

Date: June 21, 2022

Owner: City of Flowery Branch, Georgia

Project: Elevated Water Tank 1 Improvements

Flowery Branch Bid # 22-008

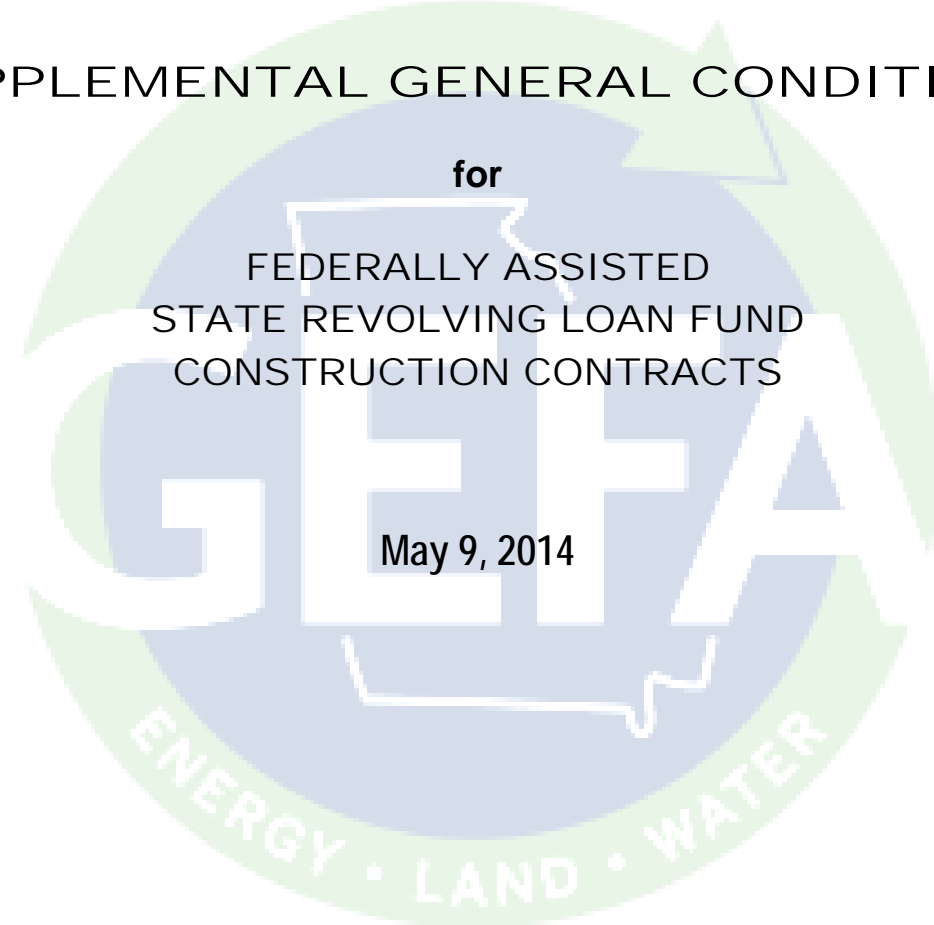
ADDENDUM NUMBER ONE

1. The following Addendum hereby amends and/or modifies the Contract Documents and any previous addenda as indicated and as issued by Infratec Consultants. All Bidders are subject to the provisions of this Addendum. Bidders shall acknowledge receipt of this Addendum on the Bid Form.
2. Change all references for the bid date to: Thursday, July 7, 2022, 2:00 PM, local time.
3. This project will be funded through the Georgia Environmental Finance Authority (GEFA). Add the enclosed Section 0015-GEFA Supplemental General Conditions; Section 0016 – Davis Bacon Wage Rates; and Section 0017-GEFA American Iron and Steel Special Conditions to the Bidding Documents. The Contractor shall comply with all additional bidding and construction requirements as outlined in the GEFA documents.
4. Remove and Replace Section 09800-Steel Water Tank 1 with the enclosed specification noted with Addendum No One. The paint specification has been updated to the upcoming potable water standards.
5. Remove and Replace Section 13412-Elevated Storage Tank No 1 with the enclosed specification noted with Addendum No One.
6. In Section 0013, C-700 Standard General Conditions; Article 6- Contractor's Responsibilities; Paragraph B under 6.02 Labor; Workings Hours; strike the words Saturday and Sunday.

End of Addendum Number One

Keith Hendrix, PE
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GEORGIA ENVIRONMENTAL FINANCE AUTHORITY
SUPPLEMENTAL GENERAL CONDITIONS



The following standard language must be incorporated into construction contract documents and in all solicitations for offers and bids for all construction contracts or subcontracts in excess of \$10,000 to be funded in whole or in part by the Federally-assisted State Revolving Fund in the State of Georgia.

These Supplemental General Conditions shall not relieve the participants in this project of responsibility to meet any requirements of other portions of this construction contract or of other agencies, whether these other requirements are more or less stringent. The requirements in these Supplemental General Conditions must be satisfied in order for work to be funded with the State Revolving Fund.

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INSTRUCTIONS & GENERAL REQUIREMENTS

It is the policy of the State Revolving Loan Fund (SRF) to promote a fair share of subcontract, materials, equipment and service awards to small, minority, and women-owned businesses for equipment, supplies, construction, and services. Compliance with these contract provisions is required in order for project costs to be eligible for SRF funding. The fair share objective is a goal, not a quota. Failure on the part of the apparent successful bidder to submit required information to the loan recipient (Owner) may be considered by the Owner in evaluating whether the bidder is responsive to bid requirements.

THE PRIME CONTRACTOR MUST SUBMIT THE FOLLOWING ITEMS TO THE OWNER:

A. Before beginning the work of any contract:

- 1) **DBE Compliance Form and related documentation.** The Owner must submit this information to the Georgia Environmental Finance Authority (GEFA) to demonstrate compliance with Disadvantaged Business Enterprise (DBE) requirements. GEFA concurrence is recommended prior to award of the construction contract and is required prior to commencement of any SRF-funded construction. (Pages GEFA-4&5)
- 2) **Certification Regarding Equal Employment Opportunity.** This form is required for the Prime Contractor and for all subcontractors. The Prime Contractor form should be submitted with the DBE Compliance Form, and the subcontractor forms should be submitted as the subcontracts are executed. (Page GEFA-9)
- 3) **Certification Regarding Debarment, Suspension, & Other Responsible Matters.** This form is required for the Prime Contractor and for all subcontractors. The Prime Contractor form should be submitted with the DBE Compliance Form and the subcontractor forms should be submitted as the subcontracts are executed. (Page GEFA-10)
- 4) ***EPA Form 6100-2 DBE Subcontractor Participation Form.** This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the Prime Contractor, how much the DBE subcontractor was paid, and any concerns the DBE subcontractor might have. The Prime Contractor must provide this form to each DBE subcontractor. The DBE subcontractor can, as an option, complete and submit this form to the GEFA DBE Coordinator, who will also forward the form to the EPA DBE Coordinator. (Page GEFA-11)
- 5) ***EPA Form 6100-3 DBE Subcontractor Performance Form.** This form captures the description of work to be performed by an intended DBE subcontractor and the price of the work. This form is to be provided by the Prime Contractor to each DBE subcontractor and submitted with the DBE Compliance Form. (Page GEFA-12)
- 6) ***EPA Form 6100-4 DBE Subcontractor Utilization Form.** This form captures intended or anticipated use of an identified DBE subcontractor by the Prime Contractor and the estimated dollar amount of the work. This form is to be completed by the Prime Contractor and submitted with the DBE Compliance Form. (Page GEFA-13)

* 6100 FORMS ARE NOT REQUIRED WHEN ALL OF THE WORK IS SELF-PERFORMED BY THE PRIME CONTRACTOR.

B. During the performance of the contract:

- 7) **Changes to Subcontractors Form.** If any changes, substitutions, or additions are proposed to the subcontractors included in previous GEFA concurrences, the Owner must submit this information to GEFA for prior concurrence in order for the affected subcontract work to be eligible for SRF funding. (Page GEFA-14)
- 8) **DBE Annual Report.** The Owner must submit this information to GEFA no later than October 20th of any year that the construction contract is active. (Page GEFA-15)
- 9) **Certified Payrolls.** These should be submitted to the Owner weekly for the Prime Contractor and all subcontractors. The Owner must maintain payroll records and make these available for inspection. Use Department of Labor form WH-347 or a similar form that contains all of the information on the Department of Labor.

THE OWNER MUST SUBMIT INFORMATION FOR GEFA REVIEW AND CONCURRENCE TO:

Georgia Environmental Finance Authority
Attention: DBE Compliance Coordinator
233 Peachtree Street, N.E.
Harris Tower, Suite 900
Atlanta, Georgia 30303
(404)584-1000; (404)584-1069 (fax)
dbe_compliance@gefa.ga.gov

DBE COMPLIANCE FORM

ALL INFORMATION OUTLINED ON THIS FORM IS REQUIRED FOR DBE COMPLIANCE REVIEW. THE PROPOSED PRIME CONTRACTOR AND OWNER SHOULD ENSURE THAT THIS INFORMATION IS COMPLETE PRIOR TO SUBMITTAL.

Loan Recipient _____

SRF Loan Number _____

PRIME CONTRACTOR'S AND OWNER'S CERTIFICATIONS:

I certify that the information submitted on and with this form is true and accurate and that this firm has met and will continue to meet the conditions of this construction contract regarding DBE solicitation and utilization. I further certify that criteria used in selecting subcontractors and suppliers were applied equally to all potential participants and that EPA Forms 6100-2 and 6100-3 were distributed to all DBE subcontractors.

(Prime Contractor signature)

Date _____

(Printed name and title)

I certify that I have reviewed the information submitted on and with this form and that it meets the requirements of the Owner's State Revolving Fund loan contract.

(Signature of Owner or Owner's representative)

Date _____

(Printed name and title)

CONTACT INFORMATION

Owner contact _____

Owner phone number & email _____

Consulting Engineer contact _____

Consulting Engineer phone number & email _____

Proposed Prime Contractor _____

Prime Contractor contact _____

Prime Contractor phone number & email _____

Proposed total contract amount \$ _____

Proposed total MBE participation \$ _____ Percentage _____ Goal: 4.0 percent

Proposed total WBE participation \$ _____ Percentage _____ Goal: 4.0 percent

CONTINUED ON NEXT PAGE

Please submit the following with the DBE Compliance Form:

- 1) List of all committed and uncommitted subcontractors by trade, including company name, address, telephone number, contact person, dollar amount of subcontract, and DBE/MBE/WBE status.
- 2) Indicate in writing if no solicitations were made because the Prime Contractor intends to use only its own forces to accomplish the work.
- 3) Proof of certification by EPA, SBA, DOT (or by state, local, Tribal, or private entities whose certification criteria match EPA criteria) for each subcontractor listed as a DBE, MBE, or WBE.
- 4) Documentation of solicitation efforts for prospective DBE firms, such as fax confirmation sheets, copies of solicitation letters and e-mails, printout of online solicitations, printouts of online search results and copies and affidavits of publication in newspapers or other publications. (see also, "**Six Good Faith Efforts**", page GEFA-7).
 - a. The Prime Contractor shall use the necessary resources to identify and directly solicit no less than 3 certified MBE firms and 3 certified WBE firms to bid in each expected subcontract trade or area. If a diligent and documented search of the recommended directories does not identify 3 potential certified MBE firms and 3 potential certified WBE firms, then the Prime Contractor shall post an advertisement in the Owner's local legal organ, the Owner's official website, a regional newspaper in a larger community in the proximity, the Prime Contractor's website, or some other appropriate resource.
 - b. The Prime Contractor is encouraged to follow-up each written, fax, or e-mail solicitation with at least 1 logged phone call.
 - c. Whenever possible, post solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- 5) Written justification for not selecting a certified DBE subcontractor that submitted a low bid for any subcontract area.
- 6) Certification By Proposed Prime Contractor or Subcontractor Regarding Equal Employment Opportunity (GEFA-9)
- 7) Certification By Proposed Prime or Subcontractor Regarding Debarment, Suspension, and Other Responsible Matters. (GEFA-10)
- 8) *EPA Form 6100-3 DBE Subcontractor Performance Form for all DBE subcontracts. (GEFA-12)
- 9) *EPA Form 6100-4 DBE Subcontractor Utilization Form for all DBE subcontracts. (GEFA-13)

*6100 forms are not required when all of the work is self-performed by the prime contractor.

END OF DBE COMPLIANCE FORM



DBE COMPLIANCE CHECKLIST

THE PRIME CONTRACTOR MUST SUBMIT THE FOLLOWING ITEMS TO THE OWNER BEFORE THE WORK BEGINS:

Loan Recipient _____

SRF Loan Number _____

Include in Package Submittal

PRIME CONTRACTOR ONLY	TOTAL CONTRACT AMOUNT	
ALL SUBCONTRACTORS, INCLUDING DBE FIRMS	TRADE	AMOUNT
ALL SUBCONTRACTORS, INCLUDING DBE FIRMS	TRADE	AMOUNT
DBE SUBCONTRACTORS ONLY	TRADE	AMOUNT
DBE SUBCONTRACTORS ONLY	TRADE	AMOUNT
PRIME CONTRACTOR ONLY <i>(Not applicable if self-performing all work, with no subcontracting)</i>		

1. **DBE Compliance Form.** The Owner must sign and submit this information to the Georgia Environmental Finance Authority (GEFA) to demonstrate compliance with DBE requirements. GEFA concurrence is recommended prior to award of the construction contract and is required prior to commencement of any SRF-funded construction. (Pages GEFA-4&5)

2. **Certification Regarding Equal Employment Opportunity.** This form is required for the Prime Contractor and for all subcontractors. The Prime Contractor's form should be submitted with the DBE Compliance Form and the subcontractors' forms should be submitted as the subcontracts are executed. (Page GEFA-9)

3. **Certification Regarding Debarment, Suspension, & Other Responsible Matters.** This form is required for the Prime Contractor and for all subcontractors. The Prime Contractor's form should be submitted with the DBE Compliance Form and the subcontractors' forms should be submitted as the subcontracts are executed. (Page GEFA-10)

4. **EPA Form 6100-2 DBE Subcontractor Participation Form.** This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from Prime Contractor, how much the DBE subcontractor was paid, and any other concerns the DBE subcontractor might have. The Prime Contractor must provide this form to each DBE subcontractor. The DBE subcontractor can, as an option, submit this form to the GEFA DBE Coordinator, who will forward the form to the EPA DBE Coordinator. (Page GEFA-11)

5. **EPA Form 6100-3 DBE Subcontractor Performance Form.** This form captures an intended DBE subcontractor's description of work to be performed for the Prime Contractor and the price of the work. This form is to be provided by the Prime Contractor to each DBE subcontractor and submitted with the DBE Compliance Form. (Page GEFA-12)

6. **EPA Form 6100-4 DBE Subcontractor Utilization Form.** This form captures the Prime Contractor's intended use of an identified DBE subcontractor and the estimated dollar amount of the work. This form is to be completed by the Prime Contractor and submitted with the DBE Compliance Form (Page GEFA-13)

Uncommitted Trades

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Documentation of Good Faith Efforts

Newspaper ads	Internet Websites	Fax Confirmation	Copies of Solicitation Emails/letters	Copies of phone logs
PROOF OF CERTIFICATION FOR EACH SUBCONTRACTOR LISTED AS A DBE, MBE, OR WBE				

SIX GOOD FAITH EFFORTS

These good faith efforts are required methods to ensure that DBEs have the opportunity to compete for procurements funded by EPA financial assistance dollars. Such good faith efforts are described as follows:

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. This will include placing DBEs on solicitation lists and soliciting them whenever there are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. This will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the resources, services, and assistance of the Department of Transportation (DOT), Small Business Administration (SBA), and the Minority Business Development Agency of the Department of Commerce (MBDA).
6. If the Prime Contractor awards subcontracts, it must take the steps described in items (1) through (5) listed above.

Please note that DBEs, MBEs, and WBEs must be certified by EPA, SBA, or DOT (or by state, local, Tribal, or private entities whose certification criteria match EPA's). DBEs must be certified in order to be counted toward the Prime Contractor's MBE/WBE goals. "Self-certified" DBE subcontractors will not be counted toward the Prime Contractor's MBE/WBE goals. Depending upon the certifying agency, a DBE may be classified as a DBE, a Minority Business Enterprise (MBE), or a Women's Business Enterprise (WBE).

The Prime Contractor must employ and document the **Six Good Faith Efforts** for all subcontracts, even if the Prime Contractor has achieved the fair share objectives.

The documentation of solicitations for the **Six Good Faith Efforts** must be detailed in order to allow for satisfactory review. Such documentation might include fax confirmation sheets, copies of solicitation letters/emails, printouts of the online solicitations, printouts of online search results and affidavits of publication in newspapers or other publications. The Prime Contractor is encouraged to follow up each written, fax, or e-mail solicitation with at least 1 logged phone call.

The Prime Contractor should attempt to identify and solicit DBEs in the geographic proximity of the project before soliciting those located farther away.

If a DBE subcontractor fails to complete work under the subcontract for any reason, the Prime Contractor must notify the Owner in writing prior to any termination and must employ the Six Good Faith Efforts described above if using a replacement subcontractor. Any proposed changes from the approved DBE subcontractor list must be reported to the Owner and to GEFA on the *Changes to Approved Subcontractors Form* (GEFA-14) prior to initiation of the action. EPA Forms Nos. 6100-3 and 6100-4 must also be submitted to GEFA for new DBE subcontracts.

RESOURCES FOR IDENTIFYING DBE SUBCONTRACTORS

RESOURCES FOR IDENTIFYING DBE SUBCONTRACTOR'S FOR DIRECT SOLICITATION:

Georgia Department of Transportation (GDOT)
Disadvantaged Business Enterprise Program
(404) 631-1972

http://tomcat2.dot.state.ga.us/ContractsAdministration/uploads/rptDBE_Directory_CA_New.pdf

City of Atlanta, Georgia
Office of Contract Compliance
(404) 330-6010

<http://pro.prismcompliance.com/>

DeKalb County, Georgia
Office of Purchasing and Contracting
(404) 371-4730

<http://www.co.dekalb.ga.us/purchasing/pdf/supplierList.pdf>

Fulton County, Georgia
Purchasing and Contract Compliance
(404) 612-5800

http://www.fultoncountyga.gov/plugins/content/external_links/frameset.php?url=http%3A%2F%2Fwww.occfultoncountyga.com%2FDirectory%2FMBEDirectoryExternal.aspx

Metropolitan Atlanta Rapid Transit Authority (MARTA)
Disadvantaged Business Enterprise Program
(404) 848-4656

<http://www.itsmarta.com/vendor-opportunities.aspx>

United States Environmental Protection Agency
http://www.epa.gov/osbp/dbe_team.htm

Teree Henderson
National DBE Program Coordinator
(202) 566-2222

henderson.teree@epa.gov

Georgia Environmental Finance Authority
DBE Compliance Coordinator
(404) 584-1000

www.gefa.ga.gov

dbe_compliance@gefa.ga.gov

NOTES:

- (1) The Prime Contractor shall use the necessary resources to identify and directly solicit no less than 3 certified MBE firms and 3 WBE firms to bid in each expected subcontract area or trade.
- (2) If a diligent and documented search of the recommended directories does not identify 3 potential certified MBE firms and 3 potential certified WBE firms, then the Prime Contractor shall post an advertisement in the Owner's local legal organ, the Owner's official website, a regional newspaper in a larger community in the proximity, the Prime Contractor's website, or some other appropriate resource. Whenever possible, post solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- (3) Expenditures to a DBE that acts merely as a broker or passive conduit of funds, without performing, managing, or supervising the work of its subcontract in a manner consistent with normal business practices may not be counted.
- (4) The Prime Contractor should attempt to identify and first solicit DBEs in the geographic proximity of the project before soliciting those located farther away.
- (5) Contact the GEFA DBE Compliance Coordinator at (404) 584-1000 or dbe_compliance@gefa.ga.gov for further assistance or resources.

**CERTIFICATION BY PROPOSED PRIME CONTRACTOR OR SUBCONTRACTOR
REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

Proposed Prime Contractor
Proposed Subcontractor

This certification is required pursuant to Executive Order 11246, Part II, Section 203 (b), (30 F.R. 12319-25). Any bidder or prospective prime contractor, or any of the proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicated that the prime or subcontractor has not filed a compliance report due under applicable instruction, such contractor shall be required to submit a compliance report.

(1) Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.
YES _____ NO _____

(2) Compliance Reports were required to be filed in connection with such contract or subcontract.
YES _____ NO _____ (If YES, state what reports were filed and with what agency.)

(3) Bidder has filed all compliance reports due under applicable instructions, including SF-100 (EEO-1 Report).
YES _____ NO _____ (If NO, please explain in detail.)

The information above is true and complete to the best of my knowledge and belief. (A willfully false statement is punishable by law – U.S. Code, Title 18, Section 1001.)

PRINTED NAME & TITLE OF AUTHORIZED REPRESENTATIVE OF CONTRACTOR OR SUBCONTRACTOR

SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

**CERTIFICATION BY PROPOSED PRIME CONTRACTOR OR SUBCONTRACTOR
REGARDING
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBLE MATTERS**

Proposed Prime Contractor
Proposed Subcontractor

Under Executive Order 12549 individuals or organizations debarred from participation in Federal Assistance Programs may not receive an assistance award under federal program or sub-agreement there under for \$25,000 or more. Accordingly each recipient of a State loan or a contract (engineering or construction) awarded under a loan must complete the following certification (see 40 CFR 32.510).

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause of default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. (A willfully false statement is punishable by law – U.S. Code, Title 18, Section 1001.)

PRINTED NAME & TITLE OF AUTHORIZED REPRESENTATIVE OF CONTRACTOR OR SUBCONTRACTOR

SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

_____ I am unable to certify to the above statements. My explanation is as follows:

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form**

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies	Amount Received by Prime Contractor

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Performance Form

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: <input type="checkbox"/> DOT <input type="checkbox"/> SBA <input type="checkbox"/> Other: _____		Meets/ exceeds EPA certification standards? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity:			

I have identified potential DBE certified subcontractors	___ YES	___ NO
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If yes, please complete the table below. If no, please explain:

Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue
on back
if needed

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

CHANGES TO APPROVED SUBCONTRACTORS FORM

Loan Recipient _____ SRF Loan Number _____

CERTIFICATIONS:

I certify that the information submitted on and with this form is true and accurate and that this firm has met and will continue to meet the conditions of this construction contract regarding DBE solicitation and utilization. I further certify that criteria used in selecting subcontractors and suppliers were applied equally to all potential participants.

 (Prime Contractor signature) Date _____

 (Printed name and title)

I certify that I have reviewed the information submitted on and with this form and that it meets the requirements of the Owner's State Revolving Fund loan contract.

 (Signature of Owner or Owner's representative) Date _____

 (Printed name and title)

GENERAL INFORMATION:

- 1) If an approved subcontractor is terminated or replaced, please identify this company and briefly state reason.

Subcontractor Name::	Trade
Reason Terminated or Replaced	

- 2) For new or additional subcontractors, list name, trade, address, telephone number, contact person, dollar amount of subcontract, and DBE status.

New Subcontractor Name and Contact Person	Trade
Address	Telephone Number
Dollar Amount	DBE Status

- 1) Attach proof of certification by EPA, SBA, DOT (or by state, local, Tribal, or private entities whose certification criteria match EPA's) for each subcontractor listed as a DBE, MBE, or WBE.
- 2) Attach documentation of Six Good Faith Efforts solicitation effort for all new subcontracts.
- 3) Provide justification for not selecting any certified DBE subcontractor that submitted a low bid for any subcontract area.
- 4) For each subcontractor, attach certifications regarding Equal Employment Opportunity (GEFA-9) and certifications regarding Debarment, Suspension, and Other responsible Matters (GEFA-10)

DBE ANNUAL REPORT
FORM (5700-52A)

This form must be completed by recipients of federal financial assistance for procurement of supplies, equipment, construction or services. SRF loan recipients are required to submit this report to GEFA by the 20th of October for the previous period of October 1 through September 30. Please submit a "negative" report even if \$0 is the amount paid to MBE/WBE subcontractors during the reporting period.

ANNUAL REPORT FORM (5700-52A)			
1. PRIME CONTRACTOR		2. REPORTING PERIOD (Complete date using current year.) Period Ending (September 30, _____)	
3. SUBMIT TO: Georgia Environmental Finance Authority Attention: DBE Compliance Coordinator 233 Peachtree Street, N.E. Harris Tower, Suite 900 Atlanta, Georgia 30303 dbe_compliance@gefa.ga.gov		4. LOAN RECIPIENT (Name, Address and Telephone)	
5. LOAN RECIPIENT (OWNER) REPORTING CONTACT	PHONE:	6. TYPE OF FEDERAL FINANCIAL ASSISTANCE PROGRAM (Check one) CWSRF _____ DWSRF _____	7. SRF LOAN NUMBER
8. CONTRACTOR NAME & TOTAL CONSTRUCTION CONTRACT AMOUNT		9. ACTUAL DOLLAR AMOUNT PAID TO MBE/WBE SUBCONTRACTORS THIS PERIOD \$ MBE _____ \$ WBE _____ NEGATIVE REPORT (\$0) ____	
10. RECIPIENT'S MBE/WBE GOALS MBE 4.0 % WBE 4.0 %		11. TOTAL DOLLARS SPENT THIS PERIOD MBE \$ _____ WBE \$ _____ NON MBE/WBE \$ _____ TOTAL \$ _____	
12. NAME & TITLE OF AUTHORIZED REPRESENTATIVE OF LOAN RECIPIENT (OWNER).		13. SIGNATURE OF AUTHORIZED REPRESENTATIVE OF LOAN RECIPIENT.	14. DATE
MBE/WBE PAYMENTS MADE DURING PERIOD			
NAME & ADDRESS of DBE (SUB)CONTRACTOR (indicate if MBE or WBE firm)		TOTAL DOLLAR AMOUNT PAID & DATE PAID \$ _____ DATE _____	

SPECIAL PROVISIONS

- (a) The Prime Contractor is required to pay its subcontractors in accordance with the Georgia Prompt Payment Act (OCGA 13-11).
- (b) The Prime Contractor is required to insert the entirety of the Davis Bacon contract requirements into all subcontracts
- (c) Sewer line and water line crossing of all roads and streets shall be done in accordance with the Georgia Department of Transportation (D.O.T.) Policies and Procedures and must comply with the Ga. D.O.T. Standard Specifications, Construction of Roads and Bridges, 1993 Edition.
- (c) Construction shall be carried out so as to prevent bypassing of wastewater flow and to prevent interruption of drinking water treatment during construction. EPD must receive written notification prior to any reduction in the level of treatment and must approve all temporary modifications to the treatment process prior to the activity.
- (d) Erosion and Sedimentation Control shall be accomplished in accordance with the Georgia Erosion and Sedimentation Control Act of 1975 as currently amended and NPDES General Permits (Storm Water from Construction Sites). See also www.gaepd.org and www.gaswcc.georgia.gov for information regarding permits.
- (e) Use of Chemicals: All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in conformance with State and local regulations as appropriate.
- (f) It is the duty of the Prime Contractor, the Owner and the Engineer to ensure the construction of the project, including the letting of contracts in connection therewith, shall comply with all applicable laws and regulations and requirements of the United States of America or any agency thereof, the state of Georgia or any agency thereof, territorial, or any local government laws or political subdivision and ordinances to the extent that such requirements do not conflict with Federal laws and this subchapter.
- (g) EPD, EPA, and GEFA shall have access to the site and the project work at all times.

BONDS

Bonding requirements for Contracts of \$100,000 or less are contained in the General Conditions. Bond requirements of contracts in excess of \$100,000 are:

1. Bid guarantee equivalent to five percent of the bid price. The bid guarantee shall consist of a firm commitment such as a certified check or bid bond submitted with the bid.
2. Performance bond equal to 100 percent of the contract price and;
3. Payment bond equal to 100 percent of the contract price. Bonds must be obtained from companies holding Certificates of Authority as acceptable sureties, issued by the U.S. Treasury.

SPECIAL NOTICE TO BIDDERS

By the submission of this bid, each bidder acknowledges that he understands and agrees to be bound by the equal opportunity requirements of EPA regulations (40 CFR Part 8, particularly Section 8.4 (b)), which shall be applicable throughout the performance of work under any contract awarded pursuant to this solicitation. Each bidder agrees that if awarded a contract, it will similarly bind contractually each subcontractor. In implementation of the foregoing policies, each bidder further understands and agrees that if awarded a contract, it must engage in affirmative action directed at promoting and ensuring equal employment opportunity in the workforce used under the contract (and that it must require contractually the same effort of all subcontractors whose subcontracts exceed \$10,000.00). The bidder understands and agrees that "affirmative action" as used herein shall constitute a good faith effort to achieve and maintain minority employment in each trade in the on-site workforce used on the project.

EQUAL EMPLOYMENT OPPORTUNITY NOTICE

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the Equal Opportunity Clause which is included in the nondiscrimination Provision and Labor Standards, EPA Form 5720-4 and the Standard Federal Equal Employment Opportunity (EEO) Construction Contract Specifications set forth herein.
2. The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	4.0 percent
Goals for female participation for each trade	4.0 percent

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minority and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation to the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical area where the contract is to be performed giving the state, county and city, if any).

EEO Construction Contract Specifications (Executive Order 11246)

EEO Specifications:

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Program, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form, 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7(a) through (p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trained programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7(b) above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations 7(a) through (p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7(a) through (p) of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes

a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Davis-Bacon and Related Acts

Labor Standards Provisions for Federally Assisted Contracts

Contract Provision for Contracts in Excess of \$2,000.

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, <http://www.dol.gov/whd/govcontracts/dbra.htm> (E-tools)

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient (s) to the State award official. The State award official will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The subrecipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly

payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the

meaning of this clause include disputes between the contractor (or any of its subcontractors) and Subrecipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job

(5) Compliance Verification:

(a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the subrecipient should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The subrecipient shall periodically review contractors and subcontractors' use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must provide a report of compliance to the Georgia Environmental Finance Authority detailing compliance efforts and results. This report will be submitted with or prior to the loan recipient's first request for funding of construction costs, prior to final disbursement of funds from the loan, and as requested by the GEFA during the project.

(f) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB coordinator and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/whd/america2.htm>.

INSERT WAGE RATE DETERMINATION HERE

Wage Rates (for *Heavy Construction*) are state/county specific can be found at:

<http://www.dol.gov/whd/govcontracts/dbra.htm>

Sample Payroll Form (WH-347) is found at:

<http://www.dol.gov/whd/forms/wh347.pdf>

Labor Standards Interview Form (SF-1445) is found at:

<http://www.gsa.gov/portal/forms/download/115910>

Davis-Bacon (WH-1321) poster is found at:

<http://www.dol.gov/whd/regs/compliance/posters/fedprojc.pdf>
(English)

<http://www.dol.gov/whd/regs/compliance/posters/davispan.pdf>
(Spanish)

Fair Labor Standards Act Minimum Wage poster is found at:

<http://www.dol.gov/whd/regs/compliance/posters/minwagebwp.pdf>
(English)

<http://www.dol.gov/whd/regs/compliance/posters/minwagespbwP.pdf>
(Spanish)

“EEO Is the Law” poster is found at:

http://www.eeoc.gov/employers/upload/eeoc_self_print_poster.pdf
(English)

http://www.eeoc.gov/employers/upload/eeoc_self_print_poster_spanish.pdf
(Spanish)

“EEO Is the Law” poster supplement is found at:

http://www.eeoc.gov/employers/upload/eeoc_gina_supplement.pdf
(English)

http://www.eeoc.gov/employers/upload/eeoc_gina_supplement_spanish.pdf
(Spanish)

OSHA poster is found at:

<http://www.osha.gov/Publications/osha3165low-res.pdf>
(English)

<http://www.osha.gov/Publications/osha3167.pdf>
(Spanish)

CERTIFIED PAYROLL REVIEW CHECKLIST

(This is a *recommended Certified Payroll Review Checklist for the Owner's use.*)

CONTRACT ID City of CW/DWSRF#00 - 000	PRIME CONTRACTOR/SUBCONTRACTOR X Construction
GENERAL WAGE DECISION AND DATE (Insert number & date)	PAYROLL PERIOD ENDING

INSTRUCTIONS: This checklist is to be used in conjunction with projects requiring Davis-Bacon Wage Rates and compliance reviews. All certified payrolls are to be date stamped upon receipt from the prime contractor.

Payroll Information Checklist:

- Prime Contractor's or subcontractor's name and address
- Contract ID numbers (GEFA SRF No.)
- Week ending.
- Project location.

- Employee ID or Last 4 digits of Social Security Number
 - Social Security Number removed
 - Employee's work classification
 - Identification of OJTs, apprentices and program levels (%) on payrolls.
 - Verify that OJT and Apprentice Program documentation is in project files.

- Daily and weekly employee hours worked in each job classification.
 - Daily and weekly employee overtime (or premium) hours worked
 - Total weekly hours worked on all jobs (prevailing and non-prevailing wage).
 - Base rate shown for each employee, overtime (or premium) rate shown when worked.
 - Verify correct wage rates are being paid.
 - Verify overtime is being paid correctly (over 40 hrs/wk, and Time and a half)
 - Week's gross wages
 - Week's itemized deductions.
 - Week's net wages paid

- Compliance statement attached.
 - Method of fringe benefit payment described by checking either box (4)(a) or (4)(b).
 - Fringe benefit package information in file and updated as needed (if 4(a) is checked)
 - Exceptions explanation for fringe benefit (4)(c).
 - Signature.

Compliance Review Checklist (for field reviews):

- Verify work classifications reported are consistent with the work performed.
- Compare payrolls with wage rate interviews when conducted.
- Compare number of employees and hours worked with project documentation.

REVIEWED BY:	DATE
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Attached are the Davis Bacon Wage Rates (Heavy Construction) for Hall County, Georgia.

"General Decision Number: GA20210071 04/16/2021

Superseded General Decision Number: GA20200071

State: Georgia

Construction Type: Heavy
Heavy Construction, Includes Water and Sewer Lines, and Heavy Construction on Treatment Plant Sites and Industrial Sites (Refineries, Power Plants, Chemical and Manufacturing Plants, Paper Mills, Etc.)

County: Hall County in Georgia.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	04/16/2021

* ELEC0613-022 09/01/2020

	Rates	Fringes
ELECTRICIAN.....	\$ 33.00	31%

ENGI0926-019 07/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR: Crane, Mechanic.....	\$ 32.63	13.83

 SUGA2012-101 08/11/2012

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 15.44	0.00
CARPENTER, Excludes Form Work....	\$ 14.76	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 16.96	0.00
IRONWORKER, REINFORCING.....	\$ 13.30	1.66
LABORER: Common or General.....	\$ 9.84	0.00
LABORER: Pipelayer.....	\$ 11.17	0.92
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 14.46	0.00
OPERATOR: Bulldozer.....	\$ 14.58	0.00
OPERATOR: Grader/Blade.....	\$ 20.24	0.00
OPERATOR: Loader.....	\$ 16.59	4.13
OPERATOR: Piledriver.....	\$ 18.72	2.06
OPERATOR: Roller.....	\$ 12.04	0.69
TRUCK DRIVER: Dump Truck.....	\$ 12.79	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 17.28	1.84

 WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a

new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

GEORGIA ENVIRONMENTAL FINANCE AUTHORITY

AMERICAN IRON AND STEEL SPECIAL CONDITIONS AND INFORMATION

For

FEDERALLY ASSISTED STATE REVOLVING LOAN FUND CONSTRUCTION CONTRACTS

April 11, 2014

The following standard language must be incorporated into construction contract documents and in all solicitations for offers and bids for all construction contracts or subcontracts to be funded, in whole or in part, through the Federally-assisted State Revolving Fund in the State of Georgia for projects subject to the American Iron and Steel requirements.

These Special Conditions shall not relieve the participants in this project of responsibility to meet any requirements of other portions of this construction contract or of other agencies, whether these other requirements are more or less stringent. The requirements in these Special Conditions must be satisfied in order for work to be funded with the State Revolving Fund.

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GENERAL REQUIREMENTS

These Special Conditions are based on guidance provided by the United States Environmental Protection Agency (EPA). Public Law 113-76, the Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel" (AIS) requirement that requires State Revolving Loan Fund (SRF) assistance recipients to use iron and steel products that are produced in the United States for projects in this project. A copy of Section 436 of the Act is found in Appendix 3.

The products and materials subject to these requirements will be defined in Appendix 1 of these special conditions.

The Owner must maintain documentation of compliance with the AIS requirements. The documentation that the Owner maintains will be subject to review and audit by representatives of the state of Georgia, the EPA, the EPA Office of the Inspector General, and other federal authorities.

The Prime Contractor must provide certifications of compliance for all products subject to AIS requirements to the Owner prior to requesting payments for those products. The Owner or the Engineer may require certifications of compliance with submittals and shop drawings for these products as part of the submittal review process.

All manufacturing processes for a covered iron or steel product, as further defined in Appendix 1, must take place in the United States. If a covered product is taken out of the US for any part of the manufacturing process, it becomes foreign source material.

The EPA recommends the use of a step certification process to document the locations of the manufacturing processes involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products certifies that its step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification should include the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached in Appendix 2 is a sample step certification.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes for the product and for its iron and steel components occurred in the United States. The EPA states that additional documentation may be needed if the certification lacks important information and recommends step certification as the best practice. A sample final manufacturer certification is attached in Appendix 2.

The Prime Contractor may document that incidental and generally low cost components, as defined in Appendix 1, are compliant with AIS requirements under the De Minimis Waiver issued by the EPA. For these items, the Contractor must provide the Owner with documentation of costs for these items, including invoices, and a report of types and categories of materials to which the waiver is applied, the total cost of incidental components covered by the waiver for each category, and the calculations by which the total cost of materials incorporated into the project was determined. A sample De Minimis report is attached in Appendix 2.

Contractor, supplier, and manufacturer records are subject to review and audit by the EPA, its Inspector General, and other federal authorities.

Failure to comply with these requirements may delay, limit, or prevent the disbursement of SRF funds to the Owner. Violations of AIS requirements will require correction by the Contractor as determined by the Owner and Engineer, including replacement of deficient products with compliant products and compensation for costs and other damages that may result. Violations may also subject the Owner, the Contractor, and suppliers to other enforcement actions within the discretion of the EPA and other federal authorities.

The Act permits EPA to issue waivers for a case or category of cases in which EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent. The Contractor should notify the Owner and Engineer immediately if it finds that a waiver may be required.

By submitting a bid for this project and by executing this construction contract, the Contractor acknowledges to and for the benefit of the Owner and the state of Georgia that it understands that the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund and that Federal law authorizing these Funds contains provisions commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and the state of Georgia that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the state of Georgia. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or the state of Georgia to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner or the state of Georgia resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the state of Georgia or any damages owed to the state of Georgia by the Owner). The Owner and the Contractor agree that the state of Georgia, as a lender to the Owner for the funding of its project, is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the state of Georgia.

Appendix 1 – Definitions

For purposes of the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the project:

Lined or unlined pipes or fittings;
Manhole Covers;
Municipal Castings (defined in more detail below);
Hydrants;
Tanks;
Flanges;
Pipe clamps and restraints;
Valves;
Structural steel (defined in more detail below);
Reinforced precast concrete (defined in more detail below); and
Construction materials (defined in more detail below).

Product primarily of iron or steel: The product must be made of greater than 50% iron or steel, measured by cost. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required, except as required for reinforced precast concrete. If a product is composed of more than 50% iron or steel, but is not listed in Section 436 (a) (2) of the Act, it is not required to be produced in the US. Alternatively, the iron or steel in such a product can be sourced from outside the US.

Steel: An alloy that includes at least 50 percent iron and between 0.02 and 2 percent carbon and may include other elements. Other alloys of iron are not required to be produced in the US.

Produced in the United States: Production in the US of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

Municipal Castings: Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings include access hatches, ballast screen, benches, bollards, cast bases, cast iron hinged hatches, cast iron riser rings, catch basin inlets, cleanout/monument boxes, construction covers and frames, curb and corner guards, curb openings, detectable warning plates, downspout shoes, drainage grates, frames & curb inlets, inlets, junction boxes, lampposts, manhole covers, rings & frames, risers, meter boxes, steel hinged hatches, steel riser rings, trash receptacles, tree grates, tree guards, trench grates, and valve boxes.

Structural Steel: Structural steel is rolled flanged shapes, having at least one dimension of their cross-section 3 inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

Reinforced Precast Concrete: While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing rebar must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin. If the reinforced concrete is cast at the construction site, the reinforcing rebar is considered to be a construction material and must be produced in the US.

Construction Materials subject to AIS: Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: welding rods, wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, gates, and screens.

Construction Materials not subject to AIS: Mechanical and/or electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples, including their appurtenances necessary for their intended use and operation, are NOT considered construction materials: pumps, motors, gear reducers, drives, variable frequency drives (VFDs), mixers, blowers/aeration equipment, compressors, meters, electric/pneumatic/manual accessories used to operate valves (such as valve actuators), gates, motorized screens (such as traveling screens), sensors, controls, switches, supervisory control and data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, dewatering equipment, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, and analytical instrumentation.

Items temporarily used during construction, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel. For example, trench boxes or scaffolding are not considered construction materials subject to AIS requirements.

Incidental Components compliant with AIS under the De Minimis Waiver: This waiver permits the use of de minimis incidental components that may otherwise be prohibited under AIS. These de minimis items may cumulatively comprise no more than a total of 5 percent of the total cost of the materials used in and incorporated into the project. The cost of an individual item may not exceed 1 percent of the total cost of the materials used in and incorporated into the project.

These items are miscellaneous, generally low-cost components that are essential for, but incidental to, the construction and are permanently incorporated into the project. For many of these incidental components, the country of manufacture and the availability of alternatives are not always readily or reasonably identifiable prior to procurement in the normal course of business. For other incidental components, the country of manufacture may be known, but the miscellaneous character in conjunction with the low cost, individually and in total, as typically procured in bulk, mark them as properly incidental. Examples of incidental components include small washers, screws, fasteners (i.e., nuts and bolts), miscellaneous wire, corner bead, ancillary tube.

Examples of items that are not incidental and are not covered by the De Minimis Waiver include significant process fittings (i.e., tees, elbows, flanges, and brackets), distribution system fittings and valves, force main valves, pipes for sewer collection and/or water distribution, treatment and storage tanks, large structural support structures.

Items covered as compliant under this waiver must be documented in a report to the Owner to demonstrate that they are both incidental and that they fall within the cost allowances of this waiver. The costs of these items must be documented by invoices. The report must include a listing of types and categories of materials to which the waiver is applied, the total cost of incidental components covered by the Waiver for each category, and the calculations by which the total cost of materials incorporated into the project was determined.

Appendix 2 – Sample Certifications Step Certification

The following information is provided as a sample letter of step certification for American Iron and Steel compliance. Documentation must be provided on company letterhead. This is to be provided by each handler (supplier, fabricator, manufacturer, processor, etc.). Each time a step in the manufacturing process takes place, the handler delivers its work along with a certification of its origin.

Date

Company Name
Company Address
City, State Zip

Subject: American Iron and Steel Step Certification for Project (Insert project name and SRF number)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

List of items, products and/or materials:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Appendix 2 – Sample Certifications

Final manufacturer certification

The following information is provided as a sample letter of the final manufacturer to certify American Iron and Steel compliance for the entire manufacturing process. Documentation must be provided on company letterhead.

Date

Company Name
Company Address
City, State Zip

Subject: American Iron and Steel Certification for Project (Insert project name and SRF number)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement of P.L. 113-76 and as mandated in EPA's State Revolving Fund Programs.

List of items, products and/or materials:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Appendix 2 – Sample Certifications Contractor De Minimis Report

Owner: (Owner Name)

SRF Project No: (SRF Number)

Project Description: (Contract title or brief description)

Date: (Date of report)

Submitted by (name & title): (Contractor representative)
Company Name

**LIST OF MATERIALS
OR CATEGORIES OF MATERIALS
PERMANENTLY INCORPORATED
INTO THE PROJECT**

	COST
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00
Category or Item	\$1,000.00

Total Permanent Materials **\$10,000.00**

1 % of total material cost	\$100.00	Maximum cost for individual item waived
5 % of total material cost	\$500.00	Maximum cumulative cost for category waived

**LIST OF MATERIALS
OR CATEGORIES OF MATERIALS
COVERED BY
DE MINIMIS WAIVER**

	COST	COMPLIANT (Yes/No)
Category or Item	\$100.00	Yes
Category or Item	\$100.00	Yes
Category or Item	\$100.00	Yes
Category or Item	\$100.00	Yes
Category or Item	\$100.00	Yes

Total De Minimis Items **\$500.00** **Yes**

INVOICES ATTACHED FOR DE MINIMIS ITEMS.

Appendix 3 – P.L. 113-76, Consolidated Appropriations Act, 2014

The Act states:

Sec. 436 (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j–12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency’s capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

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**SECTION 09800
STEEL WATER TANK PAINTING**

PART 1 - GENERAL

1.1 SCOPE

- A. Work covered within this section includes the cleaning, painting and disinfection of all interior and exterior surfaces of the elevated water storage tank, including ladders, vents, balcony, overflow pipe and handrails.
- B. The Contractor shall paint the City of Flowery Branch Logo as shown on the plans on two sides of the tank, with exact side to be field determined. The City will provide the actual color descriptions to the contractor.
- C. It is the Contractor's responsibility to assure that surrounding buildings, vehicles and structures are not damaged or sprayed with paint, regardless of the environmental conditions. If buildings, vehicles or structures are damaged due to the painting, it is the Contractor's responsibility repair and/or replace the items damaged.

1.2 SUBMITTALS

- A. Submit to the Owner's Representative, in accordance with Division 1, all copies of materials required to establish compliance with this Section. Submittals shall include at least the following:
 - 1. Product Data: Submit manufacturer's descriptive data fully describing each product including solids by volume and un-thinned volatile organic compounds (VOC)'s. Include manufacturer's recommendations for mixing, thinning, and curing.
 - 2. Certificates: Submit manufacturers certified test reports confirming compliance with the specified performance requirements under Paragraph 1.3.
 - 3. Colors: Submit 4 color charts for color selection.
 - 4. Lead Content: Submit manufacturer's certification that products to be supplied are lead free (less than 600 ppm lead).

1.3 REFERENCE STANDARDS

- A. American Water Works Association
 - 1. AWWA D100 – Standard for Welded Steel Tanks for Water Storage
 - 2. AWWA D102 – Standard for Painting Steel Water Storage Tanks
 - 3. AWWA C652 – Standard for Disinfection of Water Storage Facilities
- B. National Sanitation Foundation
 - 1. **NSF 600** – Material in Contact with Potable Water
- C. Steel Structures Painting Council Manual – Volume 1 – Good Painting Practice
- D. Steel Structures Painting Council Manual – Volume 2 – Systems and Specifications
- E. Federal Test Methods for the Performance of Paints and Coatings.

1.4 QUALITY ASSURANCE

A. Contractor Qualifications

1. The Contractor shall have three years practical experience and successful history in the Application of specified product to surfaces of steel water tanks. Upon request, he shall substantiate this requirement by furnishing a list of references and job completions.
2. The Contractor shall submit with his bid a written statement by the coatings manufacturer stating that the Contractor is familiar with the materials specified and has workers capable of performing the work specified herein.
3. The personnel performing the work shall be knowledgeable and have the required experience and skill to adequately perform the work for this project, in accordance with SSPC-PA1, "Shop, Field and Maintenance Painting".

B. General

1. Quality assurance procedures and practices shall be utilized to monitor all phases of surface preparation, application and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are approved by the Engineer.
2. Materials for each coating system shall be those of a single manufacturer. Manufacturer's representative shall be available to advise applicator on proper application techniques and procedures.
3. All prime, intermediate and finish coating materials shall be applied in different color shades.
4. The Contractor shall obtain the approval of the Engineer of the steel surface preparation and of each coat of paint prior to applying succeeding coats. Such approval will not relieve the Contractor of the obligations stated within.
5. The Contractor shall record environmental conditions at the beginning of each daily operation, thirty minutes before painting begins and every hour during painting operations.

C. Surface Preparation

1. Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces: SSPC-VIS 1-89", ASTM Designation D2200-95, "Pictorial Surface Preparation Standards for Painting Steel Surfaces", ASTM D 4417-91, Method A and/or Method C "Field Measurement of Surface Profile of Blast Cleaned Steel" or NACE Standard RP0287-87 "Field Measurement of Surface Profile of Abrasive Blast Cleaned Steel Surfaces Using a Replica Tape". In all cases the written standard shall take precedence over the visual standard. In addition, NACE Standard RP0178-91, "Fabrication Details, Surface Finish Requirements, and Proper Design Considerations for Tanks and Vessels to be Lined for Immersion Service", along with the Visual Comparator, shall be used to verify the surface preparation of welds.

D. No coating or paint shall be applied when:

1. The surrounding air temperature or the temperature of the surface to be coated or painted is below the minimum surface temperature for the products specified herein.
2. Rain, snow, fog or mist is present.
3. The surface temperature is less than 5F above the dew point,
4. The air temperature is expected to drop below the minimum temperature for the products specified within six hours after application of coating. Dewpoint shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables.

5. If any of the above conditions are prevalent, coating or painting shall be delayed or postponed until conditions are favorable. The day's coating or painting shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.
- E. Thickness and Holiday Checking:
 1. Thickness of coatings and paint shall checked with a non-destructive, magnetic-type thickness gauge, as per SSPC-PA 2 "Measurement of Dry Film Thickness with Magnetic Gages". References in PA 2 which allow 80% of the minimum thickness specified are not acceptable. Use an instrument such as a Tooke Gauge if a destructive test is deemed necessary by the Engineer.
 2. The integrity of interior coated surfaces shall be checked with a low voltage holiday detector in accordance with NACE Standard RP0188. Non-destructive holiday detector shall not exceed 67.5 volts, nor shall destructive holiday detector exceed the voltage recommended by the manufacturer of the coating system. A solution of 1 ounce non-sudsing type wetting agent, such as Kodak Photo-Flo, and 1 gallon of tap water shall be used to perform the holiday testing. All pinholes and/or holidays shall be marked and repaired in accordance with the manufacturer's printed recommendations and retested. No pinholes or other irregularities will be permitted in the final coating.
- F. The contractor shall furnish, until final acceptance of coating and painting is accepted, inspection devices in good working condition for detection of holidays and measurement of dry film thickness of coating and paint. The Contractor shall also furnish U.S. Department of Commerce, National Bureau of Standards certified thickness calibration plates and/or plastic shims, depending upon the thickness gauge used, to test the accuracy of dry film thickness gauges and certified instrumentation to test the accuracy of holiday detectors. Dry film gauges and holiday detectors shall be made available for the Engineer's use at all times until final acceptance of application. Holiday detection devices shall be operated in the presence of the Engineer.
- G. Inspection for this project shall consist of 'hold point' inspections. The Engineer or his representative shall inspect the surface prior to abrasive blasting, after abrasive blasting but prior to application of coating materials, and between subsequent coats of material. Final inspection shall take place after all coatings are applied, but prior to placing the tank in service. Contractor will insure that sufficient rigging is in place so that the Engineer or his representative shall be able to conduct the required inspections.
- H. Warranty inspection shall be conducted during the eleventh month following acceptance of all coating and painting work. All defective work shall be repaired in accordance with this specification and to the satisfaction of the Engineer and/or Owner.
- I. [A 15-year gloss and color retention warranty for the exterior topcoat will be issued from the coating manufacturer to the owner after the job has been completed and all punch list items have been taken care of.](#)
- J. Do not paint over nameplates, tagging, or other identification devices.
- K. Contractor shall hire a third-party to conduct the testing in presence of the Owner Engineer. See Section 13412 for additional information.

1.5 SAFETY AND HEALTH REQUIREMENTS

A. General

1. The Contractor shall comply with all regulations as established by the Occupational Safety and Health Act and other government authorities.
2. In accordance with requirements set forth by regulatory agencies applicable to the construction industry and manufacturer's printed instructions and appropriate technical

bulletins and manuals, the Contractor shall provide and require use of personal protective lifesaving equipment for persons working on or about the project site.

- B. Head and Face Protection and Respiratory Devices: Equipment shall include protective helmets which shall be worn by all persons while in the vicinity of the work. In addition, workers engaged in or near the work during sandblasting shall wear eye and face protection devices and air purifying halfmask or mouthpiece respirators with appropriate filters. Barrier creams shall be used on any exposed areas of skin.
- C. Ventilation: Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof. Ventilation shall reduce the concentration of air contaminants to a degree a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- D. Sound Levels: Whenever the occupational noise exposure exceeds maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protection devices.
- E. Illumination: Adequate illumination shall be provided while work is in progress, including explosion-proof lights and electrical equipment. Whenever required by the Engineer, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the inspector.
- F. Temporary Ladders and Scaffolding: All temporary ladders and scaffolding shall conform to applicable safety requirements. They shall be erected where requested by the Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer.

1.6 PRODUCT DELIVERY, STORAGE & HANDLING

- A. All materials shall be brought to the jobsite in original sealed containers. They shall not be used until the Engineer has inspected the contents and obtained data from information on containers or label. Materials exceeding storage life recommended by the manufacturer shall be rejected.
- B. All coatings and paints shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings and paints must be stored to conform with City, County, State and Federal safety codes for flammable coating or paint materials. At all times coatings and paints shall be protected from freezing.

PART 2 - MATERIALS

2.1 ACCEPTABLE MANUFACTURERS

- A. Materials specified are those that have been evaluated for the specific service. Products of the Tnemec Company, Inc. are listed to establish a standard of quality. Equivalent materials of other manufacturer's may be submitted on written approval of the Engineer. As part of the proof of equality, the Engineer will require at the cost of the Contractor, certified test reports from a nationally known, reputable and independent testing laboratory conducting comparative tests as directed by the Engineer between the product specified and the requested substitution.
- B. Requests for substitution shall include manufacturer's literature for each product giving name, product number, generic type, descriptive information, solids by volume, recommended dry film thickness and certified lab test reports showing results to equal the performance criteria of the products specified herein. In addition, a list of five projects shall be submitted in which each product has been used and rendered satisfactory service.
- C. All requests for product substitution shall be made at least 10 days prior to the bid date.

- D. Any material savings shall be passed to the owner in the form of a contract dollar reduction.
- E. Manufacturer's color charts shall be submitted to the Engineer at least 30 days prior to coating and/or paint application. General Contractor and Painting Contractor shall coordinate work so as to allow sufficient time (normally seven to ten days) for paint to be delivered to the job site.

2.2 GENERAL REQUIREMENTS

- A. All materials shall be lead-free as defined by the Consumer Product Safety Act, Part 1303.
- B. All zinc dust pigment contained in any zinc-rich material shall meet the requirements of ASTM D 520 Type III as regards zinc content and purity.
- C. All materials for the interior wetted portion of the tank shall meet the requirements of ANSI/NSF [Standard 600](#) for potable water contact.
- D. All high gloss clear coat products shall incorporate the use of a fugitive dye to aid in the proper application and coverage of such coats.
- E. All catalyzed polyurethane products shall meet the minimum requirements of SSPC Paint Specification Number 36, Level 3 Performance Level.

2.3 MATERIAL PREPARATION

- A. Mix and thin materials according to manufacturer's latest printed instructions.
- B. Do not use materials beyond manufacturer's recommended shelf life.
- C. Do not use mixed materials beyond manufacturer's recommended pot life.

2.4 SHOP-APPLIED PRIMER – BOTH SIDES OF PLATE

- A. Surface Preparation Prior to Abrasive Blast Cleaning: Weld flux and spatter shall be removed by power tool cleaning. Sharp projections shall be ground to a smooth contour. All welds shall be ground to a smooth contour as per NACE Standard RP0178 and herein.
- B. Surface Preparation: SSPC-SP10 Near-White Metal Blast Cleaning. Anchor profile shall be 1.5 to 2.0 mils as per ASTM D 4417, Method C or NACE Standard RP0287. Anchor profile shall be primarily angular and irregular, as produced by a blend of grit and shot.
- C. Zinc-Rich Primer: Themec Series 94 Hydro-Zinc applied at 2.5 to 3.5 dry mils. Thin only with approved thinner, Themec 41-49 or 41-3 Thinner.

2.5 FIELD-APPLIED TANK INTERIOR COATING SYSTEMS

- A. **Two Coat System:**
 - 1. Surface Preparation Prior to Abrasive Blast Cleaning: Weld flux and spatter shall be removed by power tool cleaning. Sharp projections shall be ground to a smooth contour. All welds shall be ground to a smooth contour as per NACE Standard RP0178 and herein.
 - 2. Surface Preparation: SSPC-SP10 Near-White Metal Blast Cleaning on all bare metal areas (such as weld seams, etc.) and all shop-primed areas damaged during transportation and erection. Anchor profile shall be 1.5 to 2.0 mils as per ASTM D 4417, Method C or NACE Standard RP0287. Any bare metal exposed shall be prepared as per SSPC-SP10 Near White Metal Blast Cleaning and above.
- 3. Coating System:

1. Stripe Coat: Tnemec Series 91H20 applied by brush and scrubbed into all weld seams. In addition to weld seams, all edges, corners, bolts, rivets, pits, bare metal, shall receive a stripe coat of Series 91H20 at 2.5 - 3.5 mils dry.
2. Field 1st Coat: Tnemec Series 21-WH16 Off White applied at 12.0 to 16.0 dry mils. Thin only with approved thinner, Tnemec 41-88 Thinner.
3. Total dry film thickness shall be a minimum of 14.5 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.
4. For cold weather applications, Tnemec Series 21 can be applied down to 35 degrees

2.6 FIELD-APPLIED TANK EXTERIOR COATING SYSTEMS

- A. Surface Preparation Prior to Abrasive Blast Cleaning: Weld flux and spatter shall be removed by power tool cleaning. Sharp projections shall be ground to a smooth contour. All welds shall be ground to a smooth contour as per NACE Standard RP0178 and herein.
- B. Surface Preparation: SSPC-SP6 Commercial Blast Cleaning on all bare metal areas (such as weld seams, etc.) and all shop-primed areas damaged during transportation and erection. Anchor profile shall be 1.5 to 2.0 mils as per ASTM D 4417, Method C or NACE Standard RP0287. Any bare metal exposed shall be prepared as per SSPC-SP6 Commercial Blast Cleaning and above.
- C. Coating System:
 1. Stripe Coat: Tnemec Series 91H20 applied by brush and scrubbed into all weld seams. In addition to weld seams, all edges, corners, bolts, rivets, pits, bare metal, shall receive a stripe coat of Series 91H20 at 2.5 - 3.5 mils dry.
 - a. 1st Field Coat: Tnemec Series 1075 -Color applied at 2.0 to 3.0 dry mils. Thin only with approved thinner. 41-39 for brush or roller.
 - b. 2nd Field Coat: Tnemec Series 700-Color Endura-Shield applied at 2.0 to 3.0 dry mils. Thin only with approved thinner, , 41-63 for brush or roller.
 2. Total dry film thickness shall be a minimum of 6.5 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.
 3. The finish color of the exterior shall match the existing tank color.

PART 3 - EXECUTION

3.1 GENERAL

- A. All surface preparation, coating and painting shall conform to applicable standards of the Steel Structures Painting Council, NACE International and the manufacturer's printed instructions. Materials applied to the surface prior to the approval of the Engineer shall be removed and re-applied to the satisfaction of the Engineer at the expense of the contractor.
- B. All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice. Continuity of personnel shall be coordinated with the Engineer.
- C. The Contractor shall provide a supervisor at the work site during cleaning and application operations. The supervisor shall have the authority to sign and change orders, coordinate work and make decisions pertaining to the fulfillment of the contract.

- D. Dust, dirt, oil, grease or any foreign matter that will affect the adhesion or durability of the coating or paint must be removed by washing with clean rags dipped in an approved cleaning solvent and wiped dry with clean rags.
- E. Coating and painting systems include surface preparation, prime coating and finish coatings. Unless otherwise approved in writing by the Engineer, prime coating shall be field applied. Where prime coatings are shop applied, the Contractor shall instruct suppliers to provide the prime coat compatible with the specified finish coat. Any off-site work which does not conform to this specification, is subjected to damage during transportation, construction or installation shall be thoroughly cleaned and touched-up in the field as directed by the Engineer. The Contractor shall use repair procedures which insure the complete protection of all adjacent primer. The specified repair method and equipment may include wirebrushing, hand or power tool cleaning, or dry air blast cleaning. In order to prevent injury to surrounding painted surfaces, blast cleaning may require use of lower air pressure, smaller nozzle and/or abrasive blast particles, or shorter blast nozzle distances from surface shielding and masking. If damage is too extensive or uneconomical to touch-up, the entire item shall be blasted and then coated or painted as directed by the Engineer.
- F. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Compressors shall have suitable traps and filters to remove water and oils from the air. Contractor's equipment shall be subject to approval of the Engineer.
- G. Application of the first coat shall follow immediately after surface preparation and cleaning and stripe coat, if applicable, before rust bloom occurs or the same day, whichever is less. Any cleaned areas not receiving first coat within this period shall be recleaned prior to application of first coat. Use of dehumidification equipment shall be first reviewed by the Engineer and coatings manufacturer prior to deviating from this provision.
- H. Prior to assembly, all surfaces made inaccessible after assembly shall be prepared as specified herein and shall receive the coating or paint system specified.

3.2 SURFACE PREPARATION

- A. The latest revision of the following surface preparation specifications of the Steel Structures Painting Council (SSPC) shall form a part of this specification. The summaries listed below are for informational purposes; consult the actual SSPC specification for full detail.
 - 1. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods which involve a solvent or cleaning action.
 - 2. Hand Tool Cleaning (SSPC-SP2): Removal of loose rust, loose mil scale and other detrimental foreign matter to a degree specified by hand chipping, scraping, sanding and wirebrushing
 - 3. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mil scale and other detrimental foreign matter by power wirebrushing, power impact tools or power sanders.
 - 4. White Metal Blast Cleaning (SSPC-SP5/NACE No. 1): Air blast cleaning to a gray-white uniform metallic color until each element of surface area is free of all visible residues.
 - 5. Commercial Blast Cleaning (SSPC-SP6 NACE No. 3): Air blast cleaning until at least two-thirds of each element of surface area is free of all visible residues.
 - 6. Brush-Off Blast Cleaning (SSPC-SP7 NACE No. 4): Air blast cleaning to remove loose rust, loose mil scale and other detrimental foreign matter to a degree specified.
 - 7. Near-White Metal Blast Cleaning (SSPC-SP10 NACE No. 2): Air blast cleaning until at least 95% of each element of surface area is free of all visible residues.

8. Power Tool Cleaning to Bare Metal (SSPC-SP11): Differs from SSPC-SP3 in that it requires more thorough cleaning and a surface profile not less than 1 mil.
- B. Slag, weld metal accumulation and spatters not removed by the Fabricator, Erector or Installer shall be removed by chipping and/or grinding. All sharp edges shall be peened, ground or otherwise blunted as required by the Engineer. All grinding and finishing of welds, edges, etc. shall be performed prior to solvent cleaning and abrasive blasting. Welds shall be prepared as per NACE Standard RP0178 for all interior and exterior surfaces:
 1. Butt Welds: Shall be ground smooth and free of all defects, designation "D".
 2. Lap Welds: Shall be ground smooth and blended., designation "D".
 3. Fillet Welded Tee Joint: Shall be ground smooth and blended, designation "D"
- C. All recycled abrasives used in automated shop blasting shall be clean as per SSPC-AB2 "Cleanliness of Recycled Ferrous Metallic Abrasives". All shop blasting utilizing centrifugal-type equipment shall utilize a blend of shot and grit (maximum of 80% shot). In no case shall steel shot alone be permitted. After blast cleaning, the surface of the steel shall appear angular and irregular. Should the surface appear peened or undulating, the steel shall be reblasted to achieve the correct appearance.
- D. All welds shall be neutralized with a suitable chemical compatible with the specified coating or paint.
- E. Field blast cleaning for all surfaces shall be by dry method unless otherwise directed. Blast nozzles shall be venturi-type nozzles with a minimum pressure at the nozzle of 90 psi.
- F. Particle size of abrasives used in blast cleaning shall be that which will produce a 1.5 - 2.5 mil (37.5 microns - 65.0 microns) surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied. If the profile of the blasted steel exceeds the profile specified above, the Contractor shall be required to do one or both of the following:
 1. Reblast the surface using a finer aggregate in order to produce the required profile.
 2. Apply a thicker prime coat, if possible given the limitations of the products being applied, in order to adequately cover the blast profile
- G. All shop-primed surfaces shall receive a uniform and thorough sweep-blast as per SSPC-SP7/NACE No. 4. All bare metal areas shall be abrasive blasted as per SSPC-SP10/NACE No. 2 Near-White Blast Cleaned for interior surfaces and SSPC-SP6/NACE No. 3 Commercial Blast Cleaning for all exterior surfaces.
- H. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants that would interfere with adhesion of coating or paint and shall not be reused unless specifically approved in writing by the Engineer.
- I. During blast cleaning operations, caution shall be exercised to insure that existing coatings or paint are not exposed to abrasion from blast cleaning.
- J. The Contractor shall keep the area of his work and the surrounding environment in a clean condition. He shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the accomplishment of the work, the operation of the existing facilities or to the surrounding environment.
- K. Blast cleaned surfaces shall be cleaned prior to application of specified coatings or paint. All surfaces shall be free of dust, dirt, and other residue resulting from the abrasive blasting operation. No coatings or paint shall be applied over damp or moist surfaces.
- L. Specific Surface Preparation: Surface preparation for the specific system shall be as noted in Sections 2.04, 2.05, and 2.06.

3.3 APPLICATION, GENERAL

- A. Coating and paint application shall conform to the requirements of the Steel Structure Painting Council Paint Application Specification SSPC-PA1, latest revision, for "Shop, Field and Maintenance Painting".
- B. Thinning shall be permitted only as recommended by the manufacturer and approved by the Engineer, and utilizing the thinners stated in Sections 2.04, 2.05, and 2.06..
- C. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, with no evidence of poor workmanship. Care shall be exercised to avoid lapping on glass or hardware. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- D. Protective coverings or drop cloths shall be used to protect floors, fixtures and equipment. Care shall be exercised to prevent coatings or paints from being spattered onto surfaces which are not to be coated or painted. Report to the Engineer surfaces from which materials cannot be satisfactorily removed.
- E. When two coats of coating or paint are specified, where possible, the first coat shall contain sufficient approved color additive to act as an indicator of coverage or the two coats must be of contrasting color.
- F. Film thickness per coat as specified in Sections 2.04, 2.05, 2.06, and 2.07 are the minimum required. If roller application is deemed necessary, the Contractor shall apply additional coats as to achieve the specified thickness.
- G. All material shall be as specified.

3.4 COATING SYSTEMS APPLICATION

- A. After completion of surface preparation as specified for the specific system, materials shall be applied as noted in Sections 2.04, 2.05, 2.06, and 2.07.
- B. Care shall be taken so as to eliminate overspray and dry spray on the tank interior. Where such conditions are encountered, the surface shall be cleaned of all over spray and dry spray prior to the application of the succeeding coat.

3.5 DISINFECTION

- A. Disinfection shall be completed as described in Specification 13412. Disinfection of interior surfaces shall be performed in the presence of the Engineer in accordance with all the requirements of applicable AWWA Standards and regulatory agencies.
- B. Disinfection shall be performed after protective coatings have been applied to the interior surfaces and allowed to thoroughly cure.
- C. Prior to disinfecting, the complete interior shall be washed down with clean water and thoroughly flushed out.
- D. All interior surfaces shall be thoroughly washed with a solution having a minimum chlorine content of 50 PPM. Chlorine solution accumulated on the bottom shall be drained to waste. Rinsing with clean water is not required.

3.6 SOLVENT VAPOR REMOVAL

- A. All solvent vapors shall be completely removed by suction-type exhaust fans and blowers before placing tank in operating service.

- B. All solvent vapors will be exhausted both during and after coating application at a minimum rate of one air change every four hours to allow the proper curing of the coating material. High rates of production may require an increase in ventilation.
- C. Ventilation shall be continued until such time as the coating has reached "full cure" as specified by the coating manufacturer.

3.7 CLEAN UP

- A. Upon completion of the work, all staging, scaffolding and containers shall be removed from the site or destroyed in a manner approved by the Engineer. Coating or paint spots or oil stains upon adjacent surfaces shall be removed and the jobsite cleaned. All damage to surfaces resulting from the work of this section shall be cleaned, repaired or refinished to the satisfaction of the Engineer at no cost to the Owner.

END OF SPECIFICATION 09800

**SECTION 13412
ELEVATED STORAGE TANK 1**

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall be responsible for all labor, materials and equipment necessary for the design, fabrication, construction, painting, disinfection and testing of an elevated welded carbon steel water storage tank supported by a steel support pedestal, commonly referred to as a "Spheroid or Pedesphere".
- B. Design and construction of the elevated tank shall conform to all requirements of AWWA D100-latest edition Standard for Welded Carbon Steel Tanks for Water Storage, except as modified by the requirements of these contract documents.
- C. The Contractor shall obtain all necessary permits and licenses required for the construction of the elevated water tank.

1.2 SUBMITTALS

- A. Submit to the Owner's Consultant, in accordance with the Division 1, copies of all materials required to establish compliance with this Section. Submittals shall include at least the following:
 - 1. A list of five similar elevated tanks constructed within the last ten years including the Owner, tank capacity and the Engineer.
 - 2. A foundation design drawing showing design and dimensions of the concrete and reinforcing steel. The drawings and calculations must be designed by and bear the stamp of a professional engineer registered in the State of Georgia.
 - 3. The Contractor shall provide Drawings and design calculations for the elevated steel tank. Drawings shall show the size and location of all structural components and reinforcement, the required strength and grade of all materials, and the size and arrangement of principle piping and equipment. The drawings and calculations shall bear the certification of a professional Engineer licensed in the State of Georgia. The design coefficients and resultant loads for snow, wind and seismic forces, and the methods of analysis shall be documented.
 - 4. OSHA approved climbing equipment.
 - 5. Tank accessories.
 - 6. Lightning protection.
- B. Test Reports
 - 1. Shop test results.
 - 2. Field pressure /leakage tests.
 - 3. Independent visual and x-ray seam reports.
- C. Certificates

1. Prior to shipment, submit a certified affidavit of compliance from the manufacturer that the tank has been manufactured in accordance with AWWA and ASTM standards and requirements specified herein.

1.3 REFERENCE STANDARDS

- A. Design, manufacturing and assembly of elements of the products herein specified shall be in accordance with the standards of the below listed organizations.
- B. American Water Works Association (AWWA)
 1. AWWA D100-latest edition - Standard for Welded Steel Tanks for Water Storage.
 2. AWWA D102 - Standard for Painting Steel Water Storage Tanks.
 3. AWWA C652 - Standard for Disinfection of Water Storage Facilities.
- C. American Welding Society
- D. NSF (National Sanitation Foundation) 61 - Materials in contact with Potable Water.
- E. Steel Structures Painting Council Manual - Volume 1 - Good Painting Practice.
- F. Steel Structures Painting Council Manual - Volume 2 - Systems and Specifications.
- G. ACI 318 - Building Code Requirements for Reinforced Concrete
- H. ACI 301 – Standard Specification for Structural Concrete
- I. Where reference is made to a standard of one of the above, or other organizations, the version of the standard in effect at the time of bid opening shall apply.

1.4 QUALITY ASSURANCE

- A. All products specified under this Section shall be standard products of proven ability as manufactured by competent organizations that are fully experienced, reputable and qualified in the manufacture of the products to be furnished. The products shall be designed, constructed and installed in accordance with the best practice and methods, and shall operate satisfactorily when installed.
- B. All products furnished under this Section shall be new and unused and shall be the standard products of manufacturers having a successful record of manufacturing and servicing the equipment specified herein for a minimum of five (5) years.
- C. Pipe and fittings shall be inspected and tested at the foundry as required by the standard specifications to which the material is manufactured.
- D. The Owner's Consultant may also make inspection of products after delivery. Products shall be subject to rejection at any time due to failure to meet any of the Specification requirements, even though submittal data may have been accepted previously. Products rejected after delivery shall be marked for identification and shall be removed from the job site at once.

PART 2 – PRODUCTS

2.1 GENERAL

- A. The materials, design, fabrication, erection, welding, testing and inspection of the steel tank shall be in accordance AWWA D100-latest edition

- B. The tank foundation shall be designed in accordance with AWWA D100-latest edition and ACI 318.
- C. The elevated steel water tank shall consist of a pedisphere tank with the following characteristics:
 - 1. The design operating capacity of the storage tank will be 250,000 gallons.
 - 2. The capacity of the tank, low to high water level, shall be contained within a maximum operation range from 30 feet to 32 feet plus or minus 2.5 feet.
 - 3. The height of the tank, top of foundation to the high water level shall be 155 feet.
 - 4. The top of the foundation shall be at elevation 1190.0 feet-msl.
- D. The following factors shall be used for the design of seismic loads and shall be in accordance with AWWA D100-latest edition:
 - 1. Seismic Zone 2A
- E. Wind pressure shall be determined in accordance with AWWA D100-96 (latest edition), Section 3.1.4 for a 100 MPH wind velocity.
- F. Snow Load shall be determined in accordance with AWWA D100-96 (latest edition), Section 3.1.3 for 25 psf minimum loading.
- H. A geotechnical investigation has been conducted for this report and is included in Section 02010 of the specifications.
- G. The minimum thickness for any part of the structure shall be 3/16 inch for parts not in contact with water and 1/4 inch for parts in contact with water, including the roof plates. All portions of the tank including the roof shall be of watertight construction.

2.2 TANK ACCESSORIES

- A. The following accessories shall be provided in accordance with these specifications. All items shall be in full conformity with the current applicable OSHA safety regulations and the operating requirements of the structure.
- B. Ladders
 - 1. Access ladders shall be included at the following locations:
 - a. The tower ladder shall extend from grade to upper platform and from upper platform to tank floor manhole. Upper platform to steel tank roof mounted on access tube interior.
 - b. Exterior of access tube to provide access from roof manhole to the tank floor.
 - 2. Ladder side rails shall be a minimum 3/8 inch by 2 inches with a 16 inch clear spacing. Rungs shall be not less than 3/4 inch, round or square, spaced at 12 inch centers. The surface of the rungs shall be knurled, dimpled or otherwise treated to minimize slipping. At platforms or landings, the ladder shall extend a minimum 4 feet above the platform. Ladders shall be secured to adjacent structures by brackets located at intervals not exceeding 10 feet. Brackets shall be of sufficient length to provide a minimum distance of 7 inches from the center of the rung to the nearest permanent object behind the ladder.
 - 3. Ladders shall be equipped with a fall arrest system meeting OSHA regulations. The system shall be supplied complete with a safety harness, locking mechanisms, lanyards

and accessories for two persons. The safety harness equipment shall be supplied at the start of the project and turned over to the Engineer.

C. Upper Platform

1. An upper platform shall be located at the top of the support pedestal to provide access from the pedestal ladder to the roof access ladder located on the interior of the access tube. Platform shall include a 24" x 36" access hatch with opening to allow ladder and safety device to continue 48" minimum above the platform floor.
2. A roof handrail shall be provided surrounding the roof manholes, vents, and other roof equipment. Handrail shall comply with OSHA requirements.

D. Roof Hatches

1. Provide two access hatches on the roof of the tank. One hatch shall be 30 inch diameter and allow access from the roof to the interior of the tank. The hatch will be hinged and equipped with a hasp for locking. The hatch cover shall have a 2 inch downward edge. The second hatch will be 24 inch diameter and flanged with a removable cover so constructed that an exhaust fan may be connected for ventilation during painting operations. The openings shall have a minimum 4 inch curb.
2. Provide one 30 inch diameter hinged access hatch on the access tube roof. The hatch cover shall have a 2 inch downward edge.

E. Tank Vent

1. The tank vent should be centrally located on the tank roof above the maximum weir crest elevation. The tank vent shall have an intake and relief capacity sufficiently large that excessive pressure or vacuum will not develop during maximum flow rate. The vent shall be designed, constructed and screened so as to prevent the ingress of wind driven debris, insects, birds and animals. The vent shall be designed to operate when frosted over or otherwise clogged. The screens or relief material shall not be damaged by the occurrence and shall return automatically to operating position after the blockage is cleared.

F. Tank Floor Manhole

1. A minimum 18 x 24 inch elliptical access manhole shall be provided in the tank bottom accessible from the upper platform or from a ladder that extends from the platform to the opening. The hatch shall open inward.

G. Pedestal Hatch

1. A 24" diameter manhole shall be located near the top of the pedestal for access to the exterior painter's rail located near the tank/pedestal interface. This opening shall be accessible from the upper pedestal platform.

H. Access Tube

1. A minimum 36" diameter access tube shall be provided for tanks with capacities of 150,000 gallons and less, or 42" diameter access tube on tanks with capacities 200,000 gallons and greater. The access tube will be provided from the top of the pedestal to the tank roof.

I. Rigging

1. Interior and exterior rigging devices shall be provided for painting, inspecting and maintaining the structure and accessories. A continuous bar or tee rail near the top of the exterior support structure shall be provided. The rail may be attached to the support column or steel tank. A painter's rail attached to the roof, pipe couplings with plugs in the

roof or other attachments that provide complete access for painting of tank interior shall be furnished.

J. Piping

1. General

Exterior of pipes exposed to stored water shall be coated with tank interior wet system. Exterior of pipes in the pedestal and base cone shall be coated with tank interior dry system.

2. Inlet/Outlet Piping

Provide a 12 inch diameter standard weight steel inlet/outlet pipe that extends vertically from the base of the pedestal to the bottom of the tank. An expansion joint shall be provided in the vertical section of pipe. The expansion joint should be constructed to accommodate any differential movement caused by settlement or thermal expansion and contraction. Inlet/Outlet pipe shall not extend above the LWL.

3. Overflow

The overflow pipe shall be designed to carry the maximum design flow rate of 350 GPM. The steel overflow pipe will be 8 inch in diameter and shall have a minimum wall thickness of 1/4". A suitable weir shall be provided with the crest at High Water Level. The overflow pipe shall extend down from the weir box through the tank, pedestal, and base cone. The overflow pipe shall penetrate the base cone wall approximately 1 to 2 feet above grade and discharge onto a concrete splash pad. The point of discharge shall have a 45 degree elbow and be equipped with a stainless steel screened end.

K. Interior Floor

1. A concrete slab-on-grade shall be provided inside the base cone. Isolation joints shall be provided at junctions with walls, columns, equipment or piping foundations.

L. Personnel Door

1. A 36" by 80" access door with a flush threshold shall be located in the base of the pedestal cone. A step over threshold is not acceptable. The door shall be fabricated from steel plate with adequate stiffening and specifically designed for use with the tank. The access door will be equipped with handle, drip cover and dead bolt lock. Commercial hollow metal doors and frames are not acceptable

M. Identification Plate

1. A tank identification plate shall be mounted on the tank riser pipe above the access manhole. The identification plate shall be corrosion resistant and contain the following information.
 - a. Tank Contractor
 - b. Contractor's project or file number
 - c. Tank capacity
 - d. Height to High Water Level
 - e. Date erected
 - f. Tank Owner

PART 3 - EXECUTION

3.1 GENERAL

- A. The erection of the steel tank shall comply with the requirements of Section 10 of AWWA D100-latest edition.
- B. All interior lap joints shall be sealed by means of continuous seal welding (not caulking).

3.2 WELDING

- A. All shop and field welding shall conform to AWS and AWWA D100-latest edition, Section 10. Before any welding is performed, the constructor shall make certain that the welders or welding operators have their credentials for acceptance.

3.3 FABRICATION

- A. All fabrication and shop assembly shall conform to the requirements of AWWA D100-latest edition, Section 9, Shop Fabrication.

3.4 ERECTION

- A. Plates subjected to stress by the weight or pressure of the contained liquid shall be assembled and welded in such a manner that the proper curvature of the plates in both directions is maintained. Plates shall be assembled and welded together by a procedure that will result in a minimum of distortion from weld shrinkage.

3.5 TESTING

- A. Testing for both shop and field welds shall be in accordance with AWWA D100-latest edition, Section 11, Inspection and Testing. All testing shall be performed prior to interior and exterior field painting. The testing shall be performed by an independent testing agency with all costs included in the Contractor's bid and paid by the Contractor. The Contractor shall have a third-party weld inspection performed including both at visual and a radiograph inspection per Section 11 of AWWA D100-latest edition.
- B. Paint Inspection and Testing

The Contractor shall have a third-party paint inspection and testing performed at times and locations in the presence of the Owner or Engineer including the prime coat and each of the two paint layers. The Contractor shall bore all cost associated with the third party, but not for the Owner or Engineer. Before the primer coating is applied, verify that the required surface preparation parameters as outlined in AWWA D102-latest edition have been satisfied. The wet film thickness of each coat shall be measured during application. Before application of successive coats, the dry film thickness shall be measured for compliance. The dry film thickness of the total system shall be measured in accordance with SSPC-PA 2. The required number of measurements for conformance to a thickness specified shall conform to Section 8 and SSPC-PA 2 and shall be determined between the Contractor and Owner/Engineer prior to any painting activities. For inside coating systems, the coating on interior wet surfaces below the top capacity level shall be tested and identified in accordance with NACE SP0188. Locations where holiday are detected shall be retested after repair work has been completed. Results of quality control test and records shall be provided to the Owner or Engineer at the end of each testing period. An affidavit of Compliance shall be provided at the end of the project. First-anniversary inspection shall be conducted by the Contractor to determine whether the coating system is performing properly. All areas failing shall be repaired by the Contractor.

3.6 PAINTING

- A. Surface preparation and coating of all steel surfaces shall be in accordance with Section 09800 "Coating System for Steel Water Storage Tanks".
- B. The tank manufacturer shall include a two logos painted on the sides of the bowl consisting of "City of Flowery Branch" along with their "symbol". The Owner will furnish a jpeg of the complete logo and assign the sides for the logo during the shop drawing period. The Contractor shall submit logo painting details including actual size and methods for review.

3.7 DISINFECTION

- A. Upon testing and painting, the tank and all connecting piping shall be flushed and disinfected prior to being put into service. Disinfection shall be in accordance with AWWA C-652.
- B. Only potable water shall be used as the water supply during disinfection operations.
- C. The Contractor shall use either high-test calcium hypochlorite, sodium hypochlorite solution or liquid chlorine for disinfection. The Contractor shall notify the Engineer prior to disinfection of the storage facility on what form of chlorine shall be used.
- D. One of the following methods shall be used for disinfection of the elevated water tank. The Contractor shall notify the Engineer prior to disinfection which method of disinfection shall be used as outlined in AWWA C-652, Section 4.
 - 1. First Method: After the storage tank has been thoroughly dried, it shall be filled slowly to the overflow level with potable water to which enough chlorine is added to provide a free chlorine residual in the full facility of not less than 10mg/L at the end of the 24-hour period. After the 24-hour retention period, the highly chlorinated water in the storage tank shall be completely emptied (by applying a reducing agent to the wasted water to thoroughly neutralize the chlorine residual in the water), and then refilled with potable water. After refilling, samples of water shall be taken from the storage tank and tested to demonstrate that the water in the tank is microbiologically satisfactory in accordance with the Georgia Rules for Safe Drinking Water, Chapter 391 -3 -5, before the tank is placed in or restored to regular service.
 - 2. Second Method: The walls and bottoms of storage tanks shall be thoroughly cleaned to remove all dirt and loose material. A strong chlorine solution (at least 200mg/L) shall be applied to the surface of all parts of the storage facility, including the inlet and outlet piping, that would be in contact with water when the storage facility is full to the overflow elevation. The disinfected surfaces shall remain in contact with the strong chlorine solution for at least 30 minutes, after which potable water shall be admitted. After that, the highly chlorinated water in the tank shall be disposed in an acceptable manner, as stated above, and then refilled with potable water to its overflow level. After refilling, samples of water shall be taken from the storage tank and tested to demonstrate that the water in the tank is microbiologically satisfactory in accordance with the Georgia Rules for Safe Drinking Water, Chapter 391 - 3 – 5, before the tank is placed in or restored to regular service.
 - 3. Third Method: Water containing a minimum of 50mg/L chlorine shall be placed in the storage tank to such depth that, when the storage tank is filled with potable water to the overflow level and held full for a period of at least 24 hours, there will be a free chlorine residual of not be less than 2 mg/L. The full storage tank must be allowed to stand for 24 hours. All highly chlorinated water shall then be purged from the drain piping. Samples of water shall be taken from the storage tank and tested to demonstrate that the water in the tank is microbiologically satisfactory in accordance with the Georgia Rules for Safe Drinking Water, Chapter 391 – 3 5. The storage tank may be put into service without draining the remaining water in the tank.

3.8 CONCRETE FOUNDATION

- A. A Geotechnical investigation has been carried out at the site and a copy of the report is included with the Contract Documents. Recommendations for the foundation and allowable bearing capacities are defined in this report. The Owner shall retain the services of the Geotechnical consultant to verify the adequacy of the bearing stratum after the Contractor has carried out the excavation and before any concrete or reinforcement is placed. The concrete foundation shall be designed by the Contractor based upon the recommendations in the geotechnical report. The report must provide the allowable soil bearing pressure with appropriate factors of safety, the active and passive earth pressure coefficients, the angle of soils internal friction, its cohesion, unit weight and recommendations for bearing depth and backfill requirements.

- B. The foundation shall be designed and constructed to safely and permanently support the structure. The basis of the foundation construction shall be consistent with the soils investigation data included herein of these specifications. Appropriate changes to construction schedule and price will be negotiated if, during excavation, soil conditions are encountered which differ from those described in geotechnical report. The concrete foundation shall be constructed in accordance with ACI 301. Minimum concrete compressive strength shall be as specified in Section 03000 "Cast-In-Place Concrete".

3.8 PRODUCT GUARANTEE

- A. The tank Contractor shall guarantee its work for a period of three years from the substantial completion date defined in the contract documents to the extent that it will repair any defects caused by faulty design, workmanship or material furnished under the specifications.

- B. All guarantees obtained by the tank Contractor from the manufacturer or installer of paint, equipment or accessories not manufactured by tank Contractor shall be obtained for the benefit of the Purchaser.

END OF SECTION 13412