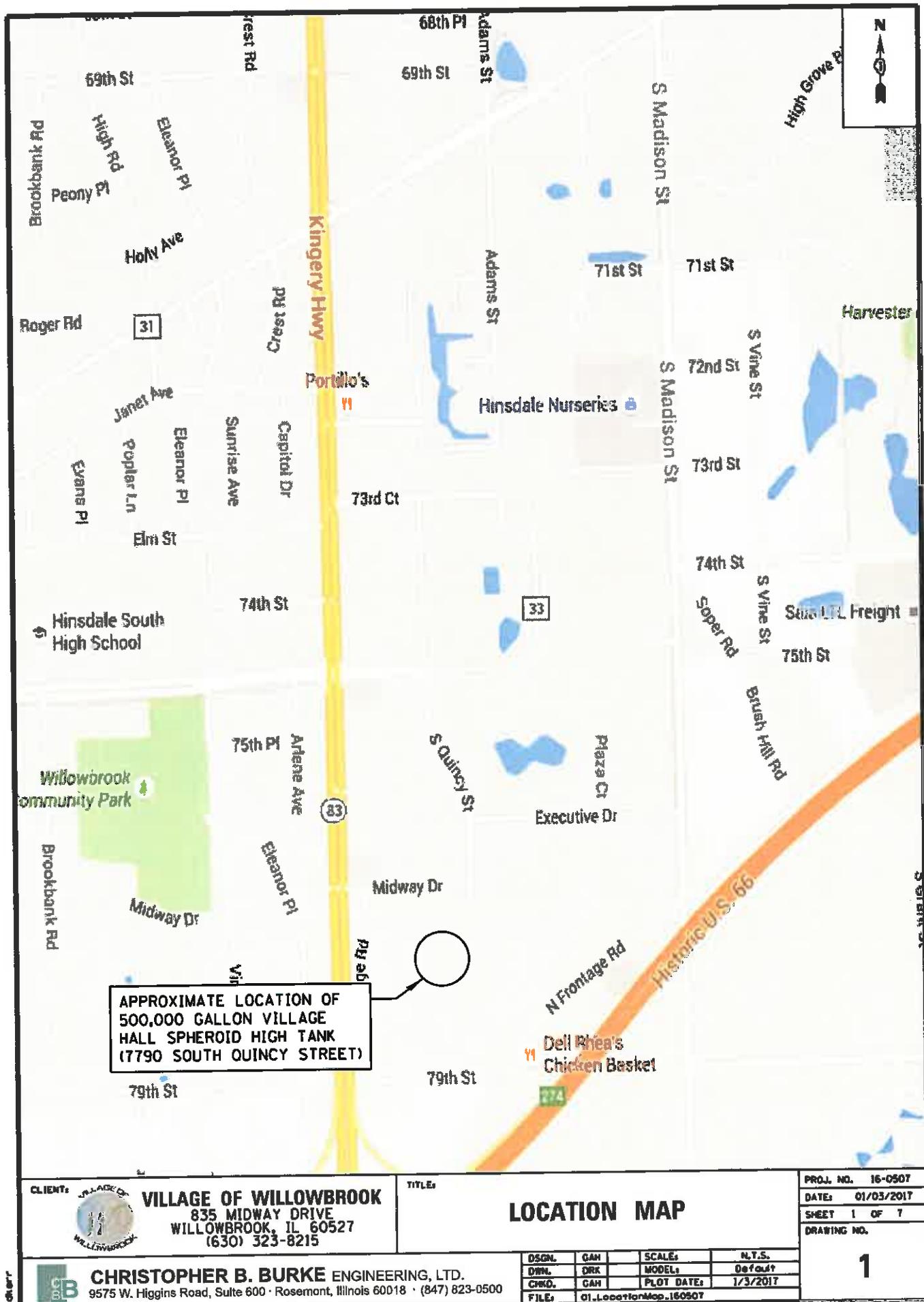
The following Drawings shall be made part of these Bidding Documents and shall form a basis for the Contract Price.

<u>DRAWING NO.</u>	<u>DRAWING TITLE</u>
Dwg. #1	Location Map
Dwg. #2	Aerial Map
Dwg. #3	Water Tank Photos (1 of 4)
Dwg. #4	Water Tank Photos (2 of 4)
Dwg. #5	Water Tank Photos (3 of 4)
Dwg. #6	Water Tank Photos (4 of 4)
Dwg. #7	Logo and Color Scheme

Drawings and photos have been included in these Bidding Documents for informational purposes only and may not reflect all existing conditions. The information provided is not intended to depict all Work or conditions. Contractor shall be responsible for inspecting the site and determining actual conditions and the nature of Work involved for this Project.

If awarded the Contract and before starting work, the contractor shall field verify for accuracy all information pertinent to this project and conditions as noted thereon. Any discrepancies found shall be brought to the attention of the Owner immediately. If such discrepancies will result in changes to Contractor's prices, these changes shall be discussed with the Owner and executed before Contractor starts Work. The Owner will not accept any changes in Contract Price after start of Work which may or may not be due to any discrepancy in the information presented.

END OF SECTION





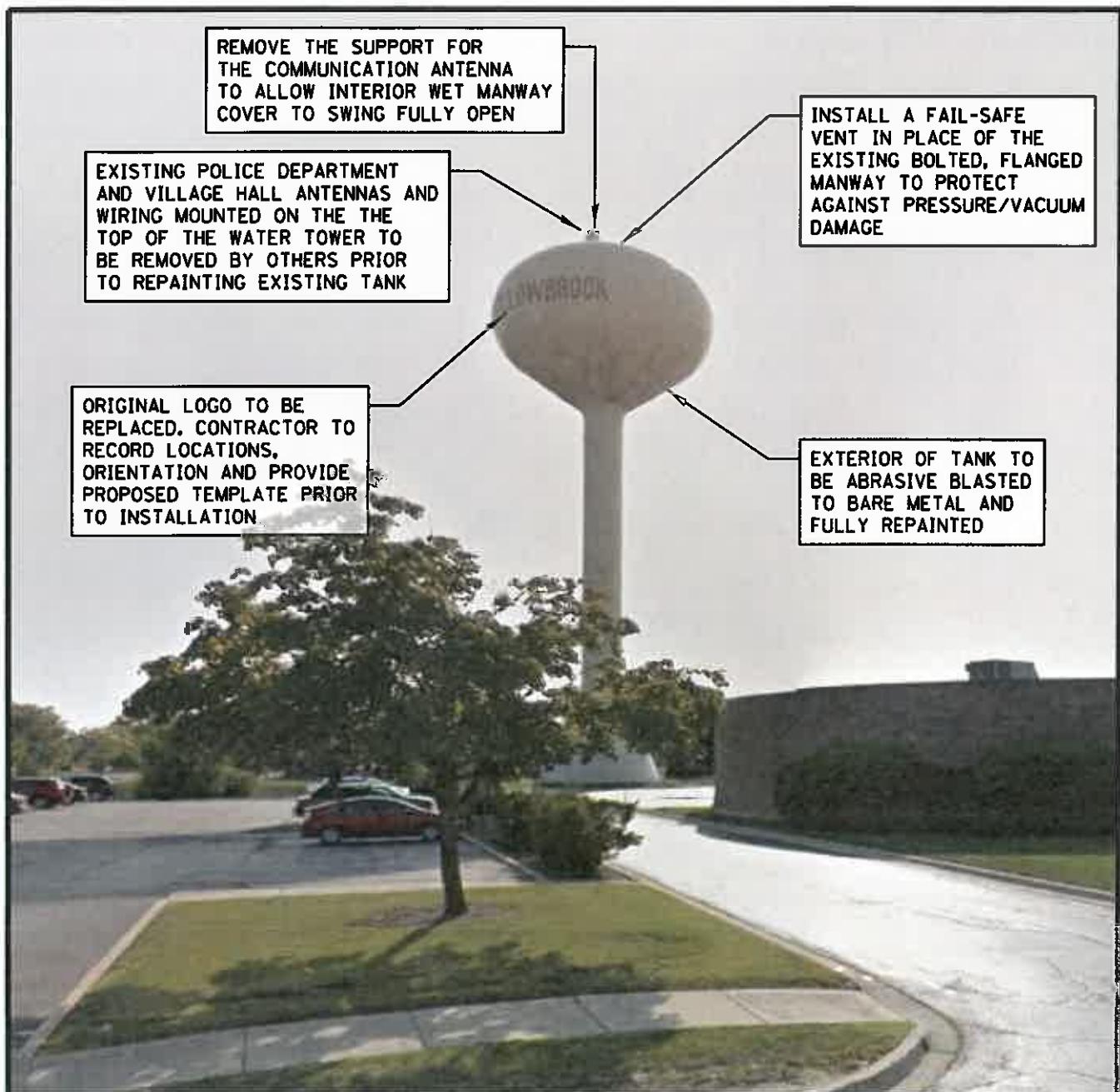


PHOTO SHOWS THE 500,000 GALLON VILLAGE HALL SPHEROID HIGH TANK  
LOOKING WEST FROM SOUTH QUINCY STREET

- ALL AREAS AT GRADE TO BE PROTECTED AGAINST RUN OFF OF PRESSURE WASHED WASTE MATERIALS.
- DUST COLLECTION SYSTEM IS REQUIRED FOR INTERIOR WET PORTION OF THIS PROJECT.
- ALL DISTURBED AREAS TO BE REGRADED AND RESTORED WITH LIKE MATERIALS.

CLIENT:  <b>VILLAGE OF WILLOWBROOK</b> 835 MIDWAY DRIVE WILLOWBROOK, IL 60527 (630) 323-8215	TITLE: <b>WATER TANK PHOTOS (1 OF 4)</b>	PROJ. NO. 16-0507 DATE: 01/03/2017 SHEET 3 OF 7 DRAWING NO.
<b>CHRISTOPHER B. BURKE</b> ENGINEERING, LTD. 9575 W. Higgins Road, Suite 600 • Rosemont, Illinois 60018 • (847) 823-0500		DSGN. GAH SCALE: N.T.S. DWL DRK MODEL: Default CRD. GAH PLOT DATE: 1/3/2017 FILE: 03_TankPhotos_160507

INFO PER NAMEPLATE IS AS FOLLOWS:

HORTON WATERSPHEROID  
CONTRCAT NO. 74-2762U  
YEAR ERECTED 1975  
NOM HEIGHT 115'  
NOM CAPACITY 500,000 GAL  
MATERIAL  
HEAT TREATMENT - YES  
CBI NA-CON, INC.  
OAK BROOK, IL



PHOTO SHOWS THE EXISTING EXTERIOR PAINT COAT OF THE SPHEROID HIGH TANK. THE EXTERIOR COAT AND WELD SEAMS ARE TO BE ABRASIVE BLASTED, PRIMED, AND REPAINTED.



**VILLAGE OF WILLOWBROOK**  
835 MIDWAY DRIVE  
WILLOWBROOK, IL 60527  
(630) 323-8215

TITLE:

**WATER TANK PHOTOS  
(2 OF 4)**

PROJ. NO. 16-0507  
DATE: 01/03/2017  
SHEET 4 OF 7  
DRAWING NO.

4

DSGN.	GAH	SCALE:	N.T.S.
DWLR.	DRK	MODEL:	Default
CHRD.	GAH	PLOT DATE:	1/3/2017
FILE:	04_TankPhotos2_160507		



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500



EXISTING CONDUIT PENETRATION ON EAST SIDE OF THE BASE CONE, CONTINUES AROUND THE INTERIOR PERIMETER OF THE TANK AND ENTERS THE NORTH SIDE OF THE CONTROL ROOM



EXISTING TELEMETRY AND POWER CABINET LOCATED APPROX. 10' WEST OF TANK. TELEMETRY CABINET SHALL BE PROTECTED DURING CONSTRUCTION.

EXISTING COM ED METER AND SCADA ANTENNA MOUNTED ON UNISTRUT ON THE NORTH SIDE OF THE TANK. ALL EQUIPMENT SHALL BE PROTECTED DURING CONSTRUCTION.

CLIENT: **VILLAGE OF WILLOWBROOK**  
835 MIDWAY DRIVE  
WILLOWBROOK, IL 60527  
(630) 323-8215

TITLE:

**WATER TANK PHOTOS**  
**(3 OF 4)**

PROJ. NO. 16-0507  
DATE: 01/03/2017  
SHEET 3 OF 7  
DRAWING NO.

5



CHRISTOPHER B. BURKE ENGINEERING, LTD.  
9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.	GAH	SCALE:	NT.S.
DRW.	DRK	MODEL:	Default
CRD.	GAH	PLOT DATE:	1/3/2017
FILE:	05_TankPhotos3.160507		



REGRADE AROUND THE TANK TO ALLOW TOP OF FOUNDATION TO BE 6" ABOVE GRADE AND OVERFLOW DISCHARGE TO DRAIN AWAY FROM THE TANK.

PHOTO LOOKING AT TANK OVERFLOW PIPING. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING RUN OFF OF TANK DEBRIS DURING CONSTRUCTION. FILTER BASKETS FOR ALL STRUCTURES AND SILT FENCE WILL BE REQUIRED TO PROTECT RUNOFF.



PHOTO FROM PROPOSED CONSTRUCTION STAGING LOCATION LOOKING EAST FROM THE WILLOWBROOK INN PARKING LOT

CLIENT: **VILLAGE OF WILLOWBROOK**  
835 MIDWAY DRIVE  
WILLOWBROOK, IL 60527  
(630) 323-8215

TITLE:

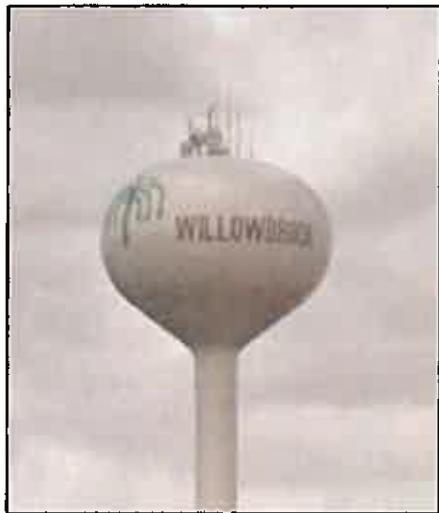
## WATER TANK PHOTOS (4 OF 4)

PROJ. NO. 16-0507  
DATE: 01/05/2017  
SHEET 6 OF 7  
DRAWING NO.

6

**CHRISTOPHER B. BURKE** ENGINEERING, LTD.  
9575 W. Higgins Road, Suite 600 • Rosemont, Illinois 60018 • (847) 823-0500

DSGN.	GAH	SCALE:	N.T.S.
DRW.	DRK	MODEL:	Default
CHKD.	GAH	PLOT DATE:	1/3/2017
FILE:	C6_TankPhotos4.160507		



**ORIGINAL LOGO**



**PROPOSED LOGO**

THE CONTRACTOR WILL INCLUDE TWO LOGOS ON THE TANK. THE SIZE OF THE LOGOS ARE TO BE  $1\frac{1}{2}$  TIMES LARGER THAN THE EXISTING 67TH STREET TANK LOGOS. THE LETTERS SHOWN ARE FOR GRAPHICAL PURPOSES ONLY, THE CONTRACTOR MUST SUBMIT A LAYOUT DRAWING FOR APPROVAL. THE COST OF THE TWO LOGOS WILL BE INCIDENTAL TO THE PRICE OF THE EXTERIOR PAINTING WORK

**COLOR SCHEME**

OWNER HAS MADE NO PRELIMINARY SELECTION OF COLORS  
 CONTRACTOR TO SUBMIT COLOR CHARTS IDENTIFYING  
 EXISTING COLOR SCHEME WITH NEW PAINT SWATCHES.  
 COLORS TO MATCH LOGO ON 67TH STREET 500MG SPHEROID TANK

CLIENT:  <b>VILLAGE OF WILLOWBROOK</b> 835 MIDWAY DRIVE WILLOWBROOK, IL 60527 (630) 323-8215	TITLE: <b>LOGO AND COLOR SCHEME</b>	PROJ. NO. 16-0507
		DATE: 01/03/2017
		Sheet 7 of 7
		DRAWING NO.
	DSGN. <input type="checkbox"/> GAH <input type="checkbox"/> MODEL: <input type="checkbox"/> N.T.S. DWN. <input type="checkbox"/> DRX <input type="checkbox"/> PLOT DATE: <input type="checkbox"/> Default CHRD. <input type="checkbox"/> GAH <input type="checkbox"/> FILE: 07.LogoColor_160507	7

## GENERAL REQUIREMENTS FOR TANK PAINTING

### SECTION 01 01 20

#### PART 1- GENERAL

##### 1.01 SCOPE

###### A. Description

This Section describes the General Requirements for the Work to be performed under this Contract. The Contractor shall comply with these General Requirements and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specifications in related Special Provisions, and as shown on the Drawings.

##### 1.02 QUALITY ASSURANCE

Acceptable manufacturers for various materials are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain materials are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer materials which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives/substitutes shall be upon the Contractor. Specified items are preferred. After acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. Each such request for substitution shall include the name of the specified material for which a substitute is being requested; the name of the proposed substitute material; and a complete description of the proposed substitute including performance and test data and any other information necessary for an evaluation. The decision of the **Owner** regarding the use of the proposed substitution shall be final.

##### 1.03 CONTAINMENT/DISPOSAL REQUIREMENTS

When required by Federal, State or local regulation, the entire **water storage tank** and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 I (CON), "Guide for Containing Debris Generated During Paint Removal Operations". Also refer to SSPC-GUIDE 7 I (DIS), "Guide for Disposal of Lead-Contaminated Surface Preparation Debris". NOTE: All surface preparation debris must be disposed of in accordance with applicable Federal, State and local regulations. When containment structures/enclosures are used, they shall not exceed the structural capacity of the **water storage tank** nor place excessive stress on any of the **water storage tank** components.

## **GENERAL REQUIREMENTS FOR TANK PAINTING**

Such containment apparatus shall be designed for rapid lowering in the event of an emergency or wind storm. The enclosure shall be lowered at the end of each day's work.

The **Owner** acknowledges that they are the Generator of and are responsible for the proper containment and disposal of all waste resulting from the surface preparation of the tank. As part of this Contract, the Contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of the **water storage tank** in strict accordance with **Illinois** EPA regulations. Copies of all documentation required by **Illinois** EPA regulations shall be submitted to the **Owner** for verification prior to the submission of the Contractor's request for Final Payment, including the properly executed Waste Manifest.

The Contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as specified in the exterior painting Section of these Specifications.

Upon removal of the exterior lugs, the Contractor shall also repair any damaged interior coating by methods described in the interior painting Section of these Specifications. Abrasive blasting to bare metal (SSPC-SP10) shall be required in the damaged areas.

1.04

### **PROTECTION OF PUBLIC AND PRIVATE PROPERTY**

During surface preparation and/or painting the Contractor shall be fully responsible for all public and private property such as, but not limited to, vehicles, buildings or other such property, including any nearby water ways, that damage occurs to, or may occur to, as a direct result of the surface preparation and/or painting. The Contractor shall advise nearby businesses of the Work being performed in an effort to relocate any vehicles that could be damaged by the Contractors operations. THE USE OF SILICA SAND BASED ABRASIVE SHALL NOT BE ALLOWED FOR EXTERIOR SURFACE PREPARATION ON THIS PROJECT. The Contractor shall comply with all OSHA and any other Federal or State safety standards.

1.05

### **PROPOSED SCHEDULE**

The Contractor shall submit a proposed schedule of construction with his/her proposal with a specified completion date.

The Contractor's proposed schedule shall include a starting date for painting the tank, completion date of Work on the

## **GENERAL REQUIREMENTS FOR TANK PAINTING**

tank and the length of time necessary to shut down operation of the tank. The proposed schedule shall also show the number of days to perform interior painting work and the number of days to perform exterior painting work.

The Contractor's proposed schedule shall be used for bid comparison and shall be subject to the revisions or modifications and approval of the **Owner** prior to award of the Contract. Start date shall be as soon as possible (weather permitting) after contract award.

1.06

### WATER TOWER DRAINING

The **500,000 Gallon Village Hall Spheroid High Tank** will be completely drained by the **Owner** prior to beginning the Work of this Contract. The Contractor shall notify the **Owner** at least ten (10) working days prior to initiating any of the specified Work, to allow the **Owner** sufficient time to drain the **water storage tank**.

1.07

### DISINFECTION AND FILLING OF THE WATER TOWER

Adequate ventilation that will effectively remove solvent vapors shall be provided for proper drying of paint on interior surfaces when interior surfaces of the **water storage tank** require painting. Following final coat application, the **water storage tank** shall not be disinfected or filled until the coating system is fully cured. Refer to applicable product data sheet(s) for dry time/temperature requirements. Disinfection shall be done in accordance with the current American Water Works Association standard, AWWA C652, or as instructed by the **Owner**. The disinfection process shall be repeated, as required, until water samples taken from the **water storage tank**, submitted to an approved **Illinois** EPA laboratory, show a satisfactory analysis. As a minimum, two water samples on two consecutive days shall be taken. The cost of labor, materials and samples for disinfection shall be considered incidental to the cost of this Project.

1.08

### AMERICAN WATER WORKS ASSOCIATION

All Work shall be implemented in accordance with the American Water Works Association's Standard D102-11.

1.09

### NSF CERTIFICATION

All coatings in contact with potable water or applied to the inside wet area of the **water storage tank** shall be listed by NSF International under ANSI/NSF Standard 61, Section 5, Protective (Barrier) Materials, Potable Water Tank Coatings.

## GENERAL REQUIREMENTS FOR TANK PAINTING

### 1.10 WORK CREW SUPERVISION

The Contractor shall provide qualified supervision of the paint crew at all times while performing the Work of this Contract. The Contractor's supervisor shall be capable of conversing fluently in the English language and shall be authorized by the Contractor to accept and act on requests made by the **Owner's Representative**.

### PART 2- PRODUCT

(As specified in Related Work Sections of these Specifications.)

### PART 3- EXECUTION

#### 3.01 MONITORING CONSTRUCTION

- A. The Contractor shall submit a monitoring plan for review by the **Owner**, which shall outline the schedule, methods, locations, etc., and shall keep a diary of the Contractor's activities. Diary entries shall include, but not be limited to:
  1. Date and time.
  2. Representatives name(s) visiting the work site.
  3. Weather conditions, including (but not limited to): wind speed, wind direction, humidity, dew point, air temperature, and surface temperature. Inclement weather conditions (such as rain or fog) shall also be documented. **Note: Contractor shall provide and maintain on site equipment to monitor weather conditions as required.**
  4. Contractor's activities.
  5. Work completed since previous visit.
  6. Description of observations, deficiencies and conversations with the **Owner's Representative**.
  7. Upcoming work.
  8. Other items including lost work days and reason for same.
  1. Tests conducted (including dry film thickness testing) and the results.
- B. Copies of the diary shall be sent to the **Owner's Representative** at the end of each week.

#### 3.02 GENERAL INSPECTIONS

While performing the Work of this Contract, the Contractor shall visually inspect all areas of the **water storage tank** to be painted for deficiencies such as, but not limited to,

## **GENERAL REQUIREMENTS FOR TANK PAINTING**

loose electrical conduits and wiring, faulty or broken lighting, unrestrained piping, unfastened bolts, wobbly ladder assemblies, etc. The Contractor shall report any such deficiencies discovered without delay to the **Owner**.

3.03

### RELATED WORK

Additional execution requirements shall be in accordance with the applicable Related Work Sections of these Specifications.

PART 4-

### MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified under this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Bid Schedule.

END OF SECTION

## SUMMARY OF WORK

### SECTION 01 11 00

#### PART 1- GENERAL

##### 1.01 DESCRIPTION OF WORK

A. General. The Work to be performed consists of furnishing labor, materials, equipment, and supervision as required by the Contract Documents for the **500,000 Gallon Village Hall Spheroid High Tank Painting and Rehabilitation Project** as required and as herein specified, including any and all accessories associated with the installation. The Contractor shall submit a staged construction schedule to Owner. The Work to be performed is generally summarized to include but not be limited to the following.

B. Work is briefly summarized as follows:

1. Replace the existing lighting units with new LED type luminaires and controls.
2. Clean all oil and grease from all surfaces, abrasive-blast the entire exterior to a SSPC-SP6 Commercial Blast. All weld seams should be abrasive-blasted to SSPC-SP10 near White Blast. Prime the exterior with a zinc-rich primer and apply a spot prime coat prior to an application of a urethane intermediate coat. Follow the intermediate coat with one finish color coat of fluoropolymer including the placement of 2 logos as described on Drawing #7.
3. Abrasive-blast of the entire interior wet areas of the spheroid tank including ceilings, weld seams, beams, and manways to SSPC-SP10 Near White. Prime surface-prepared areas with epoxy and apply two additional coats of epoxy. Sealing along the roof beams and ceiling with caulk.
4. Abrasive-blast all interior dry coating areas inside the bell of the tank, ladders, landings and platforms to SSPC-SP6. Prime all areas with epoxy primer and apply an intermediate coat, a thermal insulate coating and a finish epoxy coat to match existing.
5. Install a fail-safe, frost proof vent in place of the existing mushroom vent to protect against pressure/vacuum damage. This includes installing a flange on the existing vent pipe and providing a gasket between the flanges.

## SUMMARY OF WORK

6. Installation of new 42" high painter's rail, safety grabs, rigging couplings, and new fall protection devices on all ladders.
7. Remove and replace existing hanging anode cathodic protection system including rectifier.
8. Seam seal all interior wet roof plates with caulk.
9. Remove and replace existing interior dry manway hatch with proposed 30" diameter hatch.
10. Replace all gasketing on all hatches and manways.
11. Remove all insulation from the fill pipe, abrasive-blast the entire fill pipe to SSPC-SF6 and provide a four (4) coat epoxy system.
12. Provide new pipe insulation and aluminum jacket on riser pipe.
13. Install a fail-safe vent in place of the existing bolted, flanged manway to protect against pressure/vacuum damage. Provide a gasket between the flanges.
14. Remove and install new 30" diameter manway hatch and interior wet access hatch.
15. Seal the annular space between the side of the access tube and the roof penetration collar to prevent contamination entering the water containment portion of the tank.
16. Replace the curb on the interior wet manway with new steel curb.
17. Relocate any cables along or attached to the ladder in the access tube to maintain OSHA required clearance from the ladder side rails.
18. Remove the existing support for the communication antenna to allow interior wet manway cover to swing fully open.
19. Replace all existing interior and exterior lighting units with new LED type lighting units of the same type as was existing. Reuse existing electrical circuits.

## **SUMMARY OF WORK**

20. Regrade around the tank to allow top of foundation to be 6 inches above grade and overflow discharge to drain away from the tank.
21. Provide exterior diamond plate metal step into tank manway after regarding of tank surrounding areas.
22. Replace in kind all existing metal grating above tank sump pit.
23. Remove 5" of coarse aggregate on interior of bell of tank and provide a new 5" concrete floor slab to replace aggregate.
24. After construction is complete, restore site to preconstruction condition.

C. Debris Removal. Included as part of the above Work shall be the removal of any and all debris resulting from the Work. Such debris shall be legally and properly disposed off site. All fees for such disposal shall be the responsibility of the Contractor.

D. Painting. Paint to be as specified in Section 09 91 13. Paint shall be that of only one nationally recognized manufacturer, Tnemec OZ, and suitable for the application. Two coats are required. Owner to select final color of paint.

### **1.02 LOCATION OF THE WORK**

The project work site is located at **835 Midway Drive, Willowbrook, IL 60527**.

### **1.03 PHYSICAL CONDITIONS**

#### **A. General**

The sites on which the Work is to be performed has limited access and boundary constraints, all of which the Contractor accepts full responsibility. Any construction easement(s) or staging area(s) required by the Contractor (other than those that may be shown on the Drawings) shall be the responsibility of the Contractor. Any specialized machinery and/or equipment as required due to the limited access/boundary constraints/type of work to be performed shall be the responsibility of the Contractor.

## SUMMARY OF WORK

### B. Staging Areas

Prior to staging any equipment, materials, and/or appurtenances as may be required to perform the Work, the Contractor shall obtain the permission of the Owner. Any restoration of a damaged area attributed to Contractor staging shall be the Contractor's responsibility. Any special clean up required to restore disturbed areas shall be considered incidental to the Contract.

#### 1.04 ACCESS TO JOB SITE

Access to the project site is possible via **existing roadways**.

During the contract period, the area around the water tower will be located within an active construction project. The Village is currently in the process of constructing a new police facility adjacent the water tower. The Contractor of award of this project will be required to work in and around the other contract. The police facility Contractor and the Village will provide ample clear working area for staging construction materials, equipment and containment features. The Contractor's cooperation and coordination of material staging and deliveries will need to be required during the course of the painting and rehabilitation of the tower.

The Contractor shall comply with the conditions and regulations of controlling agencies of public roads, access, rights-of-way restrictions, and other limitations affecting transportation and ingress and egress at the job site.

#### 1.05 PROJECT BOUNDARIES AND CONTRACTORS USE OF PREMISES

The area of the project is indicated by the Drawings. Subject to restrictions placed upon the Contractor by the Owner, the Contractor may locate his/her facilities within the area as will best suit his/her operations; except that at no time shall the Contractor locate his/her facilities, equipment, or materials in a manner to obstruct access or in any way interfere with the normal operation of the surrounding community and/or the existing facilities.

#### 1.06 ADDRESSING CORRESPONDENCE

All mail pertinent to the Work shall be sent by special delivery unless delivery by regular mail can be

## SUMMARY OF WORK

accomplished within three days. Receipt of such mail will be promptly acknowledged when acknowledgment is requested. If acknowledgment is requested and is not received in reasonable time, duplicate copies shall be forwarded.

On all correspondence the name and official position of the signer shall be typewritten or printed immediately below the handwritten signature.

All correspondence relating to contractual matters, including prices, delivery and changes in Scope of Work, shall be directed to the Owner with two copies to the Engineer.

The address of the Owner is:

**Village of Willowbrook  
835 Midway Drive  
Willowbrook, IL 60527**

Attention: **Mr. Leroy Hansen  
Village Clerk**

### 1.07 MEASUREMENT AND PAYMENT

#### A. Measurement

Measurement will be made for the Work as indicated in the Bidding Schedule and/or as indicated herein.

#### B. Payment

Payment for the Work will be made at the prices for each of the listed categories in the Bidding Schedule.

These prices shall be full compensation for furnishing all materials, equipment and labor, and for performing the Work including installation and testing and providing the required bond(s) and insurance(s) and all incidentals necessary to complete the work, whether specified or not.

Payment will not be made for any other Items except as listed. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

END OF SECTION

## RESPONSIBILITIES OF CONTRACTOR

### SECTION 01 11 13

#### PART 1- GENERAL

##### 1.01 SCOPE

This Section establishes certain minimum requirements of Contractor's responsibilities for which the Contractor shall be fully liable for during the life of the Project and for the Work of this Contract.

##### 1.02 RESPONSIBILITY OF CONTRACTOR

###### A. General

The Contractor shall perform all Work of this Contract as specified in a neat and orderly manner, with skilled labor knowledgeable in the applicable trade(s), consistent with recognized work practices as required to perform the Work of this Contract and according to the Work Schedule. The Contractor shall be responsible for coordinating all phases of his/her Work with the work of others so as not to interfere with that work being performed by others. The Contractor shall be responsible for notification(s) prior to commencement of Work and/or during construction activities. The Contractor shall be responsible for providing at the Project Site a qualified construction supervisor or Superintendent.

###### B. Work Schedule

Within ten (10) days after receiving the Notice to Proceed, the Contractor shall submit all items, and information required by Section 01 33 23 to complete the entire Work within the Contract Time stipulated for completion. The Work Schedule shall be subject to the review of the Owner's Representative. If, at any time during the progress of Work, the Owner's Representative is of the opinion that the Contractor is not adhering to such Schedule, the Owner's Representative may request the Contractor to increase his/her force to comply with the Work Schedule. It is the intent of this Contract that the Contractor only remove and replace that portion of any of the roofs which can only be removed and replaced within one working day. Failure of the Owner's Representative to request this shall not release the Contractor from his/her obligation to complete the Work of this Contract within the specified Contract Time.

## RESPONSIBILITIES OF CONTRACTOR

### C. Supervision and Direction

The Contractor shall supervise and direct the Work. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor shall employ and maintain on the Project a qualified construction supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor or superintendent shall have full authority to act on behalf of the Contractor. All communications given to the supervisor or superintendent shall be as binding as if given to the Contractor. The supervisor or superintendent shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.

### D. Safety

The Contractor shall be solely responsible for the safety of persons, property or the Work at or adjacent to the construction site. All decisions relating to safe construction operations, the use and proper application of equipment and materials, and the protection of the general public from construction operations shall be the responsibility of the Contractor. The Contractor shall identify a qualified supervisor or superintendent in writing who shall have the authority to act on behalf of the Contractor relative to Project safety issues. The supervisor or superintendent shall be present on the site at all times as required to maintain safe Project operations. In the event that the designated construction or safety supervisor or superintendent is absent from the site, the Contractor shall designate a substitute supervisor or superintendent to act in responsible charge of the Work. Any changes in the designated construction supervisor or safety supervisor or superintendent shall be documented by written statement to the Owner and the Owner's Representative at the time of the change.

### E. Repair of Damaged Items

The Contractor shall be entirely responsible for damages to structures of any kind and shall be liable for damages to public and private property. Repair of same shall be Contractor's responsibility and at Contractor's own expense, except where such items are to be removed and replaced as required by the Contract Documents, and/or as otherwise directed by the Owner's Representative during the course of Work, in which case said replacement unit(s) will be paid for at the Contract unit price, as bid.

## RESPONSIBILITIES OF CONTRACTOR

### F. Compliance

It shall be the responsibility of the Contractor to familiarize himself/herself and comply with all applicable laws, ordinances, rules, regulations and lawful orders of all public authorities bearing on the safety of persons or property or their protection from damage, injury or loss. Further, the Contractor shall comply with all requirements of these Contract Documents, including but not limited to referenced specifications and/or standards as well as the contents of the Occupational Safety and Health Act (OSHA), all codes and ordinances adopted by and in effect by Federal, State, County, **Village**, and municipal Governmental Bodies, and any other governmental agencies at any level having authoritative jurisdiction over the area of improvement and the type of Work to be performed.

### G. Existing Utilities

The Contractor shall be responsible to make his/her own investigation to determine the existence, nature, and location of all utility lines and appurtenances within the limits of the improvement.

The Contractor shall take due care in all phases of construction to protect any utility which may be affected by the Work of this Contract. Any damages to existing utilities shall be repaired immediately by the Contractor and at the Contractor's own expense.

The Contractor shall be required to cooperate with all utility companies involved in connection with the removal, temporary relocation, reconstruction, or abandonment by these agencies of any and all services or facilities owned or operated by them within the limits of this improvement.

### H. Assignment of Contract

The Contractor shall be fully responsible for assignments of the Contract, when assignments are made by the Contractor. Furthermore, no part of the Work herein specified shall be assigned (by the Contractor) without the written consent of the Owner, and in no case shall such consent relieve the Contractor or his/her surety from the obligations herein entered into by the same or change the terms of the Contract Agreement.

## RESPONSIBILITIES OF CONTRACTOR

### I. Discrepancies

The Contractor shall not take advantage of any apparent discrepancies as may be presented by the Contract Documents. In the event the Contractor discovers any apparent discrepancy, the Contractor shall be responsible for immediately notifying the Owner's Representative in writing for an interpretation and/or decision; and such decision by the Owner's Representative shall be final. Should the Contractor, having knowledge of any such apparent discrepancy, proceed with the Work, such Work and/or related expenses shall be at the Contractor's own risk and cost.

END OF SECTION

PROJECT MEETINGS

SECTION 01 31 19

PART 1- GENERAL

1.01 PRECONSTRUCTION CONFERENCE

A. General

Within 10 days after issuance of the Notice to Proceed, a preconstruction conference will be held at the location, date, and time to be designated by the Owner. Contractor shall be readily available to attend this meeting and shall make the necessary arrangements to have those individuals (including subcontractors) experienced and knowledgeable, and who will be in the direct charge of the Work, to also attend the meeting.

B. Agenda

The matters to be discussed will include:

1. Set final completion date for the Work of this Contract in accordance with Notice to Proceed and identify time period.
2. Details of construction sequence, including the bar chart submitted with the Bid, lead times of equipment procurement, as well as the date by which the Contractor must place his/her material or equipment order to complete the Work within the construction schedule time limitations set in Section 00 72 23.
3. Communication and general correspondence procedures between the involved parties. The Owner will designate his/her representative and/or Engineer at the time of this meeting.
4. The names and titles of all persons authorized by the Contractor to represent and execute documents for the Contractor.
5. The names, addresses, and telephone numbers of all those authorized by the Contractor to act for him/her in emergencies. Contractor to provide phone/fax/cell numbers of those individuals who will be available and responsible for the Work on a 24-hour per day basis, 7 days per week.
6. Access and rights-of-way furnished by the Owner.

## PROJECT MEETINGS

7. Forms and procedures for Contractor's Submittals as described in Section 01 33 23.
8. Construction equipment and methods proposed by the Contractor. The Contractor shall submit a list of equipment to be used in the Work.
9. Administrative and general matters as needed.
10. Parking areas for public and Contractor. Coordination issues between Village, Engineer, Police Facility Contractor and local businesses.
11. Subcontractors.
12. Payment estimates and submittals for payment.
13. Progress meetings during the course of the Work.

### 1.02

#### WEEKLY CONSTRUCTION MEETINGS

Construction meetings shall be held once every week or more frequently as needed or called by the Contractor or the Owner. All matters bearing on the progress and performance of the Work since the preceding progress meetings shall be discussed and resolved, including, without limitation, any previously unresolved matters, deficiencies in the Work or the methods being employed for the Work, and problems, difficulties, or delays which may be encountered, in order that the Work may be constructed on schedule and within cost.

### PART 2-

#### PRODUCT

Minutes of construction meetings shall be prepared by the Contractor subject to the review of the Owner or Owners Representative having participated in the meeting.

### PART 3-

#### EXECUTION

Minutes of construction meetings shall be submitted to the Owner or Owners Representative no later than 72 hours following the meeting.

### PART 4-

#### MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All cost of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

## EQUIPMENT & MATERIAL SUBMITTALS

### SECTION 01 33 00

#### PART 1- GENERAL

##### 1.01 SCOPE

- A. This Section establishes minimum requirements and procedures for Equipment Submittals made by the Contractor for materials and equipment provided for under the Work of this Contract. Specific details for additional drawings, data and information to be submitted shall be in accordance with the applicable requirements of other Sections of these Specifications.
- B. Acceptable Manufacturers and Equipment Suppliers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives shall be upon the Contractor. Specified items are preferred.

##### 1.02 SUBMITTAL SCHEDULE

The Contractor shall, within 10 days after receiving the Notice to proceed, prepare and submit for review a detailed list of all the submittals which he/she proposes to make to meet the requirements stated herein and those cited in other Sections of the Contract Documents including the dates on which he/she proposes to make such submittals. The list shall include Working Drawings, Field Detail Drawings, Project Record Documents, Quality Control Procedures, and all other items for which a submittal is required. The list shall include identifying references for each item to relate it to the specific item of the Contract Documents.

With each revision or certification of the Construction Schedule, the Contractor shall either revise this schedule of submittals and submit it for review or certify that the previously furnished schedule is still in effect.

After the Submittal Schedule is reviewed by the Owner's Representative, it shall become the basis for the submittal of all items by the Contractor.

## EQUIPMENT & MATERIAL SUBMITTALS

### 1.03 SUBMITTAL REQUIREMENTS

#### A. General

The Contractor shall furnish for review his/her Submittals as outlined herein and in the Specifications. Submittals shall confirm compliance with the requirements of the Contract Documents. Submittals of equipment drawings shall be made prior to the fabrication of the equipment. The sequence of submission shall be such that information is available for review of each Submittal when it is received. All Submittals furnished formally shall bear an approval stamp or a certification. The stamp or certification shall be signed by an authorized representative of the Contractor. The Contractor's stamp or certification on any Submittals shall constitute a representation to the Owner that the Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or that he/she assumes full responsibility for doing so, and that he/she has reviewed and coordinated each Submittal with the requirements of the Contract Documents. Before submitting any drawings for review, the Contractor shall obtain approval of the list of drawings he/she proposes to submit, showing sequence of submittal and submittal dates. All drawings shall be submitted in accordance with the Submittal Schedule as previously specified herein.

B. All submittals shall be addressed to the Owner or as otherwise directed by the Owner.

#### C. Outline Drawings

The Contractor shall submit outline drawings of the equipment to be furnished together with estimated weights, operating forces, external forces, anchoring details, and sufficient overall dimensions, to facilitate preparation of final designs of the structures into which the equipment is to be incorporated.

#### D. Wiring Diagrams

The Contractor shall submit complete schematic and full-line wiring diagrams for all equipment furnished by him/her. The Contractor shall furnish drawings of switch developments for all instrument and control switches and internal connection diagrams for all instruments, relays, regulators, and other devices. One print of each wiring diagram will be returned on which will be marked the wire notations and cable numbers for outgoing circuits where this information is not otherwise available to the Contractor. The Contractor shall add this

## **EQUIPMENT & MATERIAL SUBMITTALS**

information to his/her drawings. Adequate space shall be allowed on the wiring diagrams to accomplish this.

### **E. Detail Drawings and Erection Drawing**

Before proceeding with fabrication or manufacture of the material and equipment designed and furnished by him/her, the Contractor shall submit the designs, design computations when requested, apparatus ratings, detailed specifications, general assembly drawings, sufficient subassembly drawings, details, and control and wiring diagrams to demonstrate fully that all parts will conform to the provisions and intent of the Contract Documents and to the requirements of their installations, operations, and maintenance. These drawings shall substantially conform to the Bid and Contract Drawings and shall show all necessary dimensions; all field joints and subassemblies in which the Contractor proposes to ship the equipment; locations and sizes of auxiliary connections for oil, grease, water and air; and the terminal boxes and wire sizes for electrical circuits. Before proceeding with fabrication or purchase, the Contractor shall submit shop drawings and/or catalog cuts as appropriate of items designed but not detailed on the Contract Drawings including, but not limited to structural steel and metal frames, covers, and gratings.

### **F. Field Detail Drawings**

Layout drawings for any and all embedded components of the equipment such as but not limited to, piping, conduit, anchor bolts/plates, thimbles, etc. shall be submitted. These drawings shall be based on the Contract Drawings and shall contain sufficient detail for construction in the field.

### **G. Review of Drawings**

1. The Contractor shall make all required submittals in .pdf format. All drawings submitted shall, insofar as practicable, be of one standard size, measuring approximately 24 x 36 inches. The Contractor's drawings shall have a blank area of 4 x 4 inches adjacent to the drawing title block for the review stamp of the Owner's Representative. The Contractor shall verify by inspection of sample reproductions that good legible reproductions can be obtained from the reproducible before submittal.

## **EQUIPMENT & MATERIAL SUBMITTALS**

2. Within two weeks of receipt of shop drawings or manufacturer's data, the Owner's Representative will return one copy of each drawing and/or data sheet marked to indicate the result of the Owner's Representative's review, as follows:
  - a. "REVIEWED" - Revision of drawing or data will not be required.
  - b. "REVIEWED WITH CORRECTIONS" - Contractor shall revise the drawings or data and shall submit four print copies and one reproducible copy for Owner's Representative's records.
  - c. "REVISE AND RESUBMIT" - Contractor shall revise the drawing or data and shall resubmit the revised drawing or data to the Owner's Representative for review.
  - d. "REJECTED" - Drawings are non-conforming and do not meet intent of Specifications.
3. Copies marked "REVIEWED" or "REVIEWED WITH CORRECTIONS" authorize the Contractor to proceed with construction or fabrication covered by those drawings or data sheets with corrections, if any, incorporated.
4. Review will not relieve the Contractor of responsibility for conformity to the Contract Documents and correct detail and fit of parts when installed.
5. If minor revisions are made after a drawing has been returned to the Contractor marked "REVIEWED", the Contractor shall furnish without delay one print copy and one reproducible copy subsequent to each revision. No major revision affecting the design shall be made after a drawing has been marked "REVIEWED" without resubmitting the drawing.
6. When prints of drawings have been marked "REVIEWED WITH CORRECTIONS" or "REVISE AND RESUBMIT" the Contractor shall make the necessary corrections and submit four print copies and one paper-type reproducible. Every revision shall be shown by number, date, and subject in a revision block, and in addition, each revised drawing shall have its latest revision clearly indicated. Submitted drawings which do not illustrate these indications will be considered non-conforming.

## **EQUIPMENT & MATERIAL SUBMITTALS**

7. The applicable parts of the requirements of the above paragraphs with reference to the drawings shall apply equally to design data, catalog cuts, illustrations, printed specifications, draft reports or any other submittals furnished for review.
8. The Contractor shall make any changes in the designs which are necessary to make the equipment conform to the provisions and intent of the Contract Documents, without additional cost to the Owner.
9. Should an error be found in a Contractor's drawing during the erection of structures or installation of equipment, the correction, including any field changes found necessary, shall be noted on the drawing, and it shall be resubmitted for review, and recorded as outlined above.

### **H. Record Drawings**

Prior to completion of the Work under the Contract Documents, the Contractor shall furnish one complete set of full-size permanent reproducible copies of approved quality and type and 3 full size sets of prints of all Contractor's drawings and equipment as finally built, including any field changes.

### **I. Operating and Maintenance Instructions**

1. Two hard copy sets and one .pdf version of detailed operating and maintenance instruction manuals which shall include reduced-size copies of applicable drawings, applicable parts lists and catalogs covering all equipment furnished and which may be needed or useful in operation, maintenance, repairs, dismantling or assembling, and for repair and identification of parts for ordering replacements, shall be furnished as specified.
2. Furnish operation and maintenance manuals for the various types of equipment and systems, as required by the Contract Documents. Unless otherwise indicated, a separate manual shall be furnished for each piece of equipment and/or system. The manual shall include complete information necessary to operate, maintain and repair the equipment and/or system and shall include the following specific requirements:
  - a. Table of contents and index.
  - b. Brief description of the equipment/system and principal components.

## **EQUIPMENT & MATERIAL SUBMITTALS**

- c. Starting and stopping procedures both normal and emergency.
- d. Installation, maintenance and overhaul instructions which shall include detailed assembly drawings with parts list and numbers, and recommended spare parts list with recommended quantity, manufacturer's price, suppliers address and telephone number.
- e. Recommended schedule for servicing including technical data sheets that indicate weights and types of oil, grease or other lubricants recommended for use and their application procedures.
- f. One copy of each component wiring diagram and the system wiring diagram showing wire size and identification.
- g. One approved copy of each submittal with any changes made during construction properly noted including test certificates, characteristic curves, factory and field test results.
- h. For electrical systems include dimensioned installation drawings, single line diagrams, control diagrams, wiring and connection diagrams, list of material for contactors, relays and controls, outline drawings showing relays and controls, outline drawings showing relays, meters, controls and indication equipment mounted on the equipment or inside cubicles, control and protective schematics and recommended relay settings.

3. Submittal Requirements: One preliminary copy of the manual in .pdf format shall be submitted no later than the date of shipment of equipment, and installation shall not begin until they are accepted by the Owner's Representative. One approved hard copy and one in .pdf format of complete manual shall be delivered to the Owner's Representative prior to Owner's Representative inspections and tests.

### **J. Language**

All drawings, design data, reports, instructions, catalogs, illustrations, and printed specifications shall be submitted in English.

## EQUIPMENT & MATERIAL SUBMITTALS

### K. System of Units of Measurement

All units of measurement used shall be in the U.S. Customary System.

### PART 2 - PRODUCTS

(Refer to Paragraph 1.03, Submittal Requirements, of this Section.)

### PART 3 - EXECUTION

(Refer to Paragraph 1.02, Submittal Schedule, of this Section.)

### PART 4 - MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

## **MATERIAL AND EQUIPMENT**

### **SECTION 01 60 00**

#### **PART 1- GENERAL**

##### **1.01      SCOPE**

###### **A.      Description**

This Section covers minimum general requirements related to and including, but not limited to the following:

1. Products.
2. Transportation and handling.
3. Storage and protection.
4. Product options.
5. Substitutions.

###### **B.      Related Work**

1. All Sections of the Contract Documents including Bidding Documents and Drawings.
2. Refer to related Specification Sections for details.

##### **1.02      PRODUCTS**

- A. Products: Means new material, machinery, components, equipment, fixtures and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing facilities or premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

##### **1.03      TRANSPORTATION AND HANDLING**

- A. Transport and handle products in accordance with manufacturer's instructions.

## **MATERIAL AND EQUIPMENT**

B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

### **1.04 STORAGE AND PROTECTION**

A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area. Do not allow mixing with foreign matter.

F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

### **1.05 PRODUCT OPTIONS**

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications.

### **1.06 SUBSTITUTIONS**

A. Owner will consider requests for Substitutions only at time of Bid. Where Specifications indicate "No Substitutions Allowed", the Contractor shall provide the designated manufacturers equipment without exception.

B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.

## **MATERIAL AND EQUIPMENT**

- C. Document request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the Substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
  - 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
  - 1. Submit three copies of request for Substitution for consideration 10 days prior to bid date. Limit each request to one proposed Substitution.
  - 2. Submit shop drawings, product data and certified test results attesting to the proposed product equivalence.
  - 3. The Owner will notify Contractor, in writing, of decision to accept or reject request.

**END OF SECTION**

## CUTTING AND PATCHING

### SECTION 01 73 29

#### PART 1- GENERAL

##### 1.01 SCOPE

This Section covers cutting and patching where required to perform the Work of these Contract Documents.

##### 1.02 QUALITY ASSURANCE

Cutting and patching shall be performed in accordance with recognized and applicable standards of construction using materials equal to or exceeding those of the parent structure.

##### 1.03 SUBMITTALS

A. Before doing any cutting as required to complete the Work, submit a written notice to Owners Representative, and the Owner of the specific item involved requesting consent, including:

Description of affected work

Necessity for cutting

Scope of cutting and patching

Trades and products to be used and extent of refinishing

B. Prior to doing cutting and patching identified in writing by Owner's Representative as additional work, submit a cost estimate.

#### PART 2- PRODUCT

Materials used for replacement of work removed shall be of the same type, style, size, thickness, etc. of like new materials for the type of work to be performed.

#### PART 3- EXECUTION

##### 3.01 GENERAL

A. Perform all cutting and patching required to complete the Work.

B. Cutting and patching shall include the cutting, fitting, or patching necessary to:

## CUTTING AND PATCHING

1. Accomplish/perform modifications to existing structures as shown on the Drawings.
2. Remove and replace defective or deteriorated work.
3. Remove and replace work not conforming to the Contract Documents.

C. All Work shall be performed by skilled workers licensed to perform the Work of the trade involved and/or as may be required.

### 3.02 EXECUTION

- A. Protect adjacent portions of the Work and existing facilities from damage due to cutting and patching operations.
- B. Restore work which has been cut or removed. Install new products to provide completed Work meeting all requirements of the Contract Documents.
- C. Refinish entire surfaces as necessary to provide an even and uniform finish.

### PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

**MAINTENANCE OF WORK SITE & DAILY CLEAN-UP**

**SECTION 01 74 00**

**PART 1- GENERAL**

This Section covers general maintenance of the Work Site and daily clean-up which the Contractor shall be responsible for the duration of the Project, and includes, but is not limited to storage, stockpiling and/or protection of materials and Work.

**PART 2- PRODUCTS**

(Not applicable to this Section.)

**PART 3- EXECUTION**

**3.00 GENERAL**

Contractor shall comply with all applicable requirements specified in Section 00 72 23.

**3.01 MAINTENANCE OF WORK SITE**

The Contractor shall keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable, and shall remove same from any portion of the site, if, in the opinion of the Owner's Representative, such material, debris, or rubbish constitutes a nuisance or is objectionable in any way to the public. The Contractor shall remove all machinery, materials, barricades, staging, false-work, debris and rubbish connected with, or caused by said Work, immediately upon the completion of the same and shall clean all structures and Work constructed under this Contract to the satisfaction of the Owner's Representative and leave the premises in an approved condition insofar as affected by the Work under this Contract.

**3.02 DAILY CLEAN-UP**

Each day before the Contractor shuts down Work operations for the day, the Contractor shall clean all areas in/around/adjacent to the Work site of all dirt, mud, debris, or other items deposited thereupon resulting from the Work.

**3.03 RESPONSIBILITY FOR PROTECTION OF MATERIALS**

The Contractor shall be responsible for the safe storage of all equipment and materials furnished by, or to, or accepted by the Contractor, and intended for the Work until such equipment or material has been incorporated into the completed Project. Such equipment and materials as well as their related

#### **MAINTENANCE OF WORK SITE & DAILY CLEAN-UP**

appurtenances and accessories shall, unless otherwise directed by the Owner, be unloaded at the "staging site" point of delivery, hauled to, and distributed as necessary to the specific Work site of the Project, by the Contractor. They shall at all times be handled with care to avoid damage.

All construction shall be protected by the Contractor to prevent accidental or pre-meditated damage. All cost associated with the supervision, the repair, or the replacement of damaged areas shall be considered incidental to the Contract.

3.04

#### **STOCKPILING MATERIAL**

Materials shall be so stockpiled as not to endanger the Work and so that free access may be had at any time to all parts of the Work, and shall be kept neatly piled so as not to inconvenience public travel, private property owners, or adjoining tenants.

At no time shall material be stored in the street.

END OF SECTION

**TESTING, CHLORINATING, FILLING AND FINAL INSPECTION AND ACCEPTANCE**

**SECTION 01 77 00**

**PART 1- GENERAL**

1.01 Upon completion of all Work specified in the Contract Documents, the Contractor shall perform final field alignments, adjustments, and tests to verify that the overall performance as specified have been satisfied. Acceptance tests conducted on the completed installation will be witnessed and subject to the approval of the Owner's Representative.

1.02 When all Work has been completed and the equipment has been installed, the Contractor will work with the Village to back flush standpipe, fill to acceptable levels to chlorinate standpipe and potable water to acceptable levels to allow for the water to be reintroduced to the system. The Contractor shall be responsible for all testing required. Once the standpipe has been placed into operation, have potable water tested by independent contractor and subsequently has satisfactorily operated, a thorough inspection will be made by the Owner in the company of the Contractor and the Owner's Representative, and if the Work is found to comply with the Specifications, the Work will be formally accepted and the Contractor so notified in writing as to the Final Acceptance of the Work by the Owner.

1.03 Should any Work be found to be inadequate, faulty, or otherwise not in accordance with these Specifications, it shall be the Contractor's responsibility to correct such Work at the Contractor's own expense, prior to Final Acceptance.

1.04 The period of equipment and workmanship guarantees shall commence immediately after Final Acceptance. Upon being notified of the Final Acceptance, the Contractor shall supply, to the Owner, a certificate of guarantee which shall guarantee all equipment and workmanship for a period of not less than one year or as otherwise specified in subsequent Sections of the Specifications. Guarantees shall be unconditional. Limited guarantees are not acceptable.

**PART 2- PRODUCT**

A "Final Inspection" report prepared by the Contractor shall be submitted to the Owner's Representative documenting the results of the Final Inspection.

**PART 3- EXECUTION**

Advise Owner's Representative a minimum of 72 hours prior to performing the Final Inspection.

**TESTING, CHLORINATING, FILLING AND FINAL INSPECTION AND ACCEPTANCE**

**PART 4- MEASUREMENT AND PAYMENT**

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

## MISCELLANEOUS METAL REPAIRS

### SECTION 05 50 00

#### PART 1- GENERAL

##### 1.01 SCOPE

This Section covers miscellaneous metal repairs which may be ordered by the Owner during construction, but only after an approved Change Order has been processed. Supports, anchors and other incidentals, where required, shall be included under this Section of Work.

##### 1.02 QUALITY ASSURANCE

###### A. Acceptable Materials

As specified herein.

###### B. Applicable Standards

All Work shall conform to the applicable provisions of the codes, standards and Specifications as specified herein and as follows:

<u>Name</u>	<u>Abbreviation</u>
Welded Steel Tank for Water Storage	AWWA D-100
American Society for Testing & Materials	ASTM
Welding	ASME Sect. IX

###### C. Welding Qualifications

All welders shall be qualified by ASME Section IX requirements for all positions.

###### D. Field Verification

The Contractor shall verify field conditions and measurements so that the fabricated metals shall fit together properly and be suitable for the field conditions.

##### 1.03 SUBMITTALS

The Contractor shall submit to the Owner's Representative for review drawings, data and information in accordance with the applicable requirements of Section 01 33 00. Submittals shall include but are not limited to drawings showing location, sizes of metal, method of assembly, hardware, fasteners, anchorage, and connection with other work. The drawings shall include a listing of metals used and governing ASTM specifications. Where structural components are the design

## MISCELLANEOUS METAL REPAIRS

of the Contractor, the drawings shall bear the seal of a professional structural engineer registered in the State of Illinois.

PART 2 - PRODUCT

2.01 MATERIALS

- A. Structural steel shapes, ASTM A36.
- B. Bent or cold-formed steel plates, ASTM A283, Grade C.
- C. Galvanized carbon steel sheets, ASTM A526, with 1.25 ounces commercial zinc coating, ASTM A525.
- D. Gray iron castings, ASTM A48.
- E. Bolts and nuts (for general use), Type 304 stainless steel, ASTM A320 unless otherwise specified.
- F. High strength bolts shall comply with ASTM A325 with nuts conforming to ASTM A563 and washers complying with ASTM F436.
- G. Anchor bolts and connection bolts for steel assemblies shall comply with ASTM A307.
- H. Anchor bolts and connection bolts for aluminum shall be stainless steel.
- I. Stainless steel, Type 316.
- J. (Not used.)
- K. Welding Electrodes: Filler metal for welding of structural steel shall comply with AWS D1.1, Structural Welding Code. Filler metal for welding of aluminum shall comply with AWS D1.2.
- L. Grout: Grout for bedding and grouting structural steel components shall be of non-shrink type grout.

2.02 COATINGS

Galvanizing shall be performed by the hot-dip process after fabrication in compliance with the following standards:

- A. Iron and steel hardware, ASTM A153.
- B. Rolled, pressed, and forged steel shapes, plates, bars, and strips 1/8 inch thick and heavier, ASTM A123.

## MISCELLANEOUS METAL REPAIRS

- C. Assembled steel products, ASTM A386.

### PART 3- EXECUTION

#### 3.01 SHOP INSPECTION

Each item of equipment shall be shop assembled to the extent practical and shall be inspected prior to shipment. Minimum requirements for shop inspection shall be a visual exam and a dimensional check to verify that the equipment has been fabricated correctly.

#### 3.02 FABRICATION

- A. Design and fabricate all metal parts to comply with the intent and requirements of the Drawings. Make field measurements and prepare templates as required to ensure proper fit. Assemblies shall be fitted together in the shop and delivered to the site complete and ready for installation.
- B. Miscellaneous metals shall have holes, connections, and other provisions for accommodating other work. In general, holes for bolts shall be drilled or reamed 1/16-inch larger than the diameter of the bolt. Holes for anchor bolts shall be 1-1/3-times the anchor bolt diameter.
- C. Miscellaneous metal work shall be formed to shape and size, with sharp lines and angles. Items shall be sheared and punched to obtain clean, true lines and surfaces. Permanent connections shall be welded. Screws or bolts shall not be used where avoidable, but if used, heads shall be countersunk, screwed tight, and threads nicked to prevent loosening. Curved work shall be sprung evenly.
- D. Exposed surfaces shall have smooth finish and sharp, well defined lines and arises. Joints shall be mill machined to a close fit. Necessary rabbets, lugs, and brackets shall be provided so that work can be assembled in a neat and substantial manner. Metal thicknesses, assembly details, and supports shall provide ample strength and stiffness. Joints shall be designed to prevent trapping of moisture.
- E. Fastenings shall be concealed where practical. Metal thickness and details of assembly and supports shall be designed to provide strength and stiffness. Joints exposed to weather shall be formed to exclude water.

## MISCELLANEOUS METAL REPAIRS

- F. Expansion anchor bolts shall be of the types and sizes recommended by the manufacturer for the particular application. When set in concrete or masonry, the minimum penetration of the expansion anchor bolts shall be six times the diameter of the shank.
- G. Structural joints made using high strength bolts, hardened washers, and nuts tightened to a high bolt tension shall comply with the "Specification for Structural Joints Using ASTM A325 or A490 Bolts".
- H. Welded joints shall comply with AWS D1.1, Structural Welding Code', and AISC "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings". All welds shall be made by operators who have been previously qualified as prescribed by AWS B3.0, Welding Procedure and Performance Qualification. All welds exposed to view shall be dressed smooth.
- I. Anchor holes in concrete or masonry for grouted bolts shall be a minimum of 1-1/2 times the bolt shank diameter. Anchor holes in concrete and masonry for expansion type anchor bolts shall comply with the bolt manufacturer's recommendations.
- J. Castings shall be true to pattern, smooth, straight, sound, and free from warp, holes, and other defects that impair strength or appearance.

### 3.03 PAINTING

- A. Paint all surfaces except those which have a galvanized surface finish according to the requirements of Section 09 91 13. Prepare surfaces and prime in compliance with the manufacturer's recommendation for the specific environment to which the metal components will be subjected.
- B. Where dissimilar metals contact each other, apply alkali-resistant paint to the more active metal. Where steel work contacts aluminum, apply two coats of aluminum paint over shop coat.
- C. Metal components used for miscellaneous metal repairs may be shop or field primed and painted. Contractor shall be responsible for touch-up field painting as required.

## MISCELLANEOUS METAL REPAIRS

### PART 4- MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

Measurement will not be made for the Miscellaneous Metal Repair Work specified in this Section; except that measurement will be made as follows:

05 50 00/01, Continuous Seal Weld Repairs  
05 50 00/02, Interior Pit Weld Repairs  
05 50 00/03, Replace Bolts and Gasketing on Manways

#### 4.02 PAYMENT

- A. Payment for the Miscellaneous Metal Repair Work (which includes Continuous Seal Weld and Interior Pit Repair Work specified in this Section will be made only after an **Owner** approved Change Order has been processed for work ordered during construction.
- B. Payment for Continuous Seal Weld Repair Work specified in this Section will be made at the contract unit price for Continuous Seal Weld Repair, in the Bidding Schedule. This price shall include all labor, tools, materials and equipment for repairs as herein specified.
- C. Payment for Interior Pit Weld Repair Work specified in this Section will be made at the contract unit price for Interior Pit Weld Repair, in the Bidding Schedule. This price shall include all labor, tools, materials and equipment for repairs as herein specified.
- D. These prices shall be full compensation for furnishing all materials; and for all preparation, and placing of the materials; and for all labor, equipment, tools and incidentals necessary to complete the miscellaneous metal repairs as required.
- E. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

# WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS

## SECTION 05 52 13

### PART 1- GENERAL

#### 1.01 SCOPE

##### A. Description

This Section covers the rehabilitation and repairs of potable water storage tanks of the elevated or standpipe type and includes furnishing all materials, equipment, tools and labor necessary for the repair and rehabilitation of the elevated and/or standpipe water storage tanks, together with all appurtenant components and associated fittings, and miscellaneous equipment specified in other Sections of these Specifications, including necessary supports and anchors, to be designed, furnished, installed and tested as shown on the Drawings and as specified herein. All fittings, connectors, supports and anchors, where required shall be included under this Section of Work.

##### B. Related Work

1. Section 09 91 13.
2. Section 26 42 00.
3. Other Sections as herein specified.

#### 1.02 QUALITY ASSURANCE

##### A. Acceptable Manufacturers

Tank: Chicago Bridge & Iron Company or equal.

Other Items: As required.

##### B. Applicable Standards

All Work including materials and inspection of the elevated tank shall conform to the applicable and current provisions of the codes, standards, and Specifications, as specified herein, and the following:

<u>Name</u>	<u>Abbreviation</u>
Welded Steel Tank for Water Storage	AWWA D100
Structural Concrete for Buildings	ACI 301
Welding	ASME Sect. IX

## **WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS**

### **C. Welding Qualifications/Supervision**

All welders shall be qualified by ASME Section IX requirements for all positions. The contractor shall employ the services of a welding supervisor independent of the tank painting foreman's jurisdiction.

### **1.03 SUBMITTALS**

A. The Contractor shall submit to the Owner's Representative for review product specifications and description, mill certificates, inspection reports, together with instruction manuals, installation procedures, field check-out and testing procedures specified in Section 01300 of all equipment furnished.

### **1.04 WARRANTY**

The herein specified all water storage tank repairs shall be warrantied for a period of 12 months from the date of Final Acceptance of the Work to the extent that the contractor shall be solely responsible for the repair or replacement of defective parts including but not limited to repair of any reported defects during the warranty period which may appear because of faulty workmanship or material furnished under the Specifications. Defects caused by damaging service conditions such as electrolytic, chemical, abrasive or other damaging service conditions are not intended to be covered by this warranty.

### **PART 2- PRODUCT**

#### **2.01 GENERAL**

A. The tank and supporting structure is of all-welded steel design. Tank construction is as specified herein.

B. The tank has a shape as shown on the Drawings.

#### **2.02 PERTINENT DATA AND REQUIREMENTS**

##### **A. Pertinent Data**

1. Time of Completion - **120** calendar days. See **Instructions to Bidders** for additional information and details.
2. Location - As identified in the Bid Form.
3. Nearest Town - Willowbrook, IL.

## **WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS**

4. Railroad Siding - None immediately adjacent to or through proposed site development.
5. Compressed Air - Not available at site.
6. Corrosion Allowance - None.
7. Inspection Report - An inspection report per Paragraph 11.2.1 of AWWA D100 shall be required for the 500,000 Gallon Spheroid High Tank.

### **2.03 DETAILS OF CONSTRUCTION**

- A. Details of tank construction (as a minimum) shall be in accordance with AWWA D100. Where contradictions occur, the more stringent shall apply.
- B. Install a fail-safe vent in place of the existing mushroom vent to protect against pressure/vacuum damage. This includes installing a flange on the existing vent pipe and providing a gasket between the flanges. The open area of the overflow shall not be considered as venting area. The vent screen shall be a No. 4 mesh insect screen and shall be designed to relieve any pressure or vacuum in the event the screen frosts over or is otherwise clogged. The vent screen shall be easily dismantled to remove the screens for cleaning.
- C. Remove existing manway hatches for dry interior and wet interior access and install new 30" diameter manway hatches to match existing manway hatches.
- D. Install new painter's handrail which shall include the installation and erection of a new 4" flat stock painted steel, 42" high x 20'-0" diameter painter's handrail. The painters rail to be centered around the roof access hatch at the roof of the tank and have continuous railings between pilaster and access hatch. The proposed handrail shall be welded in place in accordance with AWWA Standard D100 and the AWWA Manual M42. Surface preparation and painting shall be in accordance with ¶1.01A(2) of this Section. Along with this work the contractor will provide and install 4 new safety grabs on the exterior of the tank roof to allow tie off points when exiting roof access hatch and wet interior access hatch.
- E. Repair and/or replace the existing dry interior lighting lamps with LED type light bulbs.
- F. Replace in kind all existing metal grating over existing riser piping sump pit.

## **WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS**

- G. Remove 5" of coarse aggregate from interior floor of tank bell and provide a new 5" concrete floor slab to replace aggregate floor.
- H. Provide new metal diamond plate exterior type step for access to tank bell to compensate for 6" removal of excavated material after regrading around tank.

### PART 3 - EXECUTION

#### 3.01 FACTORY TESTING AND INSPECTION

The contractor shall inspect and test components of the tank repairs in accordance with AWWA D100. Certified copies of the shop inspections and test reports shall be furnished to the Owner's Representative.

#### 3.02 INSTALLATION AND TESTING

- A. The equipment shall be installed as shown on the Drawings and in accordance with the manufacturer's instructions and recommended best practices. All necessary shims, grout, anchor bolts, and other items required for installation and testing shall be furnished. All items of equipment shall be operated, adjusted, and tested for proper performance in accordance with the manufacturer's recommended test procedure. Any and all excavation, trenching, concreting, backfilling required for the repair and rehabilitation of the Water Storage Tanks shall be performed by the Contractor at the Contractor's expense.
- B. After the Contractor has completed all repairs, including painting of the interior wet portion of the standpipe, the Contractor will make piping connections to the tank, furnish, pump and dispose of sufficient water for a single test and sterilization. While under test, the tank Contractor shall chlorinate the tank in accordance with AWWA C652 Method 3. In addition, disinfecting of the elevated tank shall be in accordance with Section 7.0.18 of the Recommended Standards for Water Works (Latest Edition). Any leaks which are disclosed by this test shall be repaired by gouging out defective areas and rewelding. All costs associated with such repair work including costs for additional water usage (beyond one time fill provided by the Owner) shall be the responsibility of the Contractor. No repair work shall be done on any joint unless the water in the tank is at least two feet below the point being repaired. After repair work has been completed, the tank shall be retested to verify the integrity of the repair. Any paint damaged by repairs shall be properly restored. The tank shall not be placed in service until satisfactory bacteriological tests have been provided.

## **WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS**

The Contractor shall work in cooperation with **Village Water Department Personnel** the Contractor conducting the bacteriological tests at the laboratory of the Village's choice.

### **3.03 PAINTING**

Painting of the tank and its components shall be in accordance with the applicable requirements of Section 09900, Painting and Grouting.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### **4.01 MEASUREMENT**

Measurement will not be made for the Work specified in this Section.

#### **4.02 PAYMENT**

A. Payment for the Work specified in this Section will be made at the lump sum prices for the below listed Items in the Schedule of Prices:

##### **Base Bid**

05 52 13/01,	Remove and Replace Existing Roof Vent
05 52 13/02,	Remove and Replace Existing Manway Hatch and Interior Wet Access Hatch
05 52 13/03,	Installation of New Painters Rail and Safety Grabs
05 52 13/04,	Repair and Replace Existing Dry Interior Lighting

##### **Alternate Bid**

05 52 13/05,	Provide New Metal Grating over Existing Sump Pit
05 52 13/06,	Installation of New 5" Concrete Floor Slab in Tank Finished Aggregate Floor
05 52 13/07,	Provide New Exterior Metal Access Step into Tank Base Cone

B. These prices shall be full compensation for furnishing all materials, equipment and labor as well as any and all incidentals necessary to complete the Items of Work.

C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

**WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS**

D. Payment for other items of equipment specified in other Sections of these Specifications will be made at the prices for those respective Items in the Schedule of Prices.

END OF SECTION

## PAINTING WATER STORAGE TANK

### SECTION 09 91 13

#### PART 1- GENERAL

##### 1.01 SCOPE

###### A. Description

This Section covers painting materials to be furnished and applied, including preparing surfaces and providing adequate conditions for proper workmanship, as shown on the Drawings and as specified herein.

##### 1.02 QUALITY ASSURANCE

A. Acceptable Materials and Manufacturers shall conform to the herein specified material and construction standards.

###### B. Applicable Standards

All Work shall conform to the applicable provisions of codes, standards and Specifications, as specified herein as follows:

<u>Name</u>	<u>Abbreviation</u>
National Fire Protection Association	NFPA
Steel Structure Painting Council	SSPC
Ten State Standards	--
Painting Steel Water Storage Tanks	AWWA D102

##### 1.03 SUBMITTALS

A. The Contractor shall submit to the Owner's Representative for review product specification of paint materials and descriptions of surface preparation contemplated for the Work to illustrate compliance with applicable requirements of this Section and other Related Work Sections.

B. Submittals shall include, but not be limited to the following:

1. Project schedule not to extend beyond the completion date of **September 1, 2017**; and start date not to deviate more than 2 weeks from start date indicated on the preliminary schedule submitted at the time of bid unless otherwise approved by the **Owner**.

## PAINTING WATER STORAGE TANK

2. Surface preparation details including containment methods when and where containments are utilized.
3. Application instructions for each type of coating to be used.
4. Maintenance recommendations for each type of coating used.
5. Color samples for selection and scheduling. (Note: Color to be selected by **Owner** if not specified).
5. MSDS sheets for all products used.
6. Monitoring Plan, dry film thickness test results and diary of daily painting activities.
7. Product Certification and Waste Manifest.

### PART 2- PRODUCT

The following manufacturers are named herein (under Protective Coating Systems) and approved for use. Contractor shall use the product(s) of only one paint product manufacturer. Products listed herein are that of Tnemec Company, Inc.

#### Exterior

Primer: Series 91-H<sub>2</sub>O Hydro-Zinc

Spot Primer: Series 135 Chembuild

Intermediate: Series 73 Endura-Shield

Finish: Series V700 Hydro Flon

Logo: Series V700 Hydro Flon

#### Interior (Wet) Coating System Repair

Spot Finish: Series FC22-WH04 Epoxoline

### 2.01 CONTAINMENT

The Contractor shall provide full containment curtain for entire standpipe and include a bonnet. The Contractor shall provide shop drawings of all proposed components of containment system and rigging drawings for review and approval.

## **PAINTING WATER STORAGE TANK**

When required by federal, state or local regulation, the entire tank and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 (CON), "Guide for Containing Debris Generated During Paint Removal Operations".

Refer to SSPC-GUIDE 7 (DIS). NOTE: All surface preparation debris must be disposed of in accordance with applicable federal, state and local regulations.

The owner is the generator of and is responsible for the proper containment and disposal of all waste resulting from the surface preparation of this tank(s). As part of this contract, the contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of this tank(s) in strict accordance with Illinois EPA regulations. Copies of all documentation required by Illinois EPA regulations shall be submitted to the owner for verification prior to the submission of the contractor's request for final payment.

The painting contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as described in the exterior painting section of these specifications.

Upon removal of the exterior lugs, the painting contractor shall also repair any damaged interior coating by methods described in the interior painting section of these specifications. Abrasive blasting to bare metal (SSPC-SP10) will be required in the damaged areas.

### PART 3- EXECUTION

#### 3.01 GENERAL

- A. Do not proceed with the application of paint until the following conditions are met: Proper temperature and humidity, dust free spaces, proper surface preparation. Starting Work constitutes acceptance of conditions and substrates and full responsibility for the quality and suitability of the finished Work.
- B. Furnish inspection devices, in good working condition, for the detection of holidays and the measurement of coating film thickness (wet and dry). Inspect surfaces to be painted and conditions of the area before starting Work. Report any defects that render any area or surface unfit to receive paint.

## PAINTING WATER STORAGE TANK

- C. Handle and store materials in accordance with the provisions of the Flammable and Combustible Liquids Code, NFPA 30. All materials shall be handled and stored to avoid fire and explosion.
- D. Provide masks, gloves, and other protective materials or clothing and furnish special ventilation as necessary or recommended by the paint manufacturer.
- E. During surface preparation, contain and dispose of any and all paint chips/flakes in accordance with Federal, State and/or local requirements, or as otherwise specified.

### 3.02 DELIVERY TO SITE

All materials furnished shall be labeled. Each label shall indicate the manufacturer's name, the brand name, the type of material as specified, the class of flammability or combustibility if applicable, the color, and the mixing and application instructions. Each container shall be stenciled or embossed at the factory with the product number and name as it appears in the manufacturer's catalog. Deliver materials to the site in unbroken, unopened containers, with labels affixed on each container by the manufacturer. Containers delivered to site which are damaged shall be cause for rejection.

### 3.03 CONDITIONS FOR APPLYING MATERIALS

- A. Materials other than water thinned materials shall be applied only to surfaces that are free of surface moisture as determined by sight or touch.
- B. Materials shall not be applied when the temperature of the surfaces to be covered are below recommended levels, or the surrounding atmosphere is below recommended levels, or when the relative humidity exceeds 85 percent.
- C. Additional conditions to be satisfied prior to application shall be as specified in Section 01010.
- D. Prepare all surfaces to receive materials as required herein or as required by the coatings manufacturer. Clean surfaces to remove all foreign matter. Roughen surface as recommended by the coating manufacturer for proper adhesion of coating to the substrate.

## PAINTING WATER STORAGE TANK

3.04

### APPLICATION

- A. Mix and apply materials in accordance with the manufacturer's printed instructions. Allow each succeeding coat to dry in accordance with manufacturer's printed instructions.
- B. Apply each coat in accordance with these Specifications and the paint manufacturer's recommendations. The coating shall be applied at the specified thickness. If the specified thickness is not obtained, an additional coat(s) of paint shall be applied at no additional cost to the Owner.
- C. All paint shall be applied in strict accordance with the applicable manufacturer's printed data sheet and container label outlining recommended minimum and maximum surface and air temperatures required for application.
- D. Do not paint code required labels, (Underwriters Laboratories, Inc., Factory Mutual, or the like) or any equipment identification, performance ratings, name, or nomenclature plates. Remove any paint inadvertently or previously applied to such items.
- E. Protect adjacent surroundings against splash or overspray. Remove materials from surfaces not designated to receive such materials.
- F. Finished surfaces shall be uniformly coated with the thickness specified, free of runs, drips, sags, brush marks, holidays, or other defects. Such defects shall be corrected without change in Contract Price.
- G. Remove waste rags and coating debris on a daily basis. Keep storage spaces and work areas neat and clean.

3.05

### PROTECTIVE COATING SYSTEMS

- A. General: The application of any coating or primer indicates the acceptance of and responsibility for the condition of the substrate and the primer thereon.
- B. Protect adjacent materials/surroundings/properties/etc. subject to damage by the Work to be performed under this Contract.
- C. Exterior Coating System:

## PAINTING WATER STORAGE TANK

1. Surface Preparation: Remove all oil and grease from the surface prior to blast cleaning. All exterior surfaces shall be abrasive blast cleaned to a Commercial Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coatings Specification SP-6. A minimum angular blast profile of 2.0 mils is required.
2. Prime Coat: Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91 H<sub>2</sub>O Hydro-Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5 to 3.5 mils.
3. Additional Spot Prime Coat: Apply by brush only, one additional spot prime coat to all inaccessible and hard to reach areas, such as the inside of anchor bolt chairs, vents, manways, tie rods, turnbuckles, and accessories, with one coat of Tnemec Series 135-color Chembuild.
4. Intermediate Coat: Apply one complete coat, to the entire tank, of Tnemec Series 73- (the color lab of Tnemec Company will select this color) Endura-Shield at a dry film thickness of 2.0 to 3.0 mils.
5. Finish Coat: Apply one complete coat, to the entire tank, of Tnemec Series V700 Hydro Flon at a dry film thickness of 2.0 to 3.0 mils.
6. Logo: Apply emblem in two locations (in the size and location agreed upon) in the configuration as shown on the Drawings. Size to be 1 ½ times larger than 67<sup>th</sup> Street tank logo. As an alternate, the two logos on the 67<sup>th</sup> Street tank shall be removed and replaced by new logos 1 ½ times larger than the existing tank logo. Two coats of Tnemec Series V700- (Color) Hydro Flon shall be used for the logos applied at a dry film thickness of 2.0 - 3.0 mils per coat. Color(s) of the emblem shall be as shown on the Drawings or as otherwise selected by the Owner.

D. Interior (Wet) Coating System Repair

1. Surface Preparation: All rusted, failed, burned and damaged areas shall be spot abrasive blast cleaned to a Near White Finish, removing all existing paint, rust, burns, dirt, mill scale and foreign matter by the recommended methods outlined in the

## PAINTING WATER STORAGE TANK

SSPC Society of Protective Coating's Specification SP-10. Feather edges to form a smooth transition to tight existing paint. A minimum angular anchor profile of 2.0 mils is required. Scarify the areas surrounding the area to be replaced where the new coating will overlap onto the tightly adhered existing.

2. Spot Finish Coat: Apply one coat of Tnemec Series FC22-WH04 Epoxoline to all properly prepared bare metal surfaces at a dry film thickness of 14.0+ mils.

### 3.06 COMPLETION OF WORK

- A. When Work is complete leave all materials properly coated to conform to the above Specifications. Remove and/or clean-up dry fall, overspray, droppings, or spatter from adjacent materials and properties. Make good damage to other work to the satisfaction of Owner's Representative.
- B. Furnish two copies and all instructions, manufacturers' certificates, and documents to Owner's Representative.

### PART 4- MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

#### 4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the contract lump sum prices for the below listed Items in the Bid Schedule:

##### Base Bid

09 91 13/01,	Exterior Surfaces; all surface preparation, priming and painting
09 91 13/02,	Original Logos (exterior) to Match Existing
09 91 13/03,	Full Containment as required
09 91 13/04,	Interior (Wet) Coating System Repair
09 91 13/05,	Proper and Legal Disposal of Paint Chips/Flakes and Other Debris (Resulting from Prep/Paint Work Exterior and Interior Wet)

**PAINTING WATER STORAGE TANK**

**Alternate Bid**

09 91 13/06, Remove and Replace Existing 67<sup>th</sup> Street  
Tank Logos

- B. These prices shall be full compensation for furnishing all materials, equipment and labor, as well as any and all incidentals necessary to complete the Items.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

END OF SECTION

## GENERAL PROVISIONS FOR ELECTRICAL WORK

### SECTION 26 00 10

#### PART 1 - GENERAL

##### 1.01 SCOPE

- A. This Section describes the general provisions for the Work to be performed under Division 26 - Electrical, of this Contract as well as Division 33 - Utilities, where applicable. The Contractor shall comply with these general provisions and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specification in related Sections, and as shown on the Drawings. Related mechanical work shall be performed in accordance with the applicable provisions of Division 33.
- B. The following specifies the minimum general requirements by which the Contractor shall furnish, fabricate, deliver, erect, install, connect and test electrical materials, equipment and systems specified in the respective Sections of Division 26 and shown on the Drawings, so as to constitute a complete and operating electrical installation.
- C. The Contractor shall provide all necessary coordination between the suppliers of the specified equipment so as to provide a well-designed and satisfactory operating facility to the Owner. The Contractor is advised that these Specifications are not intended to cover every and all details of the Work. In case(s) where details related to the specified Work are not covered by these Specifications, it shall be the responsibility of the Contractor to include and execute such coordination and Work at no additional cost to the Owner.
- D. Items of equipment furnished and installed as a part of the Work under other Sections of the Specifications shall be connected and wired as a part of the Work under this Section.
- E. All operating limits of electrical apparatus whether furnished under this Section or in other Sections of the Specifications shall be adjusted in the field to meet the operating conditions reviewed by the Owner's Representative and as required. This shall include settings of all overcurrent and trip devices, limit switches, timers, and control device adjustments, etc.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

### 1.02 QUALITY ASSURANCE

#### A. Acceptable Manufacturers and Equipment Supplier

1. As shown on the Drawings and/or as specified hereinafter in subsequent Sections.
2. Acceptable manufacturers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or approved equal" whether such words are shown or not. Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives shall be upon Contractor. Specified items are preferred. After acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. (Exception: Where Specifications indicate "No Substitutions Allowed" Contractor shall provide the designated manufacturers equipment without exception.)

#### B. Applicable Standards

1. All electrical work furnished and installed under this Section shall be in strict compliance with the ordinances and bylaws of the City, State and/or any other political subdivision thereof governing the installation of the electrical work on this Project. In the absence of other more stringent authority, the electrical work shall conform to the requirements of the National Electrical Code.
2. The Contractor shall conform to the latest safety standards as required by the Occupational Safety and Health Administration (OSHA) in all Work performed. In addition, all equipment and materials shall meet all applicable OSHA requirements.
3. All equipment shall be U.L. rated.

### 1.03 SUBMITTALS

- A. The Contractor shall comply with the requirements specified in Section 01 33 00 - Equipment Submittals, and as specified herein.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

B. The Contractor shall not install any electrical work for any item of equipment specified under this or other Sections of the Contract until shop drawings of such equipment, reviewed by the Owner's Representative, are made available to him/her. Any such Work installed by the Contractor prior to the Owner's Representative review will be the responsibility of the Contractor and any modification of the electrical work necessary to meet the equipment requirements shall be made without additional compensation.

C. Before fabrication and assembly of equipment, submit the following:

1. Front and rear elevations showing dimensions and the arrangement for each cubicle.
2. Plan and section views, including dimensions and mounting details.
3. Details of bus, connections, terminals, etc., including the complete ground bus arrangement and enclosure ground connections.
4. Single line diagram of equipment and control schematic diagram.
5. Wiring Diagrams
  - a. Connection diagrams for the wiring of equipment in each cubicle.
  - b. Interconnection diagrams for the wiring to equipment in other cubicles. Clearly identify the terminal block points for the external wiring to be routed in or out of the cubicles. Provide adequate space on the wiring diagrams for additions (by the Contractor) or cable and wire designations for that external wiring to be routed in or out of the cubicles at the terminal block.
6. Bill of Material.
7. Factory test procedures and protocols.

D. Prior to shipment of the equipment, submit for record and distribution:

1. All drawings as finally reviewed and corrected.
2. Recommended storage instructions.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

3. Installation instructions and operating and maintenance manuals.
4. Spare parts bulletins.
5. Factory test reports (certified).
6. Booklet on maintenance procedures for circuit breakers and other equipment.
7. Field test procedures and protocols.

E. After final installation of the equipment the Contractor shall deliver a complete set of reproducible shop drawings of (including schematics, internal point-to-point and interconnecting) diagrams for all equipment and panels showing Work "as installed".

1.04

### WARRANTY

All equipment (electrical and/or mechanical) specified by these Specifications shall be warrantied, and shall be provided with such warranties covering all parts and labor for a period of one (1) year from the date of Final Acceptance.

PART 2-

### PRODUCTS

2.01

#### GENERAL

##### A. Standard Products

The equipment furnished shall be standard products in production by reputable companies regularly engaged in the manufacture of high-quality equipment of the type specified. Similar equipment shall have been in satisfactory and successful operation for a period of at least two years. All parts of the specified equipment shall be so designed as to be especially adapted for the service required and shall be proportioned, enclosed, or guarded as to have ample and liberal strength and stability to withstand, without damage, the stresses to which they may be subjected during erection or operation. The component parts of duplicate items shall be fabricated on a principle of interchangeability to facilitate ready replacement.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

### B. Materials

All material incorporated in the equipment shall be new and of first-class quality, free from injurious defects and imperfections, and of the classifications and grades designated. Materials not specifically designated herein shall be subject to the review of the Engineer and shall be suitable for the purpose intended.

### 2.02 RATINGS

The sizes, ratings, capacities, and performance characteristics of various specified items of equipment and devices are based on currently available standard products, which are available through United States manufacturers. In no case shall the size, rating, capacity or performance characteristic be less than that specified unless approved in writing by the Owner. Ratings and performance characteristics, where applicable, of various devices and items of equipment are specified in respective Sections of these Specifications. All electrical equipment shall be UL listed.

### 2.03 DETAILS OF CONSTRUCTION

- A. Electrical work shall meet requirements of these Specification, product manufacturer's instructions, recommended tolerances and recommended procedures, and as indicated by final reviewed submittals for the Work.
- B. Materials shall be of size and thickness indicated. If not indicated, size and thickness shall be selected to provide strength and durability in finished Work for intended application. Work to dimensions indicated, using proven fabrication details.
- C. Product finishes, surfaces and edges shall be smooth and free of marks, burrs, seams, roughness and like defects or conditions.
- D. Other electrical-mechanical product construction details shall be in accordance with the best engineering practices, applicable code requirements and as specified and/or other Sections of these Specifications.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

### PART 3- EXECUTION

#### 3.00 GENERAL

- A. The Contract Drawings indicate the general details necessary for the complete electrical installation. It shall be the Contractor's responsibility to install all electrical work in a neat and workmanlike manner. The Contractor shall cooperate with others to permit the installation of all of the work without interferences. If changes become necessary to avoid interference between the Work installed under various Sections, the Contractor shall submit to the Owner's Representative, for review, the proposed changes and upon review by the Owner's Representative, proceed with the installation of such changes without additional cost to the Owners.
- B. The Contractor shall maintain at the site a set of black-line prints on which shall be accurately shown the actual installation of all Work done under Division 26 and any variation from the Contract Drawings as reviewed by the Owner's Representative including changes in sizes, locations, and dimensions shall be indicated thereon. At the conclusion of the Work, the Contractor shall furnish record drawings in accordance with the General Conditions and as specified herein.

#### 3.01 FACTORY TEST AND INSPECTION

- A. All equipment shall be shop-assembled and tested in the manufacturer's shop in accordance with recognized standard practices. Factory tests and inspections shall be conducted to verify that the equipment is operating satisfactorily and in compliance with the Specifications.

#### 3.02 INSTALLATION AND TESTING

- A. General: Examine the areas and conditions under which electrical work is to be installed or performed and remedy any conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected.
- B. Existing Facilities: Verify existence, location, and operation of existing electrical facilities to be abandoned, removed, altered, modified and/or temporarily relocated to allow activities during construction of the Work.

## GENERAL PROVISIONS FOR ELECTRICAL WORK

- C. Install electrical work. Meet requirements of these Specifications, product manufacturer's instructions, recommended tolerances, and recommended procedures and as indicated by final reviewed submittals for the Work.

### 3.03 PAINTING

- A. All specified equipment shall be shop-primed and painted in accordance with manufacturer's standard finish.
- B. The Contractor shall be responsible for coordination of the compatibility between manufacturer's standard finish and the field paint specified.

### PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

## CATHODIC PROTECTION

### SECTION 26 42 00

#### PART 1- GENERAL

##### 1.01 SCOPE

This Section covers the cathodic protection system, related electrical panels and associated accessories including but not limited to power unit, conduit, wires and cables, junction boxes, anodes and all other necessary appurtenances to be designed, furnished, installed, and tested as shown on the Drawings and as specified herein. All fittings, connectors, hangers, supports, anchors and accessories where required, not otherwise specifically provided for in these Specifications, but necessary to complete the various systems shall be included under this Section of Work. Any and all miscellaneous electrical work required for installation and to electrically connect and provide for a complete and operational system shall be included under this Section of Work.

##### 1.02 QUALITY ASSURANCE

###### A. Acceptable Supplier

The cathodic protection equipment supplier shall utilize personnel who have been engaged in the design and installation of impressed current corrosion control systems for five (5) or more years. The Work shall be performed under the direction of a licensed professional engineer or a person with N.A.C.E. certification who has experience in water tank cathodic protection design. Equipment shall be as manufactured by Corrpro Waterworks, Inc. (@ 330-725-6681); no exceptions allowed.

###### B. Applicable Standards

All Work shall conform to the applicable provisions of the codes, standards, and Specifications, as specified herein and the following:

<u>Name</u>	<u>Abbreviation</u>
American Water Works Association	AWWA D104
National Electrical Code	NEC
Underwriters Laboratories	UL
National Association of Corrosion Engineers	NACE

##### 1.03 SUBMITTALS

###### A. The Contractor shall submit to the Owner's Representative for review drawings, design details, product specifications, and

## CATHODIC PROTECTION

description, including control schematic diagrams, wiring connection diagrams, together with instruction manuals, installation instructions, operating and maintenance manuals and field check-out, start-up and testing procedures specified in Section 01300 for all equipment furnished.

B. Submit copy of ANSI/NSF 61 classification for all system components located within the tank.

PART 2- PRODUCT

2.01 GENERAL

A. General. All materials and equipment shall conform to the Specifications listed below. All products shall have minimum ratings as specified herein. Identification symbols and nomenclature where used in this Section are the same as those shown on the Drawings. Paragraphs of these Specifications describing the requirements of a single item of equipment shall apply equally to all identical items of equipment to be furnished.

B. Standard Products. All materials shall be new and conform to the applicable portion of these Specifications. The materials to be furnished under these Specifications shall be the standard product of manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest standard design.

C. Special Products. The supplier of the power units, anodes and other special cathodic protection materials and equipment shall have a minimum of five (5) continuous years of successful experience in the manufacture, installation and service of cathodic protection systems for similar tank structures.

2.02 EQUIPMENT CRITERIA AND OPERATION

A. Type. The **existing** cathodic protection system is of the automatic impressed current type with IR Drop Free mode of operation to control corrosion of the submerged steel surfaces of a potable water storage tank.

B. Design Criteria. The criteria for protection shall be based on a tank-to-water potential, IR drop free, within a range of -0.850 volts to -1.050 volts relative to a stationary copper-copper sulfate reference electrode. This potential shall be measured free of the effect of voltage gradients (IR drops). The potential shall be measured with protective current being applied as recommended in NACE Standard RPO 388-88 latest version and/or ANSI/AWWA D104-91.

## CATHODIC PROTECTION

C. Design Requirements. The cathodic protection system shall be designed based upon capacity and performance requirements as follows:

Total submerged surface area of the tank. Total surface area includes high water level in tank and wet risers including draft tube recirculation piping, which are 30" diameter or larger.

Total bare surface area to be protected will be a minimum of 25% of total surface area.

Type of coating and condition of coating.

Minimum current density of 0.5 MA/ft<sup>2</sup> bare surface area.

Chemical analysis of water including resistivity expressed in ohm-cm.

Tank being susceptible to icing.

Minimum anode design life of twenty (20) years.

Selection, dimensions and layout of system components specified hereinafter.

D. Mode of Operation. The **existing** power unit is capable of operating in the following three (3) modes with the selection of the desired operating mode made on the front panel without additional equipment or tools with access limited to authorized personnel only.

1. Manual Mode. The power unit shall operate as a constant current rectifier continuously delivering preselected current to the anodes. In this mode, the automatic control shall be locked out without affecting the preprogrammed settings. The output of the power unit shall be regulated from 0-100% of rated capacity without the use of transformer taps.
2. Auto-1 Mode. In the Auto-1 mode, the controller shall automatically and continuously monitor the potential of the structure and make necessary adjustments in the current output to maintain the structure potential at the preselected value. A single reference electrode placed within 1 to 2 cm. from the protected structure shall be used to measure the potential and control operation of the power unit.
3. Auto-2 Mode (IR Drop Free). The Auto-2 model shall function the same as Auto-1 except the potential shall

## CATHODIC PROTECTION

be monitored against a reference electrode located some distance from the protected structure. The measured and displayed potential shall be free of IR drop error.

E. Data. The following data shall be used as the basis for system design.

ITEM	TANK DATA
Type:	Spheroid High Tank
Style:	Water Spheroid
Capacity:	500,000 Gallons
Tank Height:	161' -4"
Tank Diameter:	---
Draft Tube Mixer:	None; per Village

### 2.03 DETAILS OF CONSTRUCTION

A. General. The existing anodes and suspension system will need to be removed and replaced under this contract. This Specification outlines the minimum quality required for long-term economy and reliability of the cathodic protection power unit (rectifier) which is solid state, air-cooled and consisting of the necessary potential control circuitry, transformers, rectifiers, circuit breaker, meter, wiring, terminals and appurtenances of adequate capacity to meet the requirements of the system. Multiple D.C. output circuits exist, each circuit consists of separate transformers, rectifier and control. The output of each circuit is electronically controlled in all modes of operation. The entire unit is field serviceable. The unit is designed to operate on 110 volts, 1 phase, 60 hertz, A.C.

B. Existing Transformer. The transformer is of the separate primary and secondary type and shall withstand continuous operation 10% above rated input voltage at the maximum rated D.C. output. The transformer is designed for a maximum hot spot heat rise not to exceed 50°C.

C. Existing Rectifiers. The rectifier unit(s) performs in accordance with ANSI/AWWA Standard D104-04 Section 4: 4.1.1.1.1, IR drop free system and include:

1. Transformer
2. Selenium or silicon rectifying elements
3. Circuit breaker(s)
4. Lightning, surge and overload protection
5. Provision for air-cooling operation

## CATHODIC PROTECTION

6. Voltmeter(s) and ammeter(s)
7. Weatherproof cabinet in accordance with NEMA 4R requirements
8. Provision to vary current output from 0% to 100% of rated capacity
9. Provisions for mounting, grounding and locking
10. Provision for 110-120 volt, 60Hz, single phase AC power
11. DC output capacity in volts and amperes in accordance with Design Criteria and Requirements specified in Paragraph 2.02
12. Number of circuits or separate rectifiers in accordance with Design Criteria and Requirements specified in Paragraph 2.02
13. Automatic controller is AWWA D104-04, Type A and adjusts current output to compensate for changes in water level, temperature of water, water chemistry, and cathodic polarization and shall include the following provisions:
  - a. Utilize long-life reference electrode(s) mounted in tank
  - b. Monitor the tank-to-water potential, free of IR drop
  - c. Automatically adjust the tank-to-water potential, free of IR drop, to a preset value
  - d. Operate within 25MV of preset value
  - e. Limit current to a preset value
  - f. Utilize potential meter(s) to display tank-to-water potential, free of IR drop

D. Proposed Long Life Reference Electrode(s). The permanent reference electrode shall consist of a copper-copper sulfate electrode which shall be manufactured to remain stable (plus or minus 10 MV) for a minimum of ten (10) years. The reference electrode to lead wire connection shall be encapsulated to prevent water migration.

The stationary reference electrode shall be positioned in the tank water to provide the most representative measurements for the submerged surface area(s).

E. Proposed Anode Suspension System. The anode suspension system shall be designed to be resistant to ice damage and in accordance with ANSI/AWWA Standard D104-04, Section 4.2.4.1.1 Type A, Horizontal System.

The anode suspension system shall consist of a minimum 5/16" polyester cord. The cord shall be secured to steel anchors welded to the side wall of the tank bowl or to the exterior of the dry access column of spheroidal type tanks and the side wall of wet risers which are 30" diameter or larger. All cord

## CATHODIC PROTECTION

to cord connections shall be tied and taped.

Handhole assemblies used for the installation of vertical anode suspension systems from the roof of the tank shall consist of a 6" diameter steel cover, rubber gasket and a steel bar and bolt assembly for each 5" diameter access opening.

F. Proposed Anode Materials. The anode materials shall be selected in accordance with Design Criteria and Requirements specified in Paragraph 2.02 and shall consist of one of the following:

1. Minimum .062" diameter platinized niobium with 25 micro inches of platinum. The wire anode shall be continuous with a maximum of two (2) anode to header connections.
2. Minimum .062" diameter titanium with a precious metal oxide coating. The wire anode shall be continuous with a maximum of two (2) anode to header connections.

All anode to header cable connections shall be sealed to prevent water migration.

G. Proposed Pressure Entrance Fitting. For icing tanks the pressure entrance fitting shall accommodate anode and reference electrode lead wires at the base of the tank. The fitting shall be manufactured to prevent leakage through the fitting and to prevent water migration through the wire insulation.

The entrance fitting shall be sized for a maximum 1.5 inch Schedule 80 steel coupling.

H. Existing Control Circuits. The control circuits are designed to continuously monitor the potential of the structure and automatically regulate the protective current as required to maintain the potential at the preselected level. The current output of the unit is controlled to prevent overprotection.

I. Existing Circuit Breaker. The circuit breaker shall be of the single phase, 2 pole, series trip, manually reset, magnetic type not affected by change in ambient temperature.

J. Wiring. Wiring for the cathodic protection system and equipment shall be as follows:

1. Existing Power Unit Wiring. The wires to connect components of the power unit are stranded or solid copper meeting the requirements of the N.E.C. for

## CATHODIC PROTECTION

allowable current carrying capacities. The D.C. output terminals are conveniently located and are sized to accommodate wires as required for safe operation of the cathodic protection system.

2. Proposed Wiring Within Tank. All wiring within the tank shall be insulated to prevent copper conductor to water contact.
3. Proposed Exterior Tank Wiring. All wiring on the exterior of the tank shall be insulated and run in rigid conduit.

K. Proposed Hardware. All hardware used in conjunction with the system shall be protected against corrosion.

L. ANSI/NSF 61. All materials in contact with the water, or exposed to the interior of the tank, shall be classified in accordance with ANSI/NSF 61 "Drinking Water System Components".

### PART 3- EXECUTION

#### 3.01 FACTORY TESTING

All equipment shall be inspected and tested in the manufacturer's shops. Monitoring and control devices shall be functionally tested to verify correct operation and that all component parts function properly.

#### 3.02 INSTALLATION AND TESTING

A. General. The equipment shall be installed as shown on the Drawings in accordance with the manufacturer's instructions and recommended best practices. All necessary items required for installation and testing shall be furnished. All items of equipment shall be operated, adjusted, and tested for proper performance in accordance with the manufacturer's recommended test procedure. All miscellaneous electrical work required for electrification of the cathodic protection system, including conduit and wiring, shall be in accordance with local codes and standards.

B. Field Supervisory Personnel. The equipment manufacturer shall provide the services of factory trained field supervisory personnel who shall perform all necessary checkouts and energize and adjust the system to operate within the specified criteria. The factory trained field supervisory personnel shall be responsible for adjusting the system to perform in accordance with specified design

## CATHODIC PROTECTION

criteria as well as conducting potential profile measurements.

C. Qualifications. The cathodic protection field supervisory personnel shall have a minimum of five (5) years' experience installing and servicing the types of system described by these Specifications. The system shall be installed by personnel specifically trained by the cathodic equipment manufacturer to provide all workmanship required for corrosion control performance.

D. Performance. All work shall be in accordance with the following requirements:

1. Components of the cathodic protection system shall be installed in the manner and at the locations as shown on the design drawings prepared by the cathodic equipment manufacturer.
2. Pressure entrance fitting shall be installed in accordance with AWWA D100-96, Section 3.13.
3. Welding, cutting and coating shall be in accordance with AWWA Standards D100, D102 and D105.
4. Welding of steel coupling and anchors for horizontal anode suspension and rectifier mounting bracket shall be coordinated and furnished by the Contractor prior to coating the tank. Cutting of 5" diameter access openings for vertical anode suspension shall be coordinated and furnished by the Contractor as required. The cathodic protection equipment manufacturer shall furnish installation drawings and materials to the Contractor prior to tank coating.
5. Electrical continuity of all section of bolted or riveted tanks shall be furnished by the Contractor.
6. Materials and equipment shall be inspected prior to installation. Any defective component shall be repaired or replaced.
7. Electrical work shall be in accordance with the National Electrical Code.
8. Lead wires shall be installed to prevent damage from abrasion.
9. Electrical connections within the tank shall be sealed to prevent water migration.
10. The rectifier is mounted at a convenient height (eye level) above grade for monitoring and service purposes.
11. AC power to the rectifier shall be provided as shown on the Drawings.
12. Disinfection of the tank shall be in accordance with the applicable requirements of Section 01012.

E. Energizing System. After the system is installed and the tank is filled, the cathodic protection field supervisory

## CATHODIC PROTECTION

personnel shall provide startup service which includes energizing, testing and adjusting the system for optimum performance of the cathodic protection system. This startup service shall be in accordance with ANSI/AWWA D104-04 Section 5.2 Testing, 5.2.1 Field Test for Type A, IR Drop-Free System. This startup service shall be coordinated with the Owner and/or Owner's Representative.

All tank-to-water potential measurements shall be conducted with a calibrated portable copper-copper sulfate reference electrode and a portable high impedance voltmeter. A minimum of five (5) locations shall be measured. All test data shall be reviewed and evaluated by the corrosion specialist in the regular employment of the cathodic protection equipment manufacturer.

The final test and adjustment of the system shall be conducted approximately twelve (12) months after the startup service.

F. Monitoring During Guarantee Period. The cathodic protection equipment manufacturer shall furnish self-addressed report cards to be completed by the Owner. Report cards received by the cathodic protection equipment manufacturer during the one-year guarantee and service period shall be evaluated for system performance.

G. Service Agreement. The cathodic protection equipment manufacturer shall furnish a Service Agreement for the type of system installed. The Service Agreement shall include the annual service rate and a complete description of the scope of work proposed. The Service Agreement for annual inspection and potential testing shall be in accordance with AWWA D104-04 Appendix C and include as a minimum:

1. One (1) annual job site visit.
2. Tank-to-water potential measurements conducted at representative locations within the tank. A minimum of five (5) locations shall be measured.
3. Measurements shall be conducted with a portable high impedance voltmeter and a calibrated copper-copper sulfate reference cell.
4. Adjustment for optimum corrosion control shall be in accordance with criteria for protection.
5. Data recorded shall provide sufficient information to evaluate the performance of the system relating to criteria for protection.
6. In the event additional work is required, the cathodic equipment manufacturer shall submit a report with recommendations for optimizing corrosion control.

## CATHODIC PROTECTION

### 3.03 PAINTING

All equipment specified in this Section shall be shop painted with the manufacturer's standard finish. Contractor shall be responsible for touch-up field painting as required.

### PART 4- MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

#### 4.02 PAYMENT

A. Payment for the Work specified in this Section will be made at the lump sum prices for the below listed Items, in the Schedule of Prices:

26 42 00/01; Cathodic Protection  
26 42 00/02; Service Agreement

B. These prices shall be full compensation for furnishing all materials, equipment and labor as well as any and all incidentals necessary to complete the Items of Work to provide a complete and operational system.

C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

## GENERAL PROVISIONS FOR MECHANICAL WORK

### SECTION 33 05 50

#### PART 1- GENERAL

##### 1.01 SCOPE

- A. This Section describes the general provisions for the Work to be performed under Division 22 - Plumbing, Division 33 - Utilities of this Contract as well as Division 26 - Electrical, where applicable. The Contractor shall comply with these general provisions and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specifications in related Sections, and as shown on the Drawings. Related electrical work shall be performed in accordance with the applicable provisions of Division 26.
- B. The following specifies the minimum general requirements for the furnishing, installation and testing of the materials and equipment. Additional details of items furnished and installation and testing procedures are specified under individual Sections of the Specifications.
- C. The Contractor shall provide all necessary coordination between the suppliers of the specified equipment so as to provide a well-designed and satisfactory operating facility to the Owner. The Contractor is advised that these Specifications are not intended to cover every and all details of the Work. In case(s) where details related to the specified Work are not covered by these Specifications, it shall be the responsibility of the Contractor to include and execute such coordination and Work at no additional cost to the Owner.

##### 1.02 QUALITY ASSURANCE

###### A. Acceptable Manufacturers and Equipment Suppliers.

Acceptable manufacturers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. Such offers must be in accordance with the hereinafter specified requirements. The burden of proof as to comparative quality and suitability of alternatives shall be upon the Contractor. Specified items are preferred. After

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. (Exception: Where Specifications indicate "No Substitutions Allowed" the Contractor shall provide the designated manufacturers equipment without exception.)

### **B. Applicable Standards**

Systems as installed by the Contractor shall be in accordance with all applicable Specifications included in these Contract Documents and shall conform to State, Federal and/or Local codes and regulations. Any conflicts between Drawings or Specifications or applicable codes regulations and/or authorities having jurisdiction, shall be brought immediately to the Owner's attention. In such cases, the more stringent requirements or design practices shall govern and shall be complied with, without any extra cost to the Owner.

### **C. Field Verification**

The Contractor shall verify field conditions, measurements and dimensions so as to assure that all items of equipment shall fit properly and be suitable for the field conditions.

### **D. Proposed Substitute Equipment**

Comply with requirements of Section 01 33 00.

## **1.03 SUBMITTALS**

### **A. General**

The Contractor shall comply with the requirements specified in Section 01 33 00 - Submittals, and as specified herein.

### **B. Materials**

1. The Contractor shall submit lists of material, equipment, apparatus, and accessories intended for use.
2. The Contractor shall include with all submittals all physical and performance data, including materials, manufacturer's names, model numbers, weights, sizes, capacities, temperatures, pressures, flow rates, performance curves, electrical ratings, finishes, colors, dimensions, accessories, and all other data required to completely describe the equipment and to indicate compliance with the Specifications.

## GENERAL PROVISIONS FOR MECHANICAL WORK

### C. Shop Drawings and Testing Procedures

1. The Contractor shall submit for review dimensioned outline shop drawings showing the general arrangement of the equipment to be furnished, in accordance with the specified submittal schedule, and/or as otherwise specified herein.
2. Before proceeding with the manufacture of the equipment, the Contractor shall submit for review general assembly shop drawings, subassembly shop drawings, detail shop drawings, calculations, design data, catalog cuts and similar engineering documents required to demonstrate fully that all parts will conform to the provisions and intent of the Specifications and to the requirements of their installation, operation, and maintenance. These shop drawings shall show all necessary dimensions and fabrication details, including the design of welded and bolted joint connections, tolerances of fits and clearances, and all field joints and subassemblies in which the Contractor proposes to ship the equipment. Design criteria, calculations, and detailed specifications, shall be submitted for the design of all major components and for other features or details when requested.
3. All submittals by the Contractor shall be certified by the respective equipment manufacturer.
4. The Contractor shall submit complete full-line wiring diagrams covering all equipment furnished. The Contractor shall furnish shop drawings of switch developments for all instrument and control switches and internal connection diagrams for all instruments, relays, regulators, etc. The Owner's Representative will return one print of each wiring diagram on which will be marked the wire notations and cable numbers for outgoing circuits where this information is not otherwise available to the Contractor. The Contractor shall add this information to his shop drawings. Adequate space shall be allowed on the wiring diagrams to accomplish this.
5. Shop drawings shall include electrical devices, accessories and wiring furnished as component parts of mechanical equipment and shall show arrangement and dimensions.
6. The Contractor shall prepare and submit shop drawings for all work areas, indicating solutions to space

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

problems and coordination with requirements in other Sections. These shop drawings, as a requirement of this Division, shall indicate superimposed items of all Divisions and Sections involved in congested areas, including, but not limited to, piping, structural work, electrical work and ceiling work.

7. Protocol of all shop and field testing procedures shall be submitted. In addition, and prior to conducting testing activities at the site, the Contractor shall prepare a test program, showing the sequence of work required for specified tests. This program shall be in the form of a plan drawing to the extent practical and shall be exclusive of all other plans and schedules required under this Contract. This program shall be supplemental by sketches, text, bar diagrams, showing the sequence of work required for testing.

### **D. Operating and Maintenance Manuals**

1. Upon completion of the Work, the Contractor shall furnish to the Owner six (6) complete sets of operating instructions, maintenance instructions, parts lists, and all other bulletins and brochures pertinent to the operation and maintenance of the mechanical equipment and systems provided.
2. The operating and maintenance manuals shall be bound in durable binders, labeled to correspond with all mechanical systems shown or specified, and indexed into sections such as, but not limited to, the following:
  - a) A chart tabulating all types of pipe and pipe fittings, valves and piping specialties installed in each system.
  - b) Manufacturer's brochures, including names, addresses and telephone numbers, for all items installed in each system. Identify items by item number shown on the Contract Documents. Reference the manufacturer's part or model number and the system in which it is installed.
  - c) All major equipment such as pumps, valves, compressors and related equipment, including shop drawings.
  - d) Lubrication charts for equipment requiring lubrication, listing each item of equipment, proper lubricant and dates lubricated, and a lubrication schedule.

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

e) List of consumable items, parts, and supplies, with applicable price lists.

### **E. Certificates**

At the completion of the construction, the Contractor shall submit, to the Owner's Representative for review, written certification that all mechanical systems have been tested, and that the installation and performance of these systems conform to the requirements of the Specifications.

1.04

### **WARRANTY**

All specified equipment shall be warrantied, and shall be provided with such warranties covering all parts and labor for a period of one (1) year from the date of Final Acceptance unless otherwise specified in subsequent Sections of these Specifications.

PART 2-

### **PRODUCTS**

2.01

### **GENERAL**

#### **A. Standard Products**

The equipment furnished shall be standard products in production by reputable companies regularly engaged in the manufacture of high-quality equipment of the type specified. Similar equipment shall have been in satisfactory and successful operation for a period of at least two years. All parts of the specified equipment shall be so designed as to be especially adapted for the service required and shall be proportioned, enclosed, or guarded as to have ample and liberal strength and stability to withstand, without damage, the stresses to which they may be subjected during erection or operation. The component parts of duplicate items shall be fabricated on a principle of interchangeability to facilitate ready replacement.

#### **B. Materials**

All materials incorporated in the equipment shall be new and of first-class quality, free from injurious defects and imperfections, and of the classifications and grades designated. Materials not specifically designated herein shall be subject to the review of the Owner's Representative and shall be suitable for the purpose intended.

## GENERAL PROVISIONS FOR MECHANICAL WORK

2.02

### RATINGS

The sizes, ratings, capacities, and performance characteristics of various specified items of equipment and devices are based on currently available standard products, which are available through United States manufacturers and/or suppliers. In no case shall the size, rating, capacity or performance characteristic be less than that specified unless approved in writing by the Owner. Ratings and performance characteristics, where applicable, of various devices and items of equipment are specified in respective Sections of these Specifications. All electrical components of mechanical equipment shall be UL rated.

2.03

### DETAILS OF CONSTRUCTION

#### A. Nameplates

Each item of manufactured equipment furnished under the Specifications shall have a permanent nameplate affixed thereto in a readily visible place, showing the serial number, the name and address of the manufacturer, rated capacity, speed, electrical characteristics, and other pertinent data, as applicable and as specified herein after. Nameplates of distributing agents alone will not be acceptable.

#### B. Samples

The Contractor shall furnish to the Owner's Representative for review, when requested or required by the Specifications, samples of all materials and finishes to be used in the execution of the Work. Such samples shall be submitted before the Work is commenced and in ample time to permit examination thereof. All materials furnished and finishes applied shall be fully equal to the reviewed samples found to be acceptable.

#### C. Loose Parts

All loose parts, spare parts, fasteners, anchor bolts and other non-attached pieces shall be properly tagged. A loose parts list shall accompany the equipment to identify loose parts.

#### D. Lifting Provisions

Equipment shall be equipped with adequate provisions for lifting, such as, lifting lugs, threaded holes for removable eyebolts, holes for sling passage, etc. to facilitate initial placement and future moving. All items such as, but not limited to, lifting beams, slings and other devices necessary

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

for handling during placement and/or removal of the equipment shall be provided by the Contractor and shall remain the property of the Owner.

### **E. Anchor Bolts**

Anchor bolts, nuts and washers shall be adequate for the intended use. Each anchor bolt shall be furnished with all required flat washers, lock washers and nuts. Anchor bolts shall be furnished by the Contractor as a part of each piece of equipment.

### **F. Spare Parts**

(As specified in subsequent Sections of these Specifications.)

### **G. Guards**

All rotating equipment such as but not limited to belt and chain drives, exposed gearing and shafting and flywheels, clutches, fan blades, stub shafts, couplings, etc. shall be completely guarded from all directions. Guards shall enclose the top, bottom ends, front and back of the drive assembly to prevent access to the danger zone during equipment operation. All guards shall be checked for proper running clearances and adjusted as required.

## **2.04 RELATED ELECTRICAL FEATURES OF MECHANICAL EQUIPMENT**

### **A. General**

Electrical equipment shall conform to NEC, UL, ANSI, and NEMA Standards. The installed equipment shall conform to ANSI-C1, "National Electrical Code", considering the atmospheric and climatic conditions and the elevation at the project site.

### **B. Wiring and Conduit**

Wiring of the control panels and component parts shall be in accordance with the applicable requirements of Division 26.

## **PART 3- EXECUTION**

## **3.00 FABRICATION AND WORKMANSHIP**

### **A. General**

Like parts and spare parts shall be interchangeable wherever possible. Surface finish of machined parts shall be adequate for their functional requirements. Machining of fits on

## GENERAL PROVISIONS FOR MECHANICAL WORK

renewable parts shall be accurate and to specified dimensions so that replacements made to drawing sizes may be readily installed. All work shall be done by workers skilled in their various trades and completed in a thorough manner following the best modern practices.

During erection the Contractor shall take the necessary precautions to prevent foreign objects or dirt from entering piping or equipment. All openings in equipment shall remain closed and protected during installation until ready for make-up of pipe connections or matching of sectionalized equipment. Damaged covers shall be repaired or replaced immediately to protect the interior of piping or equipment against weather or other contamination.

### B. Electric Welding

#### 1. Minimum Weld Requirements

All welds shall be made continuous. The minimum size of fillet welds shall be 1/4 inch. All butt welds shall be full penetration welds welded from both sides.

#### 2. Preparation of Base Material

Members to be joined by welding shall be cut to shape and size by mechanical means such as shearing, machining, grinding, or by gas or arc cutting, to suit the conditions. Design of welded joints and selection of weld filler metal shall allow thorough penetration and good fusion of the weld with the base metal. The edges of surfaces to be welded shall be sound metal free of visible defects, such as lamination or defects caused by cutting operations, and free from rust, oil, grease, and other foreign matter.

#### 3. Weld Finish

Welds shall in general be treated so that they will display good appearance and a surface suitable for painting. Structure welds shall be ground and blended to avoid stress raisers. All welds which required nondestructive examinations shall be dressed by chipping and grinding as required for good interpretation by the selected weld examination methods.

## GENERAL PROVISIONS FOR MECHANICAL WORK

### 4. Welding Qualifications

The qualification of welding procedures, welders, and welding operators for all welding including weld repairs, shall conform to the AWS D1.1, "Structural Welding Code". Contractor shall furnish the facilities, all equipment, materials and other articles required to perform qualification tests of his welders and welding operators. Certificates of welders' qualifications shall be submitted when requested.

### 5. Technique of Welding

The technique of welding, the appearance and quality of the welds, and the methods used in correcting defective work shall conform to the AWS D1.1, "Structural Welding Code". Special care shall be taken to avoid undercuts along the seams or warping of the structure. If undercuts appear along the welds, they shall be filled using a small diameter electrode of the same composition as the original electrode.

## C. Fabrication of Structural Steel

1. If straightening is necessary, it shall be done by methods that will not injure the metal. Sharp kinks or bends will be cause for rejection of the material. Shearing and cutting shall be carefully performed, and all portions of the Work which will be exposed to view after completion shall be neatly finished.
2. Design and fabrication of structural parts shall conform to the applicable provisions of the AISC "Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings", of the AISC "Code of Standard Practice for Steel Buildings and Bridges".

## D. Machine Work

### 1. General

All tolerances, allowances, and gauges for metal fits between plain (non-threaded) cylindrical parts shall conform to ANSI-B4.1, "Preferred Limits and Fits for Cylindrical Parts", for the class of fit as shown or otherwise required. Sufficient machining stock shall be allowed on parts to be machined to insure true surfaces of solid materials. Finished contact or bearing surfaces shall be true and exact to secure full contact. Journal and sliding surfaces shall be polished, and all

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

surfaces shall be finished with sufficient smoothness and accuracy to insure proper operation when assembled. All drilled holes for bolts which are intended to match other drilled holes shall be accurately located and drilled from templates. No machining shall be done on working surfaces of "Lubrite" bushings or washers.

### **2. Finished Surfaces**

All surfaces that are indicated on the Drawings or those that require machining for their intended function, or those that are usually machined according to good workshop practice shall be machined. Surface finish qualities shall be adequate for the intended use and shall be indicated on the Contractor's drawings and shall be in accordance with ANSI-B46.1, "Surface Texture". Compliance with specified surface will be determined by sense of feel and by visual inspection of the Work compared to standard roughness specimens, in accordance with the provisions of ANSI B46.1.

### **3. Unfinished Surfaces**

So far as practicable, all Work shall be laid out to secure proper matching of adjoining unfinished surfaces. Where there is a large discrepancy between adjoining unfinished surfaces they shall be chipped and ground smooth, or machined, to secure proper alignment. Unfinished surfaces shall be true to the lines and dimensions shown on the Drawings and shall be chipped or ground free of all projections and rough spots. Depressions or holes not affecting the strength or usefulness of the parts may be filled in an approved manner. Corrosion resistant steel seal plates shall have all surfaces thoroughly cleaned and those in contact with seals shall have a smooth and even surface.

### **4. Pins and Pin Holes**

Pin holes shall be bored true to gauges, smooth and straight, and at right angles to the axis of the member. The boring shall be done after the member is securely fastened in position.

### **5. Protection of Machined Surfaces**

a. Machine-finished surfaces shall be thoroughly cleaned of foreign matter. Finished surfaces of large parts and other delicate surfaces shall be protected with wooden pads or other suitable means. Unassembled pins and bolts shall be oiled

## GENERAL PROVISIONS FOR MECHANICAL WORK

and wrapped with moisture resistant paper or protected by other means in keeping with good engineering practice.

- b. Finished surfaces of ferrous metals to be in bolted contact shall be washed with a rust inhibitor and given one thin coat of Tung oil.

### E. Lubrication

Solvents shall not be used on "Lubrite" bearings. Before assembly all bearing surfaces, journals, and grease and oil grooves shall be carefully cleaned and lubricated with an approved oil or grease. After assembly each lubricating system shall be flushed and filled with an approved lubricant in accordance with the equipment manufacturer's written recommendations. "Lubrite" bearings shall not be greased and shall be assembled dry according to the manufacturer's instructions.

## 3.01 FACTORY TEST AND INSPECTION

- A. Test of Materials. All materials or parts used in the equipment shall be tested, unless otherwise directed, in conformity with applicable methods prescribed by the ASTM, or such other organization as may be specifically required, and in general accordance with the best commercial methods. When requested, tests shall be made in the presence of the Owner's Representative. Stocked material may be used, provided evidence is furnished to the Owner's Representative to show that such material meets the requirements specified herein, in which case tests on stocked materials may be waived.
- B. Test Certificates. Certified material test reports shall be furnished in triplicate to the Owner's Representative as soon as possible after the tests are made. The test certificate shall identify the component for which the material is to be used and shall contain all information necessary to verify compliance with the Specifications.
- C. Shop Assembly and Tests. The shop assemblies and tests specified for the various items of equipment shall be conducted. The completed shop inspection forms shall be signed by the Contractor or his representative. Copies of all shop inspection records shall be furnished to the Owner's Representative. No equipment shall be shipped from the manufacturer's shops until it has been inspected. Prior to the major shop assemblies and tests the Contractor shall submit an outline of the procedures and test he plans to demonstrate fulfillment of the requirements specified.

## GENERAL PROVISIONS FOR MECHANICAL WORK

Where witnessing of shop testing is required by these Contract Documents, the Contractor shall give sufficient notification to the Owner's Representative (as specified) so that such factory testing may be witnessed. Costs which may be incurred by the Owner's Representative directly related to witnessing of shop tests (such as travel and lodging) will be the responsibility of the Owner. All other costs related to shop testing shall be considered incidental to the items of Work to which they pertain and shall be included in the lump sum price of the specified equipment.

3.02

### INSTALLATION AND TESTING

- A. Receiving, Handling and Storage. The Contractor shall be responsible for the receiving, handling and storing of all materials and equipment required for the Work. Installation and maintenance instructions shall accompany all equipment delivered to site. All materials and equipment shall be stored to protect them from the weather and injury prior to installation. Damaged materials and equipment shall not be installed.
- B. Installation. The equipment shall be installed as shown on the Drawings and in accordance with the manufacturer's instructions and recommended best practices. All equipment shall be installed in a neat, accurate and workmanlike manner. Equipment shall be set level, true to line, at correct elevation and in proper orientation as shown on the Drawings. Equipment set on concrete foundations shall be properly grouted (with non-shrink grout) in such a manner to eliminate any voids which may be present under the base. Where shims are used and where shims are not removed after the grout sets, care shall be taken to totally cover any exposed surface areas which may result in a void. All necessary shims, grout, anchor bolts, and other items required for installation shall be furnished by the Contractor. In addition, certain anchor bolts when supplied by equipment suppliers shall be installed by the Contractor. The Contractor shall inspect all materials and equipment delivered to the site to assure compliance with the associated reviewed shop drawings. If the Contractor discovers any defect in material or equipment, he shall notify the Owner's Representative immediately. Any Work performed by the Contractor after such discovery, until authorized in writing by the Owner's Representative, will be done at the Contractor's risk and the cost of correcting such work shall be borne by the Contractor. In addition, any material or equipment installed by the Contractor prior to the completion of the Owner's Representative's review, will be done at the Contractor's risk and the cost of correcting such work shall be borne by the Contractor. Where trenching, excavation, backfilling and/or concreting is required for

## GENERAL PROVISIONS FOR MECHANICAL WORK

the equipment installation the Contractor shall perform such activities in accordance with the applicable requirements of IDOT Standard Specifications.

C. Adjustments/Alignment/Leveling. The Contractor shall perform all adjustment, fitting, cleaning and calibration of components to be incorporated into the Work to assure correct operation and workmanlike installation. As minimum requirements the Contractor shall provide/comply with the following:

1. Mild carbon steel leveling plates or smooth-troweled surfaces shall be provided at all anchor bolts in concrete bases as required for leveling.
2. All equipment, unless furnished with leveling screws or otherwise specified, shall be leveled with stainless steel shims at each anchor bolt, shim on both sides of each bolt, and at intermediate points as required to prevent distortion of the equipment. Shims shall have square cut edges, not trimmed or sheared, and shall be of varying thickness to minimize the number of shims required.
3. Rotating mechanical equipment shall be set, leveled, aligned, and inspected with precision tools such as steel straight edge, dial indicator, graduated levels, transit, etc. The alignment shall be accomplished prior to making-up any piping flange connections. After units have been aligned, the piping flange bolts shall be tightened. Sufficient alignment checks shall be made to verify that there is no load or strain on the installed equipment and that the drive shaft and the driven shaft are within the manufacturer's specified tolerances for alignment.
4. Electric motors shall be checked for correct direction of rotation prior to connection to driven equipment.

D. Field Testing. All necessary piping, pipe closures, gates, meters, valves, and other test equipment required for testing shall be furnished by the Contractor. All items of equipment shall be operated, adjusted and tested for proper performance in accordance with the manufacturer's recommended test procedure, and as otherwise specified herein. Before final grouting of equipment is done, after alignment is completed, and before any final performance tests are made, the Contractor shall notify the Owner's Representative so that such alignment may be inspected and tests may be witnessed by the Owner's Representative.

## **GENERAL PROVISIONS FOR MECHANICAL WORK**

The Contractor shall then test, operate and calibrate as necessary to demonstrate proper performance of the equipment in the presence of the Owner's Representative. Should it become necessary for any items of equipment to be retested, the Contractor shall perform all necessary Work, including removal, repair or replacing, reinstallation and retesting of the defective equipment. The Contractor will not be reimbursed for the cost of such Work associated with the retesting of defective equipment, if the defect was due to the Contractor's negligence or lack of workmanship.

- E. Maintenance and Operation of Equipment and Materials. All equipment and appurtenances installed shall be provided with proper oil and lubricants by the Contractor before being placed in operation. All permanent equipment furnished under these Specifications shall be properly maintained and operated by the Contractor until the Work is accepted by the Owner.
- F. Field Check-Out and Start-Up Procedure. The Contractor shall complete all new Work to the maximum extent possible before making actual tie-in and final connection to existing systems. Tie-ins requiring cutting and patching shall be performed in accordance with applicable requirements, best recommended procedures and as specified herein. No tie-in shall be made until authorized by the Owner. The Contractor shall advise the Owner in sufficient time (minimum 24 hours) to arrange for proper coordination with Existing Systems and scheduled cut-ins and tie-ins.

### **3.03 PAINTING**

- A. All equipment shall be shop-primed and painted in accordance with Section 09900 and/or as specified in subsequent Sections of these Specifications. All equipment shall be field-painted in accordance with Section 09900 and/or as specified in subsequent Sections of these Specifications.
- B. The Contractor shall be responsible for coordination of the compatibility between the manufacturer's standard finish and field-paint specified.

### **PART 4- MEASUREMENT AND PAYMENT**

Separate measurement or payment will not be made for Work specified in this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

**END OF SECTION**

# WILLOWBROOK POLICE FACILITY RENOVATION

Monthly Progress Report  
January 4, 2017



## KEY ACCOMPLISHMENTS

- IT panel was successfully relocated onto the permanent wall in the Utility Room.
- Hollow metal frame and CMU infills are complete.
- Rough plumbing will be complete with inspections later this week.
- Rough electrical, HVAC, steel and decking at the south addition are ongoing.
- Weekly Owner Architect Contractor (OAC) meetings continue to occur to ensure issues, RFIs, progress updates and general tracking is being discussed.

## BUDGET

Contract	Approved Contract Amount	Spend to Date
U Morse	\$3,152,000	\$968,221.02
TSC (Geotechnical Testing)	TBD (~\$5,700)	\$2905.63
Reike (Furniture)	\$141,865	-

## VILLAGE OF WILLOWBROOK PROGRESS REPORT

DATE: JANUARY 4, 2017



## UPCOMING ACTIVITIES (2-4 WKS)

- AHU install within the next couple of days, electrical saw cuts in the slab for floor boxes, metal stud installation and relocation of sprinkler heads
- Framing and electrical inspections are anticipated, then will start drywall work.
- ComEd and NICOR coordination for new service and meter respectively are anticipated to be scheduled. Paperwork has been submitted to NICOR, and is in process for ComEd.
- Raths, Raths & Johnson will prepare design and plans for 9-11 artifact to safely be installed in the lobby of the renovated Police Facility.

## ISSUES / RISKS

Issue / Risk	Impact	Owner / Contingency Plan
1. Existing flooring from the legacy 3 buildings at PD is making flooring rework challenging	Medium	LJM flooring subcontractor compiling information and plan based on meeting with LJM and WA.
2. Coverboard was not installed as specified per roofing drawings. Credit to be provided.	Medium	Awaiting credit information from LJM and subcontractor for coverboard.
3. ComEd & NICOR coordination	Medium	Application to be submitted for new meter at ComEd; request made to NICOR awaiting response
4. Crack in signage wall of Village Hall, similar design on PD plans, mitigate potential issue not to replicate issue in PD. Costs being negotiated.	High	WA providing direction to ensure integrity of design
4. 911 Artifact logistics and installation are being discussed.	Medium	Team review 1/5 to discuss with RRJ and local welder, ETI, on safe options.



EST. 1960

# Willowbrook

835 Midway Drive  
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 [www.willowbrookil.org](http://www.willowbrookil.org)

## MONTHLY REPORT

### MUNICIPAL SERVICES DEPARTMENT

Permits issued for the month of November, 2016

<b>Mayor</b>		
Frank A. Trilla	Antenna Installation	1
	Asphalt	2
	Awning	1
	Balcony Rehabilitation	1
	Bathroom Remodel	1
	Concrete Replacement	4
	Door Replacement	1
	Entry Columns	1
	Foundation Only	1
	Gazebo	1
	Installation cell tower	1
	Interior Remodel	1
	New Railing	1
	Occupancy	1
	Paver Patio	1
	Personal Vehicle Storage	1
	Pond Sediment Remove	1
	Remodel	2
	Reoccupancy	1
	Roof	3
	Signage	4
	Temporary Sign	2
	Tenant Finish	1
	Vehicle Impact	1
	Wall Packs and Pole	1
	Wall Sign	2
	Window Replacement	2
	<b>TOTAL</b>	<b>40</b>
<b>Village Clerk</b>		
Leroy R. Hansen	Final Certificates of Occupancy	1
	Temporary Certificates of Occupancy	0
<b>Village Trustees</b>		
Sue Berglund	Permit Revenue for November, 2016	74,028.63
Umberto Davi	Total Revenue Collected for Fiscal Year	
Terrence Kelly	To Date	390,702.49
Michael Mistele	Total Budgeted for Fiscal Year 2016/17	232,500.00
Gayle Neal	Total Percentage of Budgeted Revenue	
Paul Oggerino	Collected to Date	168.04
	Respectfully submitted,	

Timothy Halik  
Village Administrator

TH/jp



Proud Member of the  
Illinois Route 66 Scenic Byway

MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

Fiscal Year 2016/17

MONTH	CURRENT FISCAL YEAR	PRIOR FISCAL YEAR
MAY	\$ 28,379.31	\$ 11,447.58
JUNE	\$ 13,426.64	\$ 21,083.13
JULY	\$ 19,166.25	\$ 19,426.58
AUGUST	\$ 59,753.64	\$ 15,150.56
SEPTEMBER	\$ 62,997.75	\$ 146,015.93
OCTOBER	\$ 132,950.27	\$ 24,175.36
NOVEMBER	\$ 74,028.63	\$ 39,743.04
DECEMBER		\$ 15,692.73
JANUARY		\$ 9,450.41
FEBRUARY		\$ 9,393.21
MARCH		\$ 32,001.35
APRIL		\$ 25,586.99
COLLECTED REVENUE	\$ 390,702.49	\$ 369,166.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00
REVENUES COLLECTED- (OVER)/UNDER BUDGET	\$ (158,202.49)	(169,446.87)
PERCENTAGE OF BUDGETED REVENUE COLLECTED	168.04%	184.72

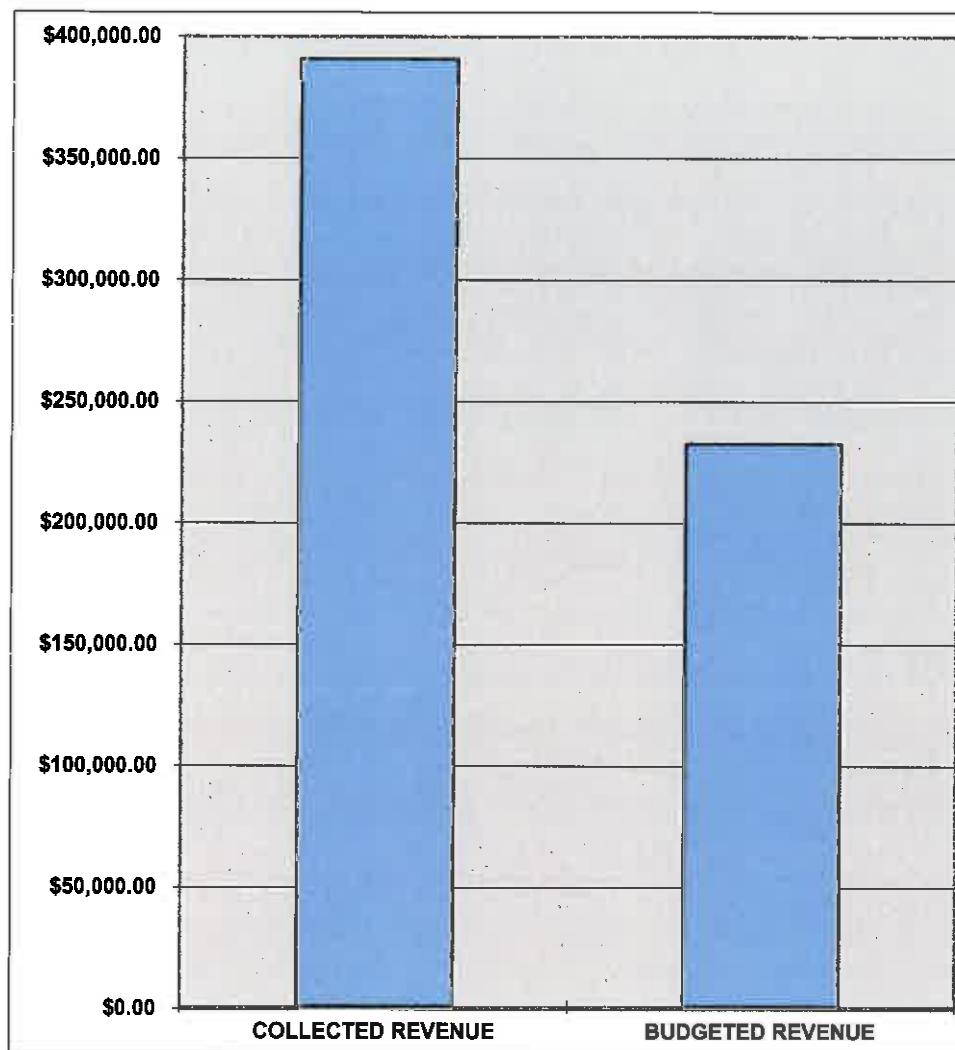
MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

	Fiscal Year 16/17	Fiscal Year 15/16
COLLECTED REVENUE	\$ 390,702.49	\$ 369,446.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00

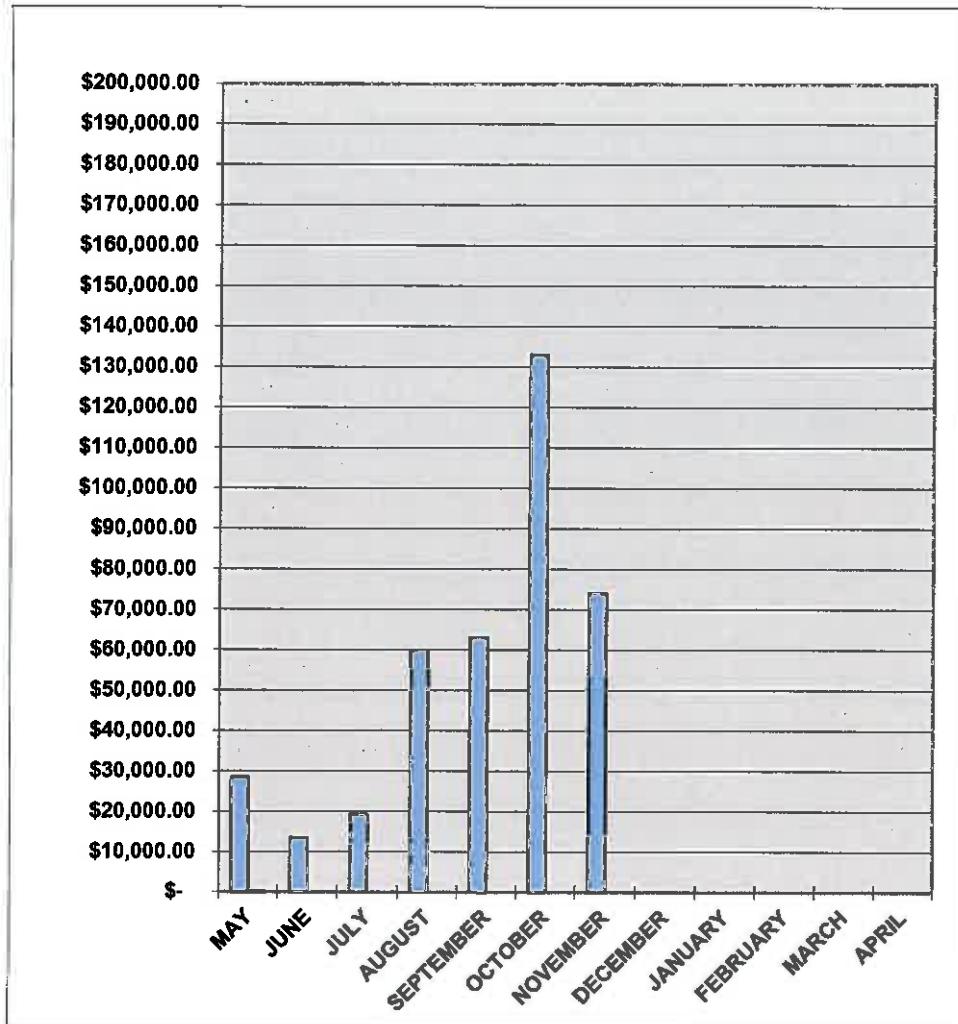
## MUNICIPAL SERVICES DEPARTMENT

### PERMIT REVENUE



# MUNICIPAL SERVICES DEPARTMENT

## PERMIT REVENUE



Permit	Date Issued:	Name:	Address:	Permit Purpose:	Business Name:	Fee:	RES/ COMM:	Date Released:
16-413	11/10/16	Lake Hinsdale	6340 Americana Dr.	Antenna Installation	\$ 882.60	R	11/10/16	
16-428	11/01/16	Nicole Franz	6649 Snug Harbor Drive	Asphalt	\$ 150.00	R	11/01/16	
16-432	11/15/16	Potbelly	7500 Kingery	Asphalt Replacement	\$ 300.00	C	11/15/16	
16-438	11/10/16	TGM Willowbrook	6060 Laurel Lane	Awning	\$ 96.10	R	11/10/16	
16-463	11/30/16	Colleen McCormack	6401 Clarendon Hills Rd	Balcony Rehabilitation	\$ 2,260.00	R	11/30/16	
16-410	11/15/16	Elizabeth Campbell	6530 Tennessee Ave	Bathroom Remodel	\$ 355.00	R	11/15/16	
16-433	11/07/16	Alan Meyer	7201A Kingery	Concrete Replacement	\$ 50.00	C	11/07/16	
16-434	11/07/16	Alan Meyer	531 Ridgemoor	Concrete Replacement	\$ 125.00	R	11/07/16	
16-240	11/15/16	PNC Bank	835 Plainfield	Concrete Replacement	\$ 75.00	C	11/15/16	
16-461	11/29/16	David Kraus	7827 Quincy	Concrete Replacement	\$ 250.00	C	11/29/16	
16-465	11/30/16	Joseph Foley	225 Sunset Ridge Road	Door Replacement	\$ 75.00	R	11/30/16	
16-435	11/07/16	Carrington Club	6526 Clarendon Hills Rd	Entry Columns	\$ 216.50	R	11/07/16	
16-451	11/16/16	Craig Stempowski	302 Palomino Trail	Foundation only	\$ 2,372.91	R	11/16/16	
16-436	11/07/16	Luke Pennings	641 Bentley Avenue	Gazebo	\$ 220.41	R	11/07/16	
16-376	11/01/16	Sigfox	7475 Madison	Installation cell tower	\$ 852.50	C	11/01/16	
16-411	11/17/16	Nancy Timko	7890 S. Quincy	Interior Remodel	\$ 1,582.15	C	11/17/16	
16-437	11/14/16	TGM Willowbrook	60 Lincoln Oaks	New Railing	\$ 75.00	R	11/14/16	
16-380	11/10/16	William Egbert	650 Willowbrook Center	Occupancy	\$ 200.00	C	11/10/16	
16-447	11/15/16	Jeff Hobbs	7722 Sugarbush Lane	Paver Patio	\$ 50.00	R	11/15/16	
16-286	11/10/16	Fred B. Barbara	640 Joliet Road	Personal Vehicle Stor.	\$ 54,635.27	C	11/10/16	
16-443	11/10/16	Cate Parlier	1 Clubhouse Drive	Pond Sediment Remove	\$ 300.00	R	11/10/16	
16-421	11/01/16	VOW/Police Station	7760 Quincy Street	Remodel	\$ -	C	11/01/16	
16-422	11/22/16	William Egbert	650 Willowbrook Center	Remodel	\$ 1,963.75	C	11/22/16	
16-453	11/22/16	David Froberg	78 63rd Street	Vulture Equipment	\$ 200.00	C	11/22/16	
16-439	11/10/16	Grady Humprries	5904 Western	Reoccupancy	\$ 35.00	R	11/10/16	
16-444	11/15/16	Rowena Collomar	7634 Virginia Ct.	Roof	\$ 35.00	R	11/15/16	
16-460	11/30/16	Vaseem Quereshi	6535 Rodgers Drive	Roof	\$ 35.00	R	11/30/16	
16-424	11/02/16	Marisol Torres	6300 Kingery	Signage	\$ 119.00	C	11/02/16	
16-423	11/07/16	Rodney Allott	650 Willowbrook Center	Signage	\$ 105.30	C	11/07/16	
16-440	11/10/16	Karen Dodge	6300 Kingery	Signage	\$ 899.40	C	11/10/16	
16-441	11/14/16	Charles Hillebord	7150 S. Madison	Signage	\$ 234.00	C	11/14/16	
16-445	11/15/16	Tomato Bar	6300 Kingery Hwy	Temporary Sign	\$ 100.00	C	11/15/16	
16-446	11/15/16	Clovers	735 Plainfield	Temporary Sign	\$ 100.00	C	11/15/16	
16-272	11/22/16	Wayde Milas	7560 S. Quincy	Tenant Finish	\$ 3,633.71	C	11/22/16	
16-427	11/07/16	TGM Willowbrook	98 MacArthur Drive	Vehicle Impact	\$ 375.00	R	11/07/16	
16-448	11/16/16	Alan Meyer	7301 S. Kingery	Wall Packs and Pole	\$ 400.00	C	11/16/16	
16-450	11/16/16	Karen Dodge	6300 Kingery	Wall Sign	\$ 316.25	C	11/16/16	
16-449	11/16/16	Karen Dodge	6300 Kingery	Wall Sign	\$ 338.75	C	11/16/16	
16-425	11/01/16	James White	6645 Wedgewood Lane	Window Replacement	\$ 75.00	R	11/01/16	
16-452	11/17/16	Neil McNamara	7731 Eleanor Place	Window Replacement	\$ 75.00	R	11/17/16	

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
Fund 01 GENERAL FUND							
11/01/2016			01-00-310-401 BUILDING PERMITS		BEG. BALANCE		(310,147.07)
11/01/2016	CR	RCPT	Building Dept. Invoice 11/01/2016		1,000.00		(311,147.07)
11/02/2016	CR	RCPT	Building Dept. Invoice 11/02/2016		75.00		(311,222.07)
11/03/2016	CR	RCPT	Building Dept. Invoice 11/03/2016		1,075.00		(312,297.07)
11/07/2016	CR	RCPT	Building Dept. Invoice 11/07/2016		220.41		(312,517.48)
11/07/2016	CR	RCPT	Building Dept. Invoice 11/07/2016		375.00		(312,892.48)
11/08/2016	CR	RCPT	Building Dept. Invoice 11/08/2016		375.00		(313,267.48)
11/08/2016	CR	RCPT	Building Dept. Invoice 11/08/2016		130.00		(313,397.48)
11/09/2016	CR	RCPT	Building Dept. Invoice 11/09/2016		35.00		(313,432.48)
11/10/2016	CR	RCPT	Building Dept. Invoice 11/10/2016		54,635.27		(368,067.75)
11/11/2016	CR	RCPT	Building Dept. Invoice 11/11/2016		130.00		(368,197.75)
11/11/2016	CR	RCPT	Building Dept. Invoice 11/11/2016		300.00		(368,497.75)
11/14/2016	CR	RCPT	Building Dept. Invoice 11/14/2016		917.60		(369,415.35)
11/14/2016	CR	RCPT	Building Dept. Invoice 11/14/2016		75.00		(369,490.35)
11/15/2016	CR	RCPT	Building Dept. Invoice 11/15/2016		200.00		(369,690.35)
11/15/2016	CR	RCPT	Building Dept. Invoice 11/15/2016		375.00		(370,065.35)
11/16/2016	CR	RCPT	Building Dept. Invoice 11/16/2016		385.00		(370,450.35)
11/17/2016	CR	RCPT	Building Dept. Invoice 11/17/2016		2,572.91		(373,023.26)
11/17/2016	CR	RCPT	Building Dept. Invoice 11/17/2016		30.00		(373,053.26)
11/18/2016	CR	RCPT	Building Dept. Invoice 11/18/2016		1,582.15		(374,635.41)
11/18/2016	CR	RCPT	Building Dept. Invoice 11/18/2016		475.00		(375,110.41)
11/21/2016	CR	RCPT	Building Dept. Invoice 11/21/2016		3,333.71		(378,444.12)
11/22/2016	CR	RCPT	Building Dept. Invoice 11/22/2016		1,963.75		(380,407.87)
11/23/2016	CR	RCPT	Building Dept. Invoice 11/23/2016		1,573.95		(381,981.82)
11/28/2016	CR	RCPT	Building Dept. Invoice 11/28/2016		35.00		(382,016.82)
11/29/2016	CR	RCPT	Building Dept. Invoice 11/29/2016		25.00		(382,041.82)
11/29/2016	CR	RCPT	Building Dept. Invoice 11/29/2016		100.00		(382,141.82)
11/30/2016	CR	RCPT	Building Dept. Invoice 11/30/2016		75.00		(382,216.82)
11/30/2016			01-00-310-401	END BALANCE	0.00	72,069.75	(382,216.82)

74028.63

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
			Fund 01 GENERAL FUND				
11/01/2016			01-00-310-402 SIGN PERMITS		BEG. BALANCE		(5,056.02)
11/01/2016	CR	RCPT	Building Dept. Invoice 11/01/2016		513.28		(5,569.30)
11/03/2016	CR	RCPT	Building Dept. Invoice 11/03/2016		105.30		(5,674.60)
11/07/2016	CR	RCPT	Building Dept. Invoice 11/07/2016		119.00		(5,793.60)
11/08/2016	CR	RCPT	Building Dept. Invoice 11/08/2016		86.50		(5,880.10)
11/09/2016	CR	RCPT	Building Dept. Invoice 11/09/2016		96.10		(5,976.20)
11/11/2016	CR	RCPT	Building Dept. Invoice 11/11/2016		349.70		(6,325.90)
11/14/2016	CR	RCPT	Building Dept. Invoice 11/14/2016		234.00		(6,559.90)
11/17/2016	CR	RCPT	Building Dept. Invoice 11/17/2016		455.00		(7,014.90)
11/30/2016			01-00-310-402	END BALANCE	0.00	1,958.88	(7,014.90)



EST. 1960

# Willowbrook

835 Midway Drive  
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 [www.willowbrookil.org](http://www.willowbrookil.org)

## Mayor

Frank A. Trilla

### MONTHLY REPORT

### MUNICIPAL SERVICES DEPARTMENT

Permits issued for the month of December, 2016

## Village Clerk

Leroy R. Hansen

Balcony Rehabilitation	1
Concrete	1
Door Replacement	1
Electric Alterations	1
Interior Buildout	1
Interior Lighting	1
Kitchen Remodel	2
Lawn Irrigation	1
Meter Socket	1
Plumbing	1
Reoccupancy	2
Window Replacement	1
<b>TOTAL</b>	<b>14</b>

## Village Trustees

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

## Village Administrator

Tim Halik

## Chief of Police

Mark Shelton

Final Certificates of Occupancy	1
Temporary Certificates of Occupancy	0
Permit Revenue for December, 2016	9,337.62
Total Revenue Collected for Fiscal Year	
To Date	400,040.11
Total Budgeted for Fiscal Year 2016/17	232,500.00
Total Percentage of Budgeted Revenue	
Collected to Date	172.06

Respectfully submitted,

Timothy Halik  
Village Administrator

TH/jp



Proud Member of the  
Illinois Route 66 Scenic Byway

MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

Fiscal Year 2016/17

MONTH	CURRENT FISCAL YEAR	PRIOR FISCAL YEAR
MAY	\$ 28,379.31	\$ 11,447.58
JUNE	\$ 13,426.64	\$ 21,083.13
JULY	\$ 19,166.25	\$ 19,426.58
AUGUST	\$ 59,753.64	\$ 15,150.56
SEPTEMBER	\$ 62,997.75	\$ 146,015.93
OCTOBER	\$ 132,950.27	\$ 24,175.36
NOVEMBER	\$ 74,028.63	\$ 39,743.04
DECEMBER	\$ 9,337.62	\$ 15,692.73
JANUARY		\$ 9,450.41
FEBRUARY		\$ 9,393.21
MARCH		\$ 32,001.35
APRIL		\$ 25,586.99
COLLECTED REVENUE	\$ 400,040.11	\$ 369,166.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00
REVENUES COLLECTED- (OVER)/UNDER BUDGET	\$ (167,540.11)	(169,446.87)
PERCENTAGE OF BUDGETED REVENUE COLLECTED	172.06%	184.72

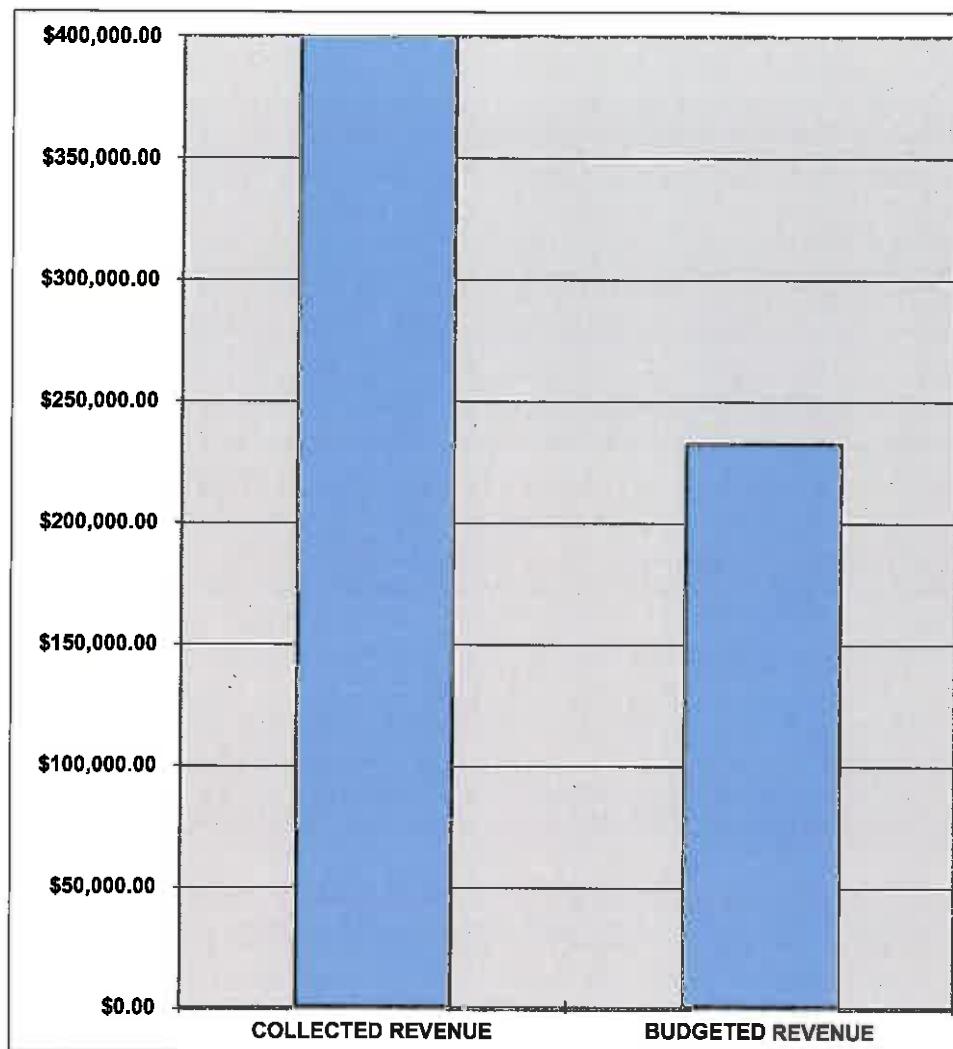
MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

	Fiscal Year 16/17	Fiscal Year 15/16
COLLECTED REVENUE	\$ 400,040.11	\$ 369,446.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00

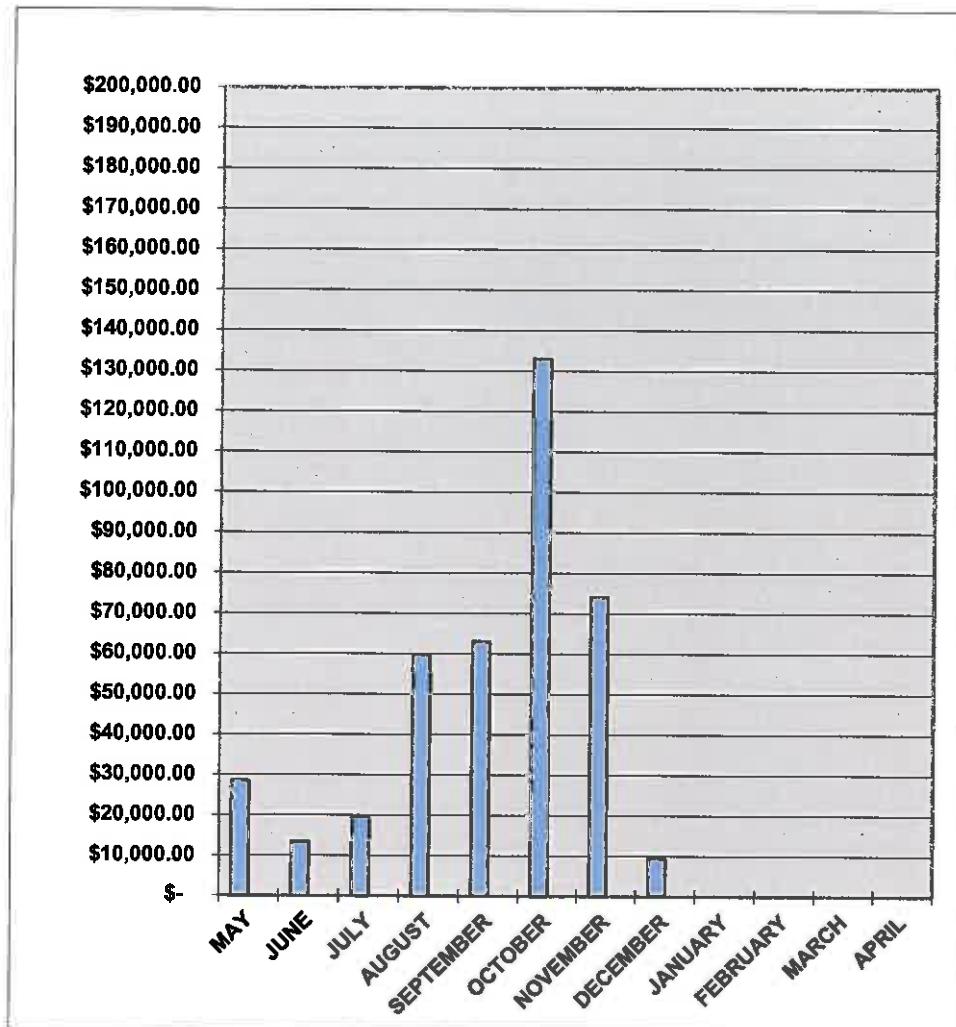
## MUNICIPAL SERVICES DEPARTMENT

### PERMIT REVENUE



# MUNICIPAL SERVICES DEPARTMENT

## PERMIT REVENUE



Permit	Date Issued:	Name:	Address:	Permit Purpose:	Business Name:	Fee:	RES / COMM:	Date Released:
16-463	11/30/16	Colleen McCormack	6401 Clarendon Hills Rd	Balcony Rehabilitation		\$ 2,260.00	R	12/01/16
16-462	12/06/16	Pam Duncan	501 W. 64th Street	Concrete		\$ 75.00	R	12/06/16
16-464	12/06/16	Angelee Johns	6147 Willowhills Road	Door Replacement		\$ 75.00	R	12/06/16
16-483	12/20/16	HCM Systems	7150 Madison	Electric Alterations	HCM Systems	\$ 900.00	C	12/20/16
16-391	12/06/16	Art Van Furniture	6938 Kingery Highway	Interior Buildout	Art Van Furniture	\$ 2,260.00	C	12/06/16
16-459	12/01/16	G&S Investments	555 Executive Drive	Interior Lighting	G&S Investments	\$ 2,073.95	C	12/01/16
16-456	12/06/16	Laura Trilla	6343 Tennessee Ave	Kitchen Remodel		\$ 431.84	R	12/06/16
16-478	12/14/16	Daiva Karla	6325 Clarendon Hills Rd	Kitchen Remodel		\$ 532.55	R	12/14/16
16-467	12/01/16	Morgan Harbour	7510 S. Madison Street	Lawn Irrigation	Morgan Harbour	\$ 125.00	C	12/01/16
16-473	12/06/16	Dolly Wang	364 Plainfield Road	Meter socket		\$ 100.00	R	12/06/16
16-468	12/06/16	Terry Dittus	77 Lake Hinsdale Dr	Plumbing		\$ 50.00	R	12/06/16
16-430	12/01/16	360 Truck Repair	800 W. 79th Street	Reoccupancy	360 Truck Repair	\$ 200.00	C	12/01/16
16-466	12/02/16	G&C Investments Inc.	555 Executive Drive	Reoccupancy	G&C Investments Inc.	\$ 200.00	C	12/01/16
16-472	12/06/16	John Diaz	419 79th Street	Window Replacement		\$ 75.00	R	12/06/16
16-479	12/20/16	Bill Murphy	18 Highridge	Window Replacement		\$ 75.00	R	12/20/16

Date	JNL	Type	Description
------	-----	------	-------------

### Reference

### Debit

## Credits

### Balance

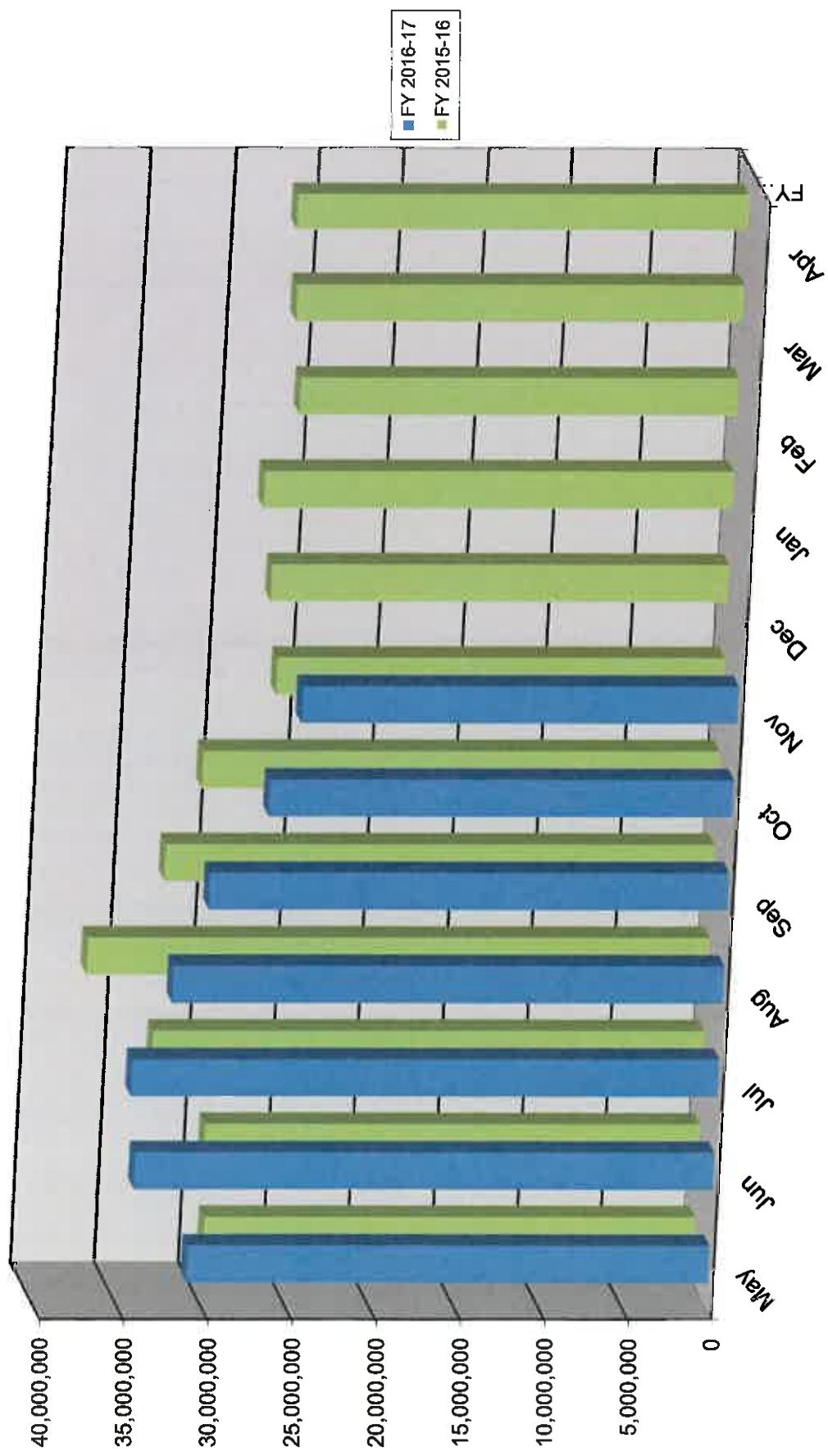
**VILLAGE OF WILLOWSBROOK - PUMPAGE REPORT**  
**TOTAL GALLONS PUMPED**  
**FY 2002/03 - FY 2016/17**

Month	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
May	32,267,000	33,518,000	35,018,000	35,919,000	35,162,000	36,696,000	33,890,000	31,322,000	31,715,000	30,725,000	34,220,000	30,860,000	29,547,000	29,213,000	31,048,000
June	38,911,000	38,691,000	35,447,000	48,511,000	42,471,000	43,700,000	33,817,000	32,087,000	31,799,000	32,620,000	44,635,000	31,512,000	32,193,000	29,447,000	34,451,000
July	52,100,000	39,116,000	41,248,000	52,479,000	43,279,000	44,574,000	41,463,000	36,819,000	38,513,000	41,371,000	49,498,000	39,106,000	33,122,000	32,813,000	34,898,000
August	44,167,000	40,433,000	41,059,000	47,861,000	41,114,000	38,778,000	43,017,000	38,516,000	38,745,000	35,639,000	40,272,000	41,448,000	32,796,000	36,985,000	32,739,000
September	40,838,000	36,275,000	39,658,000	43,906,000	32,998,000	42,013,000	33,418,000	34,331,000	33,992,000	32,273,000	33,657,000	35,737,000	31,869,000	32,623,000	30,853,000
October	33,128,000	31,667,000	33,765,000	35,009,000	31,937,000	34,612,000	30,203,000	28,919,000	33,789,000	29,892,000	30,283,000	29,226,000	28,728,000	30,690,000	27,589,000
November	28,560,000	28,260,000	30,106,000	29,515,000	29,153,000	29,847,000	28,054,000	26,857,000	28,125,000	27,138,000	27,535,000	28,446,000	25,364,000	26,585,000	25,929,000
December	30,503,000	29,133,000	32,786,000	31,086,000	30,102,000	31,435,000	29,568,000	28,931,000	29,257,000	28,643,000	27,863,000	29,847,000	26,710,000	27,194,000	
January	30,343,000	29,602,000	31,223,000	29,411,000	30,340,000	32,444,000	29,383,000	28,123,000	28,401,000	28,846,000	28,427,000	31,265,000	28,505,000	27,915,000	
February	27,216,000	28,755,000	26,768,000	27,510,000	29,078,000	29,470,000	26,629,000	25,005,000	24,988,000	26,635,000	24,308,000	29,230,000	25,484,000	26,048,000	
March	29,488,000	30,315,000	30,025,000	29,905,000	30,362,000	31,094,000	28,408,000	27,945,000	27,909,000	28,911,000	27,862,000	29,917,000	28,779,000	26,552,000	
April	29,845,000	29,350,000	29,478,000	30,452,000	29,468,000	30,239,000	27,193,000	27,793,000	27,145,000	34,220,000	27,514,000	28,101,000	25,255,000	26,791,000	
<b>TOTAL</b>	<b>417,366,000</b>	<b>395,115,000</b>	<b>406,581,000</b>	<b>441,564,000</b>	<b>405,464,000</b>	<b>424,902,000</b>	<b>385,043,000</b>	<b>366,648,000</b>	<b>374,378,000</b>	<b>376,913,000</b>	<b>396,074,000</b>	<b>384,695,000</b>	<b>348,352,000</b>	<b>352,856,000</b>	<b>217,507,000</b>

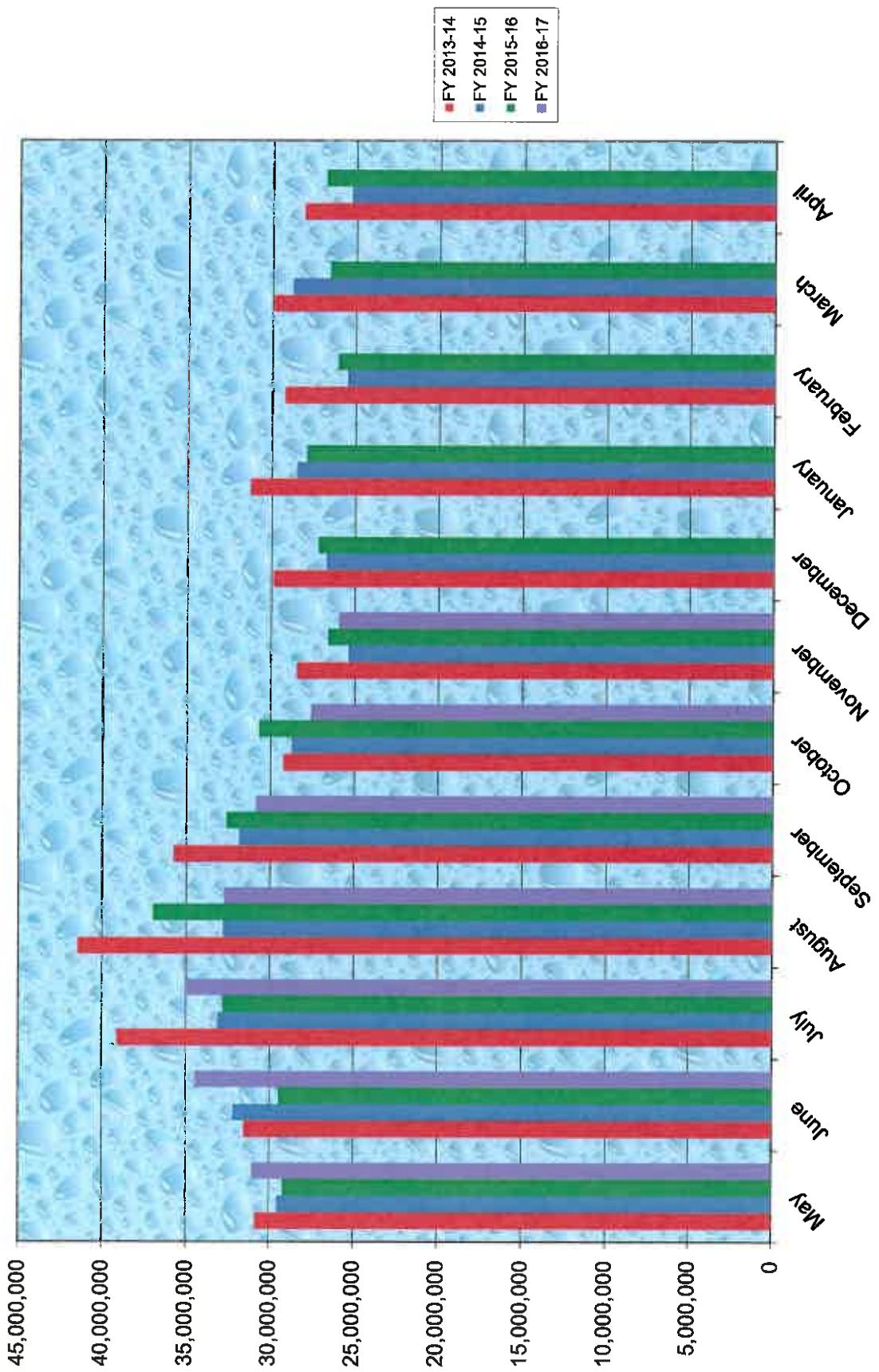
YEAR TO DATE LAST YEAR (gallons): **218,356,000**  
 YEAR TO DATE THIS YEAR (gallons): **217,507,000**  
 DIFFERENCE (gallons): **-849,000**  
 PERCENTAGE DIFFERENCE (+/-): **-0.39%**  
 FY16/17 PUMPAGE PROJECTION (gallons): **350,000,000**  
 FY16/17 GALLONS PUMPED TO DATE: **217,507,000**  
 CURRENT PERCENTAGE PUMPED COMPARED TO **62.14%**

All table figures are in millions of gallons sold on a monthly basis per fiscal year.

## Monthly Pumpage Chart



## Village of Willowbrook Pumpage Report



# CITY OF Willowbrook

## MONTHLY DATA REPORT

### Tons Collected by Month

	Refuse	Recyclables	Yard Waste	Recycling Detail	Email To:
				Paper Fiber	Commingled Containers
January-16	68.44	45.86		31.92	13.94
February-16	68.10	43.13		30.02	13.11
March-16	81.95	46.75		32.54	14.21
April-16	67.30	40.18	2.78	27.97	12.21
May-16	94.38	47.60	4.10	33.13	14.47
June-16	98.62	49.65	6.77	34.56	15.09
July-16	79.78	34.43	2.20	23.97	10.46
August-16	110.88	53.20	4.54	37.03	16.17
September-16	72.89	42.95	3.73	29.90	13.05
October-16	120.68	50.13	2.56	34.90	15.23
November-16	95.13	52.50	6.97	36.55	15.95
December-16				0.00	0.00
<b>Totals</b>	<b>958.15</b>	<b>506.38</b>	<b>33.65</b>	<b>352.49</b>	<b>153.89</b>
<b>Monthly Average</b>	<b>87.10</b>	<b>46.03</b>	<b>4.21</b>	<b>29.37</b>	<b>12.82</b>
<b>Weekly Average</b>	<b>20.10</b>	<b>10.62</b>	<b>0.97</b>	<b>6.78</b>	<b>2.96</b>

### Percentage of Materials Collected

- Refuse
- Recyclables
- Yard Waste



# CITY OF Willowbrook

## MONTHLY DATA REPORT

	Tons Collected by Month			Recycling Detail		Email To: <a href="mailto:ghummel@willowbrook.il.us">ghummel@willowbrook.il.us</a>
	Refuse	Recyclables	Yard Waste	Paper Fiber	Commingled Containers	
January-16	68.44	45.86		31.92	13.94	
February-16	68.10	43.13		30.02	13.11	
March-16	81.95	46.75		32.54	14.21	
April-16	67.30	40.18	2.78	27.97	12.21	
May-16	94.38	47.60	4.10	33.13	14.47	
June-16	98.62	49.65	6.77	34.56	15.09	
July-16	79.78	34.43	2.20	23.97	10.46	
August-16	110.88	53.20	4.54	37.03	16.17	
September-16	72.89	42.95	3.73	29.90	13.05	
October-16	120.68	50.13	2.56	34.90	15.23	
November-16	95.13	52.50	6.97	36.55	15.95	
December-16	75.16	42.24	1.30	29.40	12.84	
<b>Totals</b>	<b>1,033.31</b>	<b>548.62</b>	<b>34.95</b>	<b>381.89</b>	<b>166.73</b>	
<b>Monthly Average</b>	<b>86.11</b>	<b>45.72</b>	<b>3.88</b>	<b>31.82</b>	<b>13.89</b>	
<b>Weekly Average</b>	<b>19.87</b>	<b>10.55</b>	<b>0.90</b>	<b>7.34</b>	<b>3.21</b>	

### Percentage of Materials Collected

