



CITY OF PORT WENTWORTH

CITY COUNCIL

MAY 10, 2022

Council Meeting Room

Regular Meeting

7:00 PM

7224 GA HIGHWAY 21
PORT WENTWORTH, GA 31407

1. CALL MEETING TO ORDER
2. PRAYER AND PLEDGE OF ALLEGIANCE
3. ROLL CALL - CLERK OF COUNCIL
4. APPROVAL OF AGENDA
5. RECOGNITION OF SPECIAL GUESTS
6. PUBLIC COMMENTS - REGISTERED SPEAKERS
7. ELECTIONS & APPOINTMENTS
8. ADOPTION OF MINUTES
 - A. Regular Council Meeting Minutes - April 28, 2022
9. COMMUNICATIONS & PETITIONS
10. CONSENT AGENDA
 - A. Contract Award for the Sewerage System Rehabilitation Project
 - B. Adoption of Millage Rate
 - C. Next Site – Commercial Development Consultants
11. UNFINISHED BUSINESS
12. NEW BUSINESS
13. RESOLUTIONS/ORDINANCES/PROCLAMATIONS
14. EXECUTIVE SESSION
15. ADJOURNMENT



City Council
7224 GA Highway 21
Port Wentworth, GA 31407

SCHEDULED

AGENDA ITEM (ID # 2663)

Meeting: 05/10/22 07:00 PM
Department: All
Category: Agreement
Prepared By: Zahnay Smoak
Department Head: Brian Harvey

DOC ID: 2663

8.A

Regular Council Meeting Minutes - April 28, 2022



City Council
7224 GA Highway 21
Port Wentworth, GA 31407

SCHEDULED

Meeting: 05/10/22 07:00 PM
Department: Public Services
Category: Contract
Prepared By: Omar Senati-Martinez
Department Head: Omar Senati-Martinez

AGENDA ITEM (ID # 2660)

DOC ID: 2660

Contract Award for the Sewerage System Rehabilitation Project

Issue/Item: Contract Award for the Sewerage System Rehabilitation Project

Background: This project is part of the correction plan submitted to EPD following the Consent order WP-9162. The work to be done consists of furnishing all materials, equipment and labor for the construction of: Sewerage system rehabilitation including smoke testing approximately 218,000 linear feet of sewer lines, perform approximately 970 manhole inspections infiltration and low flow investigation between 12 am to 5 am, cleaning and televising approximately 80,000 linear feet of sewer lines, and pressure testing and grouting of mainline joints and lateral connections.

Facts and Findings: The City of Port Wentworth received two responsible bids for the Sewerage System Rehabilitation Project. The bidders and amounts are as follows: 1) Southeast Pipe Survey Inc., bid the total amount of \$517,044.00; 2) Gulf Coast Underground, LLC, bid the total amount of \$990,904.29. The apparent low bidder is Southeast Pipe Survey Inc., with a total bid of \$517,044.00, and Turnipseed Engineers recommends awarding the contract to Southeast Pipe Survey Inc., in the amount of \$517,044.00

Funding: Budgeted Line Item

Recommendation: APPROVAL of the award to Southeast Pipe Survey Inc., in the amount of \$517,044.00 based upon the bids and recommendation of Turnipseed Engineers. And, that City Council authorize the Mayor and City Manager to execute the contract documents awarding the contract to Southeast Pipe Survey Inc.

ATTACHMENTS:

- 212469.006 Ltr of Recommendation - Bid Tab (PDF)
- 212469.006 Sewer Rehab Specifications (PDF)



ATLANTA
AUGUSTA
ST. SIMONS ISLAND

May 4, 2022

Mayor and Council
City of Port Wentworth
7224 GA-21
Port Wentworth, Georgia 31407

Attention: Mr. Omar Senati-Martinez, Director of Facilities/Construction Inspector

Re: City of Port Wentworth
Sewerage System Rehabilitation
Project No. 212469.006

We have checked the bids received April 29, 2022, on subject project. Below is a tabulation of the bids received. A table with the bids for work items by the bidders is also included.

<i>Contractor</i>	<i>Total Amount Bid</i>
1. Southeast Pipe Survey, Inc. Patterson, Georgia	\$517,044.00
2. Gulf Coast Underground, LLC Theodore, Alabama	\$990,904.29

As indicated, the low bidder is Southeast Pipe Survey, Inc. of Patterson, Georgia with a bid in the amount of \$517,044. Since the low bidder appears to have adequate experience, technical ability and financial capability to complete the project, we recommend contract award be made Southeast Pipe Survey, Inc. of Patterson, Georgia.

We have enclosed a certified tabulation of the bids received and a sample resolution the City should consider adopting. Please forward us a copy of the City's signed resolution to award.

A project cost summary is enclosed and shows proposed project funding for this award.

City of Port Wentworth, Georgia
SSI/Project No. 212469.006

May 4, 2022
Page 2

If you have any questions concerning our recommendations, please call us.

Yours truly,



John V. McClellan, P.E.
Turnipseed Engineers

JVM:jf
Enclosures

Attachment: 212469.006 Ltr of Recommendation - Bid Tab (2660 : Contract Award for the Sewerage System Rehabilitation Project May 2022)

RESOLUTION

WHEREAS bids were received by the City of Port Wentworth on April 29, 2022, for Sewerage System Improvements, and

WHEREAS the low, responsible, responsive bidder is Southeast Pipe Survey, Inc. of Patterson, Georgia with a bid in the amount of \$517,044.00, and

WHEREAS the low bidder, Southeast Pipe Survey, Inc. appears to have the necessary financial and technical ability to complete the project,

BE IT THEREFORE resolved the City of Port Wentworth hereby makes tentative contract award of the construction contract to the low bidder, Southeast Pipe Survey, Inc. of Patterson, Georgia, in the amount of \$517,044.00.

THIS RESOLUTION was passed by a vote of _____ to _____ at a regular meeting of the Mayor and Council on _____.

CITY OF PORT WENTWORTH

Gary Norton, *Mayor*

Attest: _____
City Clerk

**CITY OF PORT WENTWORTH, GEORGIA
PROJECT COST SUMMARY
SEWERAGE SYSTEM IMPROVEMENTS
May 4, 2022**

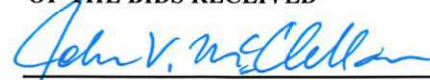
Project Cost

Total Estimated Construction Cost (As Bid)	\$517,044.00
Contingency	\$51,681.16
Engineering	\$41,363.52
Inspection	<u>\$15,511.32</u>
Total Estimated Project Cost	\$625,600.00

*Turnipseed Engineers
Augusta, Georgia
Project No. 212469.006*

TURNIPSEED ENGINEERS
Augusta, Georgia

THIS IS TO CERTIFY THAT
THIS IS A CORRECT TABULATION
OF THE BIDS RECEIVED


John V. McClellan, P.E.

BID TABULATION

BIDS RECEIVED: April 29, 2022 at 3:00 p.m.

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM IMPROVEMENTS**

ITEM NO.	QTY.	UNIT	DESCRIPTION	Southeast Pipe Survey, Inc. Patterson, Georgia		Gulf Coast Underground, LLC Theodore, Alabama	
				UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
1.	1	LS	MOBILIZATION	\$1,982.00	\$1,982.00	\$166,875.00	\$166,875.00
2.	1	LS	TRAFFIC CONTROL	\$7,990.00	\$7,990.00	\$110,714.29	\$110,714.29
3.	218,000	LF	SMOKE TEST SEWER LINE	\$0.40	\$87,200.00	\$0.63	\$137,340.00
4.	970	EA	MANHOLE INVESTIGATION	\$59.50	\$57,715.00	\$62.50	\$60,625.00
5.	125	EA	LOW FLOW INVESTIGATION	\$131.00	\$16,375.00	\$150.00	\$18,750.00
6.	1,000	CY	GRIT REMOVAL AND DISPOSAL	\$46.25	\$46,250.00	\$150.00	\$150,000.00
7.	80,000	LF	CLEAN AND TELEVISION LINE	\$2.35	\$188,000.00	\$1.88	\$150,400.00
8.	2200	LF	REMOVAL OF ROOTS OR GREASE REMOVAL OF INTRUDING SERVICES	\$4.75	\$10,450.00	\$1.50	\$3,300.00
9.	20	EA	OR OBSTRUCTIONS	\$196.00	\$3,920.00	\$25.00	\$500.00
EXTRA WORK, IF ORDERED BY THE ENGINEER							
10.			PRESSURE TESTING AND GROUTING				
a.	11	EA	Set-up Per 8" Mainline Segment	\$1,133.00	\$12,463.00	\$4,000.00	\$44,000.00
b.	1	EA	Set-up Per 12" Mainline Segment	\$994.00	\$994.00	\$4,000.00	\$4,000.00
			Pressure Test Lateral Connection to Main Line				
c.	15	EA		\$500.00	\$7,500.00	\$4,000.00	\$60,000.00
d.	300	GAL	Grout Injection	\$136.50	\$40,950.00	\$50.00	\$15,000.00
11.	5000	LF	CLEAN AND TELEVISION LINE, POST SMOKE TEST	\$2.35	\$11,750.00	\$1.88	\$9,400.00
12.			ADJUST MANHOLE FRAME AND COVER TO GRADE, 6" MIN. DEPTH				
a.	15	EA	In Asphalt	\$1,343.00	\$20,145.00	\$3,500.00	\$52,500.00
b.	5	EA	In Dirt or Grass	\$672.00	\$3,360.00	\$1,500.00	\$7,500.00
TOTAL AMOUNT BID, INCLUSIVE, ITEMS 1 THRU 12, THE AMOUNT OF:					\$517,044.00		\$990,904.29

Attachment: 212469.006 Ltr of Recommendation - Bid Tab (2660 : Contract Award for the Sewerage System Rehabilitation Project May 2022)

**BID DOCUMENTS, CONTRACT DOCUMENTS AND
CONSTRUCTION SPECIFICATIONS**

FOR

SEWERAGE SYSTEM REHABILITATION

FOR THE

CITY OF PORT WENTWORTH, GEORGIA

Elected Officials

Gary Norton, *Mayor*

Thomas Barbee

Rufus Bright

Glenn Jones

Gabrielle Nelson

Jo Smith

Mark Stephens

Omar Senati-Martinez, *Director of Facilities*

MARCH 2022

PROJECT NO. 212469

FUNDING: LOCAL FUNDS AND AMERICAN RESCUE PLAN 2021

**BID DOCUMENTS, CONTRACT DOCUMENTS AND
CONSTRUCTION SPECIFICATIONS**

FOR

SEWERAGE SYSTEM REHABILITATION

FOR THE

CITY OF PORT WENTWORTH, GEORGIA

Elected Officials

Gary Norton, *Mayor*

Thomas Barbee

Rufus Bright

Glenn Jones

Gabrielle Nelson

Jo Smith

Mark Stephens

Omar Senati-Martinez, *Director of Facilities*

MARCH 2022

PROJECT NO. 212469

FUNDING: LOCAL FUNDS AND AMERICAN RESCUE PLAN 2021

Prepared by:



TABLE OF CONTENTS

SECTION NO.	DESCRIPTION	PAGE NO.
	BID DOCUMENTS	
	Acronyms	A-1
	Advertisement for Bids	AB-1
	Instructions to Bidders	IB-1
	Proposal	P-1
	Bid Bond	BB-1
	Non-Collusion Affidavit of Bidder	NCA-1
	CONTRACT DOCUMENTS	
	Contract Agreement	CA-1
	Performance Bond	PB-1
	Payment Bond	PTB-1
	Contractor Affidavit and Agreement	CAA-1
	Subcontractor Affidavit	SCA-1
	Affidavit Verifying Status for Public Benefit	AVSPB-1
	Certificate of Owner's Attorney	COA-1
	General Conditions	GC-1
	Supplemental General Conditions	SGC-1
SECTION 1	GENERAL REQUIREMENTS	
1.01	Location	1-1
1.02	Work to be Done	1-1
1.03	Schedule of Work.	1-1
1.04	Drawings	1-1
1.05	Specifications	1-1
1.06	Protecting Existing Utilities and Structures	1-1
1.07	Subsurface Investigations.	1-1
1.08	Easements.	1-2
1.09	Working Drawings	1-2
1.10	Shop Drawings	1-2
1.11	Clean-Up	1-4
1.12	Payment.	1-4
SECTION 2	CONTROL OF MATERIAL	
2.01	Source of Supply and Quality of Materials	2-1
2.02	Samples and Testing of Materials	2-1
2.03	Schedule of Materials and Standard Tests	2-1

TABLE OF CONTENTS (CONTINUED)

SECTION NO.	DESCRIPTION	PAGE NO.
2.04	Payment	2-3
SECTION 3	SEWERAGE SYSTEM INSPECTION	
3.01	Scope	3-1
3.02	Smoke Testing	3-1
3.03	Manhole Inspection	3-3
3.04	Cleaning of Pipe Lines	3-4
3.05	Backups, Overflow or Spillage of Sewage	3-5
3.06	Time of Construction	3-5
3.07	Video Inspection	3-5
3.08	Pressure Testing and Grouting	3-12
3.09	Flow Bypassing	3-21
3.10	Obstruction Removal	3-21
3.11	Safety	3-21
3.12	Traffic Control	3-21
3.13	Measurements for Payment	3-21

ACRONYMS

Whenever the following terms or pronouns are used, whether in these Specifications or on the Plans, they are to be construed the same as the respective expressions represented:

AASHO	American Association State Highway Officials
ACI	American Concrete Institute
ANSI	American National Standards Institute
ASTM	ASTM International
AWWA	American Water Works Association
CIP	Cast Iron Pipe
cm	Centimeters
DI/CI	Ductile Iron / Cast Iron
DOC	United States Department of Commerce
DOT	Georgia Department of Transportation
DR	Dimension Ratio
EEO	Equal Employment Opportunity
EPD	Environmental Protection Division
F	Fahrenheit
Ft	Feet
GEFA	Georgia Environmental Finance Authority
In	Inch
kg	Kilograms
lb	Pounds
LF	Linear Feet
OSHA	Occupational Safety and Health Administration
pcf	Pounds Per Cubic Foot
psi	Pounds Per Square Inch
PVC	Polyvinyl Chloride
SDR	Standard Dimension Ratio
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VCP	Vitrified Clay Pipe

**ADVERTISEMENT FOR BIDS FOR CONSTRUCTION OF
SEWERAGE SYSTEM REHABILITATION
FOR THE
CITY OF PORT WENTWORTH, GEORGIA**

Sealed proposals will be received by the City of Port Wentworth, Georgia at the City Hall 7224 Georgia Highway 21, Port Wentworth, Georgia 31407-966 until 3:00 p.m. local time, Friday, April 29, 2022, at which time and place they will be publicly opened and read. No submitted bid may be withdrawn after the scheduled closing time for receipt of bids for a period of sixty (60) days

The work to be done consists of furnishing all materials, equipment and labor for the construction of:

Sewerage system rehabilitation including smoke testing approximately 218,000 linear feet of sewer lines, perform approximately 970 manhole inspections infiltration and low flow investigations between 12 a.m. to 5 a.m., cleaning and televising approximately 80,000 linear feet of sewer lines, and pressure testing and grouting of mainline joints and lateral connections.

Time allotted for construction is 120 consecutive calendar days for substantial completion and 150 days for final completion.

Proposals for the complete work in one general contract shall be made on the proposal form provided and shall contain prices in words and figures for the work bid on.

The project is proposed to be funded with ARP and local funds. All requirements and conditions apply.

All proposals shall be accompanied by a Bid Bond drawn in favor of the City of Port Wentworth, Georgia, in the amount of at least 10% of the lump sum bid for the complete work; such Bid Bond representing that the Bidder, if awarded the contract, will promptly enter into a contract and furnish Performance Bond and Payment Bond as provided by law and approved by the Attorney for the City of Port Wentworth, Georgia. Each bond shall be equal to 100% of the contract amount. The Bid Bond shall be forfeited to the City of Port Wentworth, Georgia as liquidated damages if the Bidder fails to execute the contract and provide Performance and Payment Bonds within 10 days after being notified that he has been awarded the contract.

Drawings and Specifications are open to public inspection at the office of the City of Port Wentworth, Georgia and at the offices of Turnipseed Engineers in Augusta and Atlanta, Georgia. Copies of the specifications may be obtained from Turnipseed Engineers, 4210 Columbia Road, Building 3, Augusta, Georgia 30907, upon receipt of \$50.00.

Digital copies of the documents are not available.

Upon receipt of all documents in undamaged condition within 30 days after the date of opening of bids, half of the deposit will be refunded.

The difference between the deposit and the amount refunded represents the cost of reproduction. No refund will be made for documents received after 30 days or in damaged condition.

The Owner reserves the right to reject any or all bids and to waive informalities.

CITY OF PORT WENTWORTH, GEORGIA

By: _____
Steve Davis, *Interim City Manager*

INSTRUCTIONS TO BIDDERS

1. INTENTION: It is intended that the Project Documents shall cover the complete work to which they relate.
2. DEFINITION: Where the following words, or the pronouns used instead, occur herein, they shall have the following meaning:

“Owner” shall mean the City of Port Wentworth, Georgia, party of the first part to the “Contract Agreement” or its authorized and legal representative.

“Engineer” shall mean Turnipseed Engineers of Atlanta, Georgia acting for the Owner or other representative of such party.

“Contractor” shall mean the party of the second part to the following agreement, or the legal authorized representatives of such party.
3. WORK TO BE DONE: The work to be done consists of furnishing all materials, labor and equipment for construction of Sewerage System Improvements, March 2022, complete with appurtenances, for the City of Port Wentworth, Georgia, all as set forth in the Proposal, as specified herein, and as shown on the Drawings.
4. MATERIAL AND WORK BY THE OWNER: The Owner will neither furnish materials nor perform labor for construction of work under this contract, unless otherwise stipulated elsewhere in the Project Documents.
5. SITE EXAMINATION: The Bidder is expected and requested to examine the location of the work and to inform himself fully as to the structural and mechanical conditions; the conformation of the ground; the character, quality and quantity of the materials to be encountered; the character of equipment and facilities needed preliminary to and during the execution of the work; the general and local conditions; and all other matters which can in any way affect the work to be done under the contract.

The General Requirements section of these Specifications identify any reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
6. PROPOSALS: All Proposals must be made upon the Proposal forms provided and shall be for materials and work called for in the Specifications and shown for each item in the Proposal. The total amount bid for the work in the Proposal shall be given in words and figures in the spaces provided. Proposal forms shall not be detached from these Specifications. All blank spaces in the bid form shall be filled in with black ink in words and figures. The Certification must be completed and executed when submitted.
 - A. Unit Price Items: The itemized quantities given in the Proposal for unit price work shall be considered by the Contractor as the quantities required to complete the work. Should the actual quantities required in the construction of the work be greater or less than the quantities shown in the items, an amount equal to the difference in quantities at the unit prices bid for the item will be added to or deducted from the contract price.

- B. Lump Sum Price: Where itemized prices are not given in the Proposal, the Contractor shall consider the lump sum prices bid for the work shown on the Drawings and/or specified to be sufficient for completion of his Contract.
- C. Total Amount Bid: The correct total amount bid is defined as the correct sum total of the amount bid for the items in the Proposal. The correct amount bid for each unit price item is defined as the product of the quantity listed in the Proposal for the item, multiplied by the unit price bid.
- D. The bids must be enclosed in a sealed envelope addressed to the **CITY OF PORT WENTWORTH DEVELOPMENT OFFICES, GEORGIA, 7306 GEORGIA HIGHWAY 21, SUITE 301, PORT WENTWORTH, GEORGIA 31407-966 (Shipping Address Only – No Mail Received at Street Address)** and marked **“PROPOSAL FOR SEWERAGE SYSTEM IMPROVEMENTS, FOR THE CITY OF PORT WENTWORTH, GEORGIA.”** *Bids must be submitted intact in this Book.*
- E. Attachments to this Bid: The following documents shall be submitted with and made a condition of this Bid:
- Proposal, pages P-1 through P-5 (yellow pages)
 - Bid Bond pages BB-1 and BB-2 (yellow pages)
 - Non-Collusion Affidavit, page NCA-1 (yellow page)
7. BID SECURITY: Each Proposal must be accompanied by a certified check or by a Bid Bond in an amount equal to not less than 10% of the amount of the Bid, to guarantee that the Successful Bidder will, within 10 days from the date of the notice of award of contract, enter into an Agreement with the Owner, and execute to the Owner a Performance Bond and Payment Bond, each equal to 100% of the contract amount, the agreement and bonds to be in the form set forth in this Book. If for any reason whatsoever the Bidder withdraws from the competition after the Bid opening time, or refuses to execute the required agreement and bonds, if his Bid is accepted, the Owner may retain the amount of the certified check, or proceed on the Bid Bond. The surety on the Performance Bond and the Payment Bond shall be a surety company authorized to do business in the State of Georgia and shall be countersigned by an agent residing in the State of Georgia. The bonds and surety thereon, shall be subject to approval by the Attorney for the Owner.
8. NON-COLLUSION AFFIDAVIT OF BIDDER: The Contractor is required to execute an affidavit (Page NCA-1) verifying that neither the Contractor nor any representative thereof has colluded or conspired, directly or indirectly, in connection with the attached Bid.
9. RECEIPT AND OPENING OF BIDS: Proposals must be filed with the Owner at or before the hour specified in the advertisement, and proposals filed after the specified time will not be considered. Proposals sent by mail must be mailed with sufficient time allowed for the proposal to reach the Owner prior to the opening of bids.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject all bids. Any bid

may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within sixty (60) days after the actual date of the opening thereof.

Conditional bids shall not be considered.

Bidders are requested to be present at the opening of Proposals which will be in public.

10. **RIGHT TO REJECT BIDS:** The Owner reserves the right to reject all Bids, and to waive informalities. No bids will be received after the Bid opening time. Unauthorized conditions, limitations and provisions attached to the Proposal, except as provided herein, will render it informal and cause its rejection. Unbalanced bids will be subject to rejection. Any Bidder may withdraw his bid, either personally or by telegraphic or written request, at any time prior to the Bid opening time.
11. **TELEGRAPHIC MODIFICATION:** Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two (2) days from the closing time, no consideration will be given to the telegraphic modification.
12. **DETERMINATION OF LOW BID:** The contract will be awarded, if it is awarded, to the low, responsible, responsive bidder. The Owner will decide which is the low, responsible, responsive bidder. Responsiveness shall be defined by (a) the completeness and regularity of the Bid Form, (b) a bid form without exclusions or special conditions, and (c) a bid form having no substitute bids for any items except as allowed under these Specifications. Responsibility will be based on whether the Bidder involved (a) maintains permanent place of business; (b) has adequate plant equipment to do the work properly and within the time limit established; (c) has suitable financial status to meet obligations incident to the work; (d) has appropriate technical experience and demonstrated capability in all respects to perform fully and reliably the contract requirements; and (e) has appropriate utility contracting license.
 - A. The Bidder is requested to list prices of at least two manufacturers for each item of major equipment if listed on the Proposal form. Use lowest price for base bid. If the make of any item listed in the base bid column does not meet specifications, the next lowest priced make listed for that item which does meet specifications will be used in determining the lowest bid price. If all of the listed makes of the item failed to meet specifications, the bid will be rejected on the grounds that it is nonresponsive.
 - B. The Owner has the right to apply any or all "Deductions or Additions" (if any) listed in the proposal by the Engineer for the purpose of making an award.

13. RETURN OF BID SECURITY: Owner will, within 10 days following the Bid opening, return the Bid security of all Bidders, except the Security posted by the three lowest Bidders; upon the award and execution of the contract, the remaining Bid securities will be promptly returned.
14. INTERPRETATION OF DRAWINGS AND SPECIFICATIONS: If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the Drawings, Construction Specifications and other documents, and as to the scope of any part of the work, he must submit to the Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery in ample time for an interpretation to be issued before the Bid opening date. Interpretations of the Project Documents will be made only by Addendum; a copy of each Addendum will be mailed or delivered to each person receiving a set of the Project Documents. The Engineer will not be responsible for other interpretations of the Project Documents.
15. COMPLETE WORK REQUIRED: The Construction Specifications, Drawings, and all other documents are essential parts of the contract; requirements occurring in one are as binding as though occurring in all. Documents are intended to be cooperative, and to describe and provide for a complete work. In case of discrepancies on the Drawings, figured dimensions shall govern. In case of omissions from the Construction Specifications as to items of equipment, and materials or quantities therefore, the Drawings shall govern. It shall be the responsibility of the Bidder to call to the attention of the Engineer obvious omissions of those magnitudes, which would affect the strength, adequacy, function, completeness, and cost of any part of the work, and in ample time for amendment by Addendum prior to the Bid opening date.
16. SUBCONTRACTS: The Bidder's attention is directed to the General Conditions concerning subcontracts. The Bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract:
 - Must be acceptable to the Owner. Approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.
 - Must provide insurance equal to that of the bidding contractor. Approval of the proposed subcontract award cannot be given by the Owner unless and until the proposed subcontractor has submitted the Certification and or other evidence showing that it has fully complied with any reporting requirements to which it is or was subject.
 - Although the bidder is not required to attach such Certifications by proposed subcontractors to his bid, the bidder is here advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

17. DRAWINGS: The character, location, and essential details of the work are shown upon a set of Drawings entitled:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION
MARCH 2022**

The Drawings and Specifications shall form a part of the contract for the work. The Drawings shall be supplemented by working drawings as are necessary. All authorized alterations affecting the requirement and information given on the Drawings shall be in writing.

18. EXTRA WORK ITEMS IN PROPOSAL: The Proposal contains certain unit price items entitled "Extra Work If Ordered by Engineer." In each of those items, the estimated quantity is based upon the average amount of extra work encountered in a typical job. The stated quantities are not guaranteed to be required or not to be required, but are included in the Proposal in order to determine, in advance of construction, the actual low bidder. No work described by those items will be approved for payment without advance authorization by the Engineer.
19. NOTICE OF SPECIAL CONDITIONS: Attention is particularly called to those parts of the Contract Documents and Specifications which deal with the following:
- A. Inspection and testing of material
 - B. Insurance requirements
20. POWER OF ATTORNEY: Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each bond a certified and effectively dated copy of their Power of Attorney.
21. AUTHORITY TO SIGN: If a Proposal is made by an individual, his name and Post Office address must be shown. If made by a firm, or partnership, the name and Post Office address of each member of the firm or partnership must be shown. If made by a Corporation, the person or persons, signing the Proposal must show the name of the State under the laws of which the Corporation is chartered and his or their, authority for signing same, and the names, titles and addresses of the President, Secretary and Treasurer, and the Corporate Authority for doing business in this state.
22. WORKING DRAWINGS: Working drawings for any structure shall consist of such detailed plans as may be required for the prosecution of the work but not included in the plans. All necessary-working drawings shall be furnished by the Contractor. They shall include shop details, erection plans, masonry layout diagrams, and bending diagrams for reinforcing steel, approval of which by the Engineer must be obtained before any work involving these plans may be performed. Plans for false work, centering, and form work may also be required and such cases shall be likewise subject to approval by the Engineer.

It is expressly understood, however, that approval by the Engineer of the Contractor's working drawings does not relieve the Contractor of any responsibility for accuracy of

dimensions and details. The Contractor shall be responsible for agreement and conformity of his working drawings with the Drawings and Specifications.

The contract price shall include the cost of furnishing all working drawings and the Contractor will be allowed no extra compensation for such drawings.

23. COOPERATION OF CONTRACTOR: The Contractor will be supplied with five copies of the Drawings and Specifications. The Contractor shall have available on the work, at all times, one of each of said Drawings and Specifications. He shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Engineer and with other contractors in every way possible. The Contractor shall at all times have a Superintendent, satisfactory to the Engineer, capable of acting as his agent on the work, who shall receive instructions from the Engineer or his authorized representatives. The superintendent shall have full authority to execute the orders or directions of the Engineer without delay and to promptly supply such materials, tools plant equipment, and labor as may be required.

24. CONSTRUCTION STAKES: Subsidiary lines and grades shall be laid out by the Contractor from the controlling lines and benchmarks furnished by the Engineer or from measurements shown on the Drawings. All lines and grades shall be subject to checking by the Engineer, but this checking shall in no way relieve the Contractor from responsibility for their correctness.

The Contractor shall provide such stakes, materials, and such labor and assistance as the Engineer may require in laying out work, establishing benchmarks and checking and measuring the work.

25. AUTHORITY AND DUTIES OF INSPECTOR: Inspectors shall be authorized to inspect all work done and materials furnished, including preparation, fabrication and manufacture of the materials to be used. The Inspector shall not be authorized to alter or waive any requirements of the Specifications. He shall call the attention of the Contractor to any failure of the work or materials to conform to the Specifications and Contract. He may reject materials or suspend the work until any questions at issue can be referred to and decided by the Engineer.

The presence of the Inspector shall in no way lessen the responsibility of the Contractor. The Contractor in no way relieves himself of responsibility for adequacy of the work by following the directives of the Inspector.

26. INSPECTION: The Contractor shall furnish the Engineer with every reasonable facility for ascertaining whether or not the work performed and materials used are in accordance with the requirements and intent of the Specifications and Contract. No work shall be done or materials used without suitable supervision or inspection by the Engineer or his representative. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, or obligate the Owner to final acceptance.

All materials furnished and work done when not in accordance with the Specifications and Contract will be rejected and shall immediately be removed and other work done and materials furnished in accordance therewith. If the Contractor fails to remove the work and materials as above ordered, within 48 hours, then the Engineer shall have the right

and authority to stop the Contractor and his work at once and to supply men and material at the cost and expense of the Contractor to remove said work and materials.

27. DEFECTIVE WORK AND MATERIALS: The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his Contract and defective work shall be made good, notwithstanding that such work and materials have been previously inspected by the Engineer and accepted or estimated for payment. The failure of the Engineer to condemn improper materials or workmanship shall not be considered as a waiver of any defect which may be discovered later, or as preventing the Owner at any time subsequently from recovering damages for work actually defective. All work shall be guaranteed against defects in workmanship or materials for a period of one year after final acceptance.
28. CORRECTIONS: Should any portions of the Drawings and Specifications be obscure or in dispute, they shall be referred to the Engineer and he shall decide as to the true meaning and intent. He shall also have the right to correct any errors or omissions at any time when such corrections are necessary for the proper fulfillment of said Drawings and Specifications.
29. DISAGREEMENT: Should any disagreement or difference arise as to the estimated quantities or classifications or as to the meaning of the Drawings or Specifications, on any point concerning the character, acceptability and nature of the several kinds of work, any materials and construction thereof, the decisions of the Engineer shall be final and conclusive and binding upon all parties to the Contract.
30. WEATHER: During unseasonable weather, all work must stop when the Engineer so directs, and all work must be suitably protected.
31. RIGHT OF WAY: The necessary land for the construction of the work will be furnished by the Owner. The Contractor is directed to the Owner for right of way actually acquired. The Owner will provide no right of way over other property. The Contractor shall take every possible precaution to inconvenience as little as possible the owners and tenants of adjacent property. Public highways shall not be obstructed in such a way as to cut off traffic. The Contractor shall, at his own expense, repair any damage or injury to either public or private property during the progress of the work. Wholesale cutting of trees on the right of way will not be permitted except as necessary for construction.
32. CONSTRUCTION SCHEDULE: A construction schedule showing the work in the order proposed by the Contractor and the time required to complete each phase will be required and shall be submitted to the Engineer for approval at the preconstruction conference. Approval of the construction schedule is required prior to receipt of the notice to proceed. This schedule shall include the dates for beginning and completion of all the work. If, in the opinion of the Engineer, the Contractor falls behind in his schedule or will not be able to complete the project in the time limits, he may require the Contractor to revise his schedule and put additional equipment on the job as so ordered.
33. WORK HOURS: Approved hours of work are Monday through Friday, 8:00 a.m. to 5:00 p.m., unless approved in writing by Owner / Engineer.

34. ORDER OF WORK: The order or sequence of the work shall be as provided herein or as approved by the Engineer, which approval shall in no way affect the responsibility of the Contractor.
35. COMPETENT LABOR: The Contractor shall employ only competent and skilled workers on the Project. The Contractor shall have a competent Superintendent present at all times when the work is in progress with authority to receive orders and execute the work.
- The Contractor shall, upon demand from the Engineer, immediately remove any Superintendent, Foreman or Workman whom the Engineer may consider incompetent or undesirable.
36. LAWS AND REGULATIONS: The Contractor shall keep himself fully informed of all laws, ordinances and regulations of State and County in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in this Contract, or in the Drawings or Specifications herein referred to, in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same in writing to the Owner. He shall at all times himself observe and comply with all such existing and future laws, ordinances and regulations, and shall protect and indemnify the Owner and its agents against any claims or liability arising from or based on the violation of any such law, ordinance, regulation, order of decree, whether by himself or by his employees.
37. GEORGIA WATER QUALITY CONTROL ACT: According to the *Rules and Regulations of the Georgia Water Quality Control Act*, Chapter 391-3-6, Section 12-5-51, anyone who intentionally or negligently causes or permits raw wastewater to discharge into State waters or onto the ground may be held liable for damages to the State.
38. PROTECTIVE WORKS: The Contractor shall furnish and install all necessary temporary works for the protection of the work, including barricades, warning signs and lights at night.
39. SAFETY AND OSHA REGULATIONS: The performance of work under this Contract shall comply with safety regulations prescribed by the Owner, those of the National Occupational Safety and Health Act of 1970 as amended to date (PL 91-596), and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-054), and the requirements of the State where project is located. Each bidder shall satisfy himself as to the character and extent of such regulations.
40. SANITARY REGULATIONS: Necessary sanitary conveniences for the use of the laborers on the work shall be erected and maintained by the Contractor in such a manner and at such points as shall be approved by the Engineer. Their use shall be strictly enforced.
41. STORAGE FACILITIES: Should the Contractor so desire, he may build storage facilities or other structures for housing men, tools, machinery and supplies, but they will be permitted only at approved places, and their surroundings shall be maintained at all times in a neat and sanitary and satisfactory manner to comply with the regulation of the

- State Board of Health and all local ordinances. No nuisance will be permitted. On or before the completion of the work, all such structures shall be removed, together with all rubbish and trash, at the expense of the Contractor.
42. WATER SUPPLY, FUEL SUPPLY AND ELECTRIC POWER: The Contractor shall make his own arrangements for obtaining a water supply, fuel supply and electric power for his construction operations as set forth in the Supplemental General Conditions.
 43. SOIL EROSION AND SEDIMENT CONTROL: The Contractor shall be required to take the necessary steps to minimize siltation and soil erosion during construction. The Contractor shall utilize best management practices (BMPs) as shown and in accordance with the *Manual for Erosion and Sediment Control in Georgia*, as amended to date.
 44. STORMWATER MONITORING: If required, the Contractor shall measure rainfall and perform inspections and sample discharges in accordance with NPDES Stormwater Discharges Associated with Construction Activities, General Permit (GAR 100001, 100002, 100003).
 45. ACCESS ROADS: Streets, roads and drives used by the Contractor for access to and from the site of his work shall be protected from damage in connection with construction work. Any such damage done shall be repaired immediately and left in good condition at the end of the construction period.
 46. PROGRESS PAYMENT: Progress payment requests from the Contractor shall be submitted to the Engineer for approval on or before the 5th day of each calendar month. On or before the 30th day of each calendar month the Owner shall make progress payments to the Contractor on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the Contractor, including materials delivered to the site and undelivered specifically manufactured equipment, less retainage as per the General Conditions of these Specifications which is to be retained by the Owner until all work has been performed strictly in accordance with the Contract Documents and until such work has been accepted by the Owner. The terms and conditions in these documents shall supersede all provisions of the *Georgia Prompt Pay Act*.
 47. ALLOWABLE TIME FOR COMPLETION: The time allowed for completion on all work to be done under this contract shall begin after notification by the Engineer to proceed with the work. Such notification will be issued upon completion of the contract arrangements, and in accordance with approved construction schedule, arranged to be within the contract time for completion. The time allowed for completion of the work is as set forth in the Contract Agreement.
 48. LIQUIDATED DAMAGES: The Contractor shall pay to the Owner as liquidated damages the sum set forth in the Contract Agreement for each calendar day that he shall be in default of completing the work in his Contract within the time limit named therein for substantial completion, and the Contractor shall pay to the Owner as liquidated damages the sum set forth in the Contract Agreement for each calendar day that he shall be in default of completing the work in his Contract within the time limit named therein for final completion.

49. TAXES: Bidders shall include in amounts bid in the Proposal an allowance for payment of all taxes and on all taxable materials specified to be furnished by the Contractor and incorporated into the work under this Contract as specified in the Supplemental General Conditions.
50. CONTRACTOR'S LOCAL OFFICE: The Contractor shall maintain a local office with a telephone in the general area of the work, and will be required to have a responsible representative on call at all times.
51. OFFICE SPACE AND FACILITIES FOR INSPECTORS: Office space for the inspector will not be required.
52. MUTUAL RESPONSIBILITY OF CONTRACTORS: If, through acts of neglect of the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement of arbitration if such other Contractor or subcontractor shall assert any claims against the Owner, on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall indemnify and save harmless the Owner against such claim.
53. EMERGENCY WORK: The Contractor shall at all times, including nights, weekends or holidays, have a responsible man available to act in case of emergency repairs who the Owner may contact. Upon notification of emergency work necessary, the Contractor's representative shall immediately take steps to make such repairs.
54. INSURANCE REQUIREMENTS: The Contractor's attention is directed to requirements for Contractor and Subcontractor insurance coverage as set forth in the General Conditions.
55. BUILDING PERMITS AND BUSINESS LICENSE: The Contractor shall be required to obtain applicable Building Permits and Business Licenses as required by the City of Port Wentworth or Chatham County, Georgia.
56. CONSTRUCTION PERMITS, EASEMENTS AND RIGHT OF WAY: All construction permits, and easements or right of ways known to be required to begin construction have been obtained.
57. GEORGIA SECURITY COMPLIANCE ACT: The Contractor and subcontractor(s) are required to execute affidavits verifying the work eligibility of all newly hired employees. The forms are included in these Specifications. The Contractor is also required to complete the Affidavit Verifying Status for Public Benefit that verifies the applicant's lawful presence in the United States.
58. FUNDING REQUIREMENTS: The project is proposed to be funded with ARP and local funds. All requirements and conditions apply.

PROPOSAL

TO THE MAYOR AND COUNCIL PORT WENTWORTH, GEORGIA

Submitted: _____, 2022

The undersigned, as Bidder, hereby declares that the only persons interested in the Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any person, company or parties making a bid or Proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the Drawings and Specifications for the work and contractual documents relative thereto, and has read all Special Provisions and General Conditions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees, if this Proposal is accepted, to contract with the City of Port Wentworth, Georgia in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary and to complete the construction of the work in full and complete accordance with the shown, noted, described, and reasonably intended requirements of the Drawings, Specifications and Contract Documents to the full and entire satisfaction of the City of Port Wentworth, Georgia with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents, for the following prices:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION**

For furnishing all materials and equipment and performing all labor necessary for performing the smoke testing as shown on the Drawings and as specified for the following prices and approximate quantities shown.

<i>Item No.</i>	<i>Qty.</i>	<i>Unit</i>	<i>Description</i>	<i>Unit Price</i>	<i>Total Price</i>
1.	1	LS	MOBILIZATION		
2.	1	LS	TRAFFIC CONTROL		
3.	218,000	LF	SMOKE TEST SEWER LINE		
4.	970	EA	MANHOLE INVESTIGATION		
5.	500	EA	LOW FLOW INVESTIGATION		
6.	43,600	LF	CLEAN LINE 8" AND LARGER		
7.	1,000	CY	GRIT REMOVAL AND DISPOSAL		
8.	80,000	LF	CLEAN AND TELEWISE LINE		
9.	2,200	LF	REMOVAL OF ROOTS OR GREASE		
10.	20	EA	REMOVAL OF INTRUDING SERVICES OR OBSTRUCTIONS		

EXTRA WORK, IF ORDERED BY ENGINEER

11. PRESSURE TESTING AND GROUTING					
a.	11	EA	Set-up Per 8" Mainline Segment		
b.	1	EA	Set-up Per 12" Mainline Segment		
c.	15	EA	Pressure Test Lateral Connection to Main Line		
d.	300	GAL	Grout Injection		
12.	5,000	LF	CLEAN AND TELEWISE LINE, POST SMOKE TEST		
13.	20	EA	ADJUST MANHOLE FRAME AND COVER TO GRADE, 6" MIN. DEPTH		
a.	15	EA	In Asphalt		
b.	5	EA	In Dirt or Grass		

TOTAL AMOUNT BID, ITEMS 1 THROUGH 13 INCLUSIVE, THE AMOUNT OF:

DOLLARS (\$ _____)

The Bidder further proposes and agrees hereby to commence work under this Contract, with adequate force and equipment, on a date to be specified in a written order of the Engineer and shall fully complete all work thereunder as set forth in the Contract Agreement.

The Bidder further proposes and agrees to construct all work under lump sum items of the Proposal for the lump sum price bid, and understands that certain quantities as listed under Extra Work If Ordered By Engineer will be used in case of minor authorized increase or decrease in quantities to adjust by direct increase or decrease the lump sum bid for the complete work.

The Bidder declares that he understands that the unit price quantities shown in the Proposal are subject to adjustment by either increase or decrease, and that should quantities of any of the items of the work be increased, the undersigned proposes to do the additional work at the unit prices stated herein; and should the quantities be decreased, he also understands that payment will be made on actual quantities at the unit price bid and will make no claim for anticipated profits for any decrease in the quantities and that quantities will be determined upon completion of the work at which time adjustment will be made to the contract amount by direct increase or decrease.

The undersigned further agrees that, in case of failure on his part to execute the said Contract and the Bond within 10 consecutive calendar days after written notice being given of the award of the Contract, the check or bid bond accompanying this bid and the monies payable thereto, shall be paid into the funds of the Owner as liquidated damages for such failure otherwise, the check or bid bond accompanying this Proposal shall be returned to the undersigned.

Attached hereto is a certified check on the _____ Bank of _____, or a Bid Bond by the _____ in the amount of _____ Dollars (\$_____) made payable to the **CITY OF PORT WENTWORTH, GEORGIA** in accordance with the conditions of the advertisement and provisions herein.

BIDDER ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDA

No. _____	Date _____	No. _____	Date _____
No. _____	Date _____	No. _____	Date _____

Submitted By: _____

By: _____ L.S.

Title: _____

Address: _____

Telephone No. _____ Fax No. _____

(Note: If the Bidder is a Corporation, the Proposal shall be signed by an officer of the Corporation; if a Partnership, it shall be signed by a Partner. If signed by others, authority for signature shall be attached.)

The full names and residences of persons and firms interested in the foregoing bid, as principal, are as follows:

EXPERIENCE AND REFERENCES

The bidder shall here state what work he has done of similar nature to that bid for, and give references that will afford the Owner opportunity to judge as to experience, skill, business standing and financial ability.

BID BOND**STATE OF GEORGIA
CHATHAM COUNTY**

KNOW ALL MEN BY THESE PRESENTS: THAT WE _____
 (herein called the "Bidder") submitted a Bid to the City of Port Wentworth, Georgia (herein
 called the "Owner") dated the _____ day of _____, 2022 for procuring and
 installing products for a project entitled "Sewerage System Rehabilitation, March 2022," (herein
 called the "Project") and the testing and starting up of that project; that the Bidder and we,
 _____ (herein called the "Surety") are
 firmly bound to the Owner in the sum of:

 _____ Dollars (\$ _____)

in lawful United States currency; and that we, the Bidder and Surety jointly and severally, bind
 our respective assigns, successors, heirs, executors and administrators to our obligations to pay
 the Owner that sum.

THE CONDITION OF THIS OBLIGATION is that if the Bid is not selected by the Owner as
 being the lowest, or lower, responsible Bid, then this obligation shall be void, otherwise this
 obligation shall remain in full force and effect.

THE FURTHER CONDITION OF THIS OBLIGATION is that the Surety, for value received,
 stipulates and agrees that extensions to the time limit in which the Owner may accept Bids shall
 not invalidate the Surety's obligation under this bond, and that the Surety does hereby waive
 notice of extensions to that time limit.

IN WITNESS WHEREOF the Bidder and the Surety have executed this BID BOND on this
 _____ day of _____, 2022

 (Bona Fide Bidder's Name) (Bidder's Seal if Corporation)

By: _____ L.S.
 (Print Name and Title of Signer)

(Surety's Name)

By: _____ (Surety's Seal)
(Print Name and Title of Signer)

Countersigned

By: _____ L.S.
(Agent, Resident of the State of Georgia)

NON-COLLUSION AFFIDAVIT OF BIDDER

State of _____

County of _____

I, _____ (name of individual), being first duly sworn, deposes and says that:

- (1) He is _____ (title) of _____
(Company) the Bidder that has submitted the Bid on the following:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION
MARCH 2022**

- (2) He makes an oath that O.C.G.A. 36-91-21 (e) has not directly or indirectly been violated;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Port Wentworth, Georgia or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Title _____

Subscribed and sworn to before me,

This _____ day of _____, 2022

Notary Public: _____

(Notary Seal)

My commission expires: _____

CONTRACT AGREEMENT

This Agreement made and entered into on the _____ day of _____, 2022, by and between the **CITY OF PORT WENTWORTH, GEORGIA**, party of the first part (hereinafter called the "Owner"), and _____, party of the second part (hereinafter called the "Contractor").

WITNESSETH:

That the Contractor, for the consideration hereinafter fully set out hereby agrees with the Owner as follows:

That the Contractor will furnish all equipment, tools, materials, skill and labor of every description, necessary to carry out and complete in a good, firm, substantial, and workmanlike manner the construction of all the work specified under:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION
MARCH 2022**

In strict conformity with Drawings and the Construction Specifications hereinafter set forth, which Drawings and Specifications together with the foregoing Bid, Advertisement for Bid, Instructions to Bidder and Special Provisions, General Conditions, Supplemental General Conditions, Performance and Payment Bonds, this Agreement, and all addenda, hereto annexed, shall form essential parts of this Agreement, as if fully contained herein. The work covered by this construction Agreement includes all work as shown on the Drawings, specified, and listed in the attached Proposal.

That the Contractor shall commence the work to be performed under this Agreement on a date to be specified in a written order of the Owner's Engineer and shall within 120 consecutive calendar days from said date substantially complete all work hereunder, except as otherwise provided in these documents for extension of the time limit, and shall within 150 consecutive calendar days from said date achieve final completion with 100% of punch list items complete. Time is of the essence in this contract, and the Contractor shall pay to the Owner, not as a penalty, but as liquidated damages, the sum of \$600.00 for each calendar day that he shall be in default of substantial or final completion of the work within the time limits named herein.

Because of the difficulty of fixing damages suffered by the Owner on account of such default, damages are herein agreed upon as stated.

The Contractor shall perform and comply with all conditions, stipulations and requirements specified in the deeds, easements or other documents pertaining to all aspects of this Project.

The Owner hereby agrees to pay to the Contractor for the faithful performance of this Agreement, subject to additions and deductions as provided in the Specifications and Proposal, in lawful money of the United States, the sum of:

_____ DOLLARS (\$ _____)

On or before the 30th day of each calendar month, the Owner shall make partial payments to the Contractor on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the Contractor, including materials delivered to the site, less retainage as per the General Conditions, which is to be retained by the Owner until all work has been performed strictly in accordance with this Agreement, and until such work has been accepted by the Owner. The terms and General Conditions in the Contract Documents shall supersede all provisions of the *Georgia Prompt Pay Act*.

Upon submission by the Contractor of evidence satisfactory to the Owner that all payrolls, material bills and other costs incurred by the Contractor in connection with the construction of the work have been paid in full, final payment on account of this Agreement shall be made within thirty (30) days after the completion by the Contractor of all work covered by this Agreement and the acceptance of such work by the Owner.

It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the surety bonds hereto attached for its faithful performance, the Owner shall deem the surety or sureties upon such bond to be unsatisfactory, or if, for any reason, such bond ceases to be adequate to cover the performance of the work, the Contractor shall, at his expense, within five (5) days after the receipt of notice from the Owner to do so, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the Owner. In such event no further payment to the Contractor shall be deemed to be due under this Agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement under their respective seals on the day and date first above written in six counterparts, each of which shall without proof or accounting for the other counterparts, be deemed an original contract.

NAME OF CONTRACTOR

Signed, sealed and delivered
in the presence of:

BY: _____ (L.S.)

TITLE: _____

Unofficial Witness

WITNESSED:

Notary Public

My Commission Expires:

BY: _____ (L.S.)

TITLE: _____

(NOTARY SEAL)

(CORPORATE SEAL)

CITY OF PORT WENTWORTH, GEORGIA

(L.S.)

Signed, sealed and delivered
in the presence of:

MAYOR

Unofficial Witness

WITNESSED:

Notary Public

My Commission Expires:

BY: _____ (L.S.)

Clerk

(NOTARY SEAL)

(CITY SEAL)

APPROVED AS TO FORM BEFORE EXECUTION

BY: _____ (L.S.)

Attorney for Owner

*Note: If Contractor is a corporation, the Agreement shall be signed by the President, or Vice-President, attested by the Secretary and the corporate seal affixed. If the Contractor is a partnership, the Agreement shall be signed in the partnership name by one of the partners, with indication that he is a general partner.

Attachment: 212469.006 Sewer Rehab Specifications (2660 : Contract Award for the Sewerage System Rehabilitation Project May 2022)

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the **CITY OF PORT WENTWORTH, GEORGIA**, hereinafter called OWNER, the total aggregate penal sum of:

_____ DOLLARS (\$ _____)

of lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 2022 a copy of which is hereto attached and made a part for the construction of:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION
MARCH 2022**

NOW, THEREFORE, if the PRINCIPAL shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any authorized extensions or modifications thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one (1) year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully, indemnify and save harmless the OWNER from all costs and damages

which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expenses which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in six counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2022.

NAME OF PRINCIPAL

Signed, sealed and delivered
in the presence of:

BY: _____

TITLE: _____

Unofficial Witness

WITNESSED:

BY: _____ (L.S.)

TITLE: _____

(CORPORATE SEAL)

Notary Public

My Commission Expires:

(NOTARY SEAL)

NAME OF SURETY

Signed, sealed and delivered
in the presence of:

BY: _____

TITLE: _____

Unofficial Witness

WITNESSED:

BY: _____ (L.S.)

(SURETY SEAL)

Notary Public

My Commission Expires:

(NOTARY SEAL)

Note: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

Important: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located. In addition the bonds must be signed or countersigned by an agent residing in Georgia.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the **CITY OF PORT WENTWORTH, GEORGIA**, hereinafter called OWNER, the total aggregate penal sum of:

_____ DOLLARS (\$ _____)

of lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 2022 a copy of which is hereto attached and made a part for the construction of:

**CITY OF PORT WENTWORTH, GEORGIA
SEWERAGE SYSTEM REHABILITATION
MARCH 2022**

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or material man lien holder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in six counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2022.

NAME OF PRINCIPAL

Signed, sealed and delivered
in the presence of:

BY: _____

TITLE: _____

Unofficial Witness

WITNESSED:

BY: _____ (L.S.)

TITLE: _____

(CORPORATE SEAL)

Notary Public

My Commission Expires:

(NOTARY SEAL)

NAME OF SURETY

Signed, sealed and delivered
in the presence of:

BY: _____

TITLE: _____

Unofficial Witness

WITNESSED:

BY: _____ (L.S.)

(SURETY SEAL)

Notary Public

My Commission Expires:

(NOTARY SEAL)

Note: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

Important: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located. In addition the bonds must be signed or countersigned by an agent residing in Georgia.

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is contracting with the City of Port Wentworth, Georgia has registered with, is authorized to use and is participating in a federal work authorization program* [any of the electronic verification work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91. The user identification number and the date of authorization for the affiant are set forth below. The undersigned contractor is using and will continue to use the federal work authorization program throughout the contract period.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the City of Port Wentworth, Georgia, that undersigned shall require as a condition of such employment or contract that contractor or subcontractor registers and participates in a federal work authorization program to verify information of all newly hired employees. In addition, contractor will secure from such contractor(s) or subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a notice of identity of such contractor or subcontractor together with a copy of each such verification to the City of Port Wentworth, Georgia within five (5) business days after the time the contractor(s) or subcontractor(s) is retained to perform such service.

E-Verify* User identification Number

Date of Authorization for Contractor

Company Name

By: Authorized Officer or Agent

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME THIS
____ DAY OF _____, 2022

Notary Public: _____

My Commission expires: _____

(NOTARY SEAL)

**As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is "E-Verify" operated by the U.S. Citizenship and Information Services Bureau of the U.S. department of Homeland Security, in conjunction with the Social Security Administration (SSA).*

SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services as a subcontractor for _____, the contractor which has a contract with the City of Port Wentworth, Georgia, has registered with, is authorized to use and is participating in a federal work authorization program* [any of the electronic verification work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91. The user identification number and the date of authorization for this subcontractor to use the federal work authorization program are set forth below. The undersigned subcontractor is using and will continue to use the federal work authorization program throughout the contract period.

E-Verify* User identification Number

Date of Authorization for Contractor

Company Name

By: Authorized Officer or Agent

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME THIS

_____ DAY OF _____, 2022

Notary Public: _____

My Commission expires: _____

(NOTARY SEAL)

**As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is "E-Verify" operated by the U.S. Citizenship and Information Services Bureau of the U.S. department of Homeland Security, in conjunction with the Social Security Administration (SSA).*

**CITY OF PORT WENTWORTH, GEORGIA
AFFIDAVIT VERIFYING STATUS FOR PUBLIC BENEFIT**

By executing this affidavit under oath, as an applicant for a City of Port Wentworth, Georgia public benefit as referenced in O.C.G.A. § 50-36-1, I am stating the following with respect to my application for a City of Port Wentworth, Georgia public benefit for _____.

(Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity)

1) _____ I am a United States citizen

OR

2) _____ I am a legal permanent resident eighteen (18) years of age or older or I am an otherwise qualified alien or non-immigrant under the Federal Immigration and Nationality Act eighteen (18) years of age or older and lawfully present in the United States.*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of O.C.G.A. § 16-10-20.

Signature of Applicant

Printed Name of Applicant

Date

*Alien registration number for non-citizens

Sworn to and subscribed

Before me this _____ Day of _____, 2022

Notary Public
My Commission Expires:
(NOTARY SEAL)

*Note: O.C.G.A. § 50-36-1(e)(2) requires that aliens under the federal Immigration and Nationality Act, Title 8 U.S.C., as amended, provide their alien registration number. Because legal permanent residents are included in the federal definition of "alien," legal permanent residents must also provide their alien registration number. Qualified aliens that do not have an alien registration number may supply another identifying number below:

CERTIFICATE OF OWNER'S ATTORNEY

I, the undersigned _____, the duly authorized and acting legal representative of the City of Port Wentworth, Georgia, do hereby certify as follows:

I have examined the attached Contract(s) and Performance and Payment Bond(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions, and provisions thereof.

Attorney for Owner

Date: _____

GENERAL CONDITIONS

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Definitions 2. Additional Instructions 3. Schedules, Reports and Records 4. Drawings and Specifications 5. Shop Drawings 6. Materials, Services and Facilities 7. Inspection and Testing 8. Substitutions 9. Patents 10. Surveys, Permits, Regulations 11. Protection of Work, Property, Persons 12. Supervision by Contractor 13. Changes in the Work 14. Changes in Contract Price 15. Time for Completion and Liquidated Damages 16. Correction of Work | <ol style="list-style-type: none"> 17. Subsurface Conditions 18. Suspension of Work, Termination and Delay 19. Payments to Contractor 20. Acceptance of Final Payment as Release 21. Insurance 22. Contract Security 23. Assignments 24. Indemnification 25. Separate Contracts 26. Subcontracting 27. Engineer's Authority 28. Land and Rights of Way 29. Guarantee 30. Arbitration by Mutual Agreement 31. Taxes |
|--|---|

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATION, by additions, deletions, clarifications or corrections
- 1.3 BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed
- 1.4 BIDDER - Any person, firm or corporation submitting a BID for the WORK
- 1.5 BONDS - Bid, Performance and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS
- 1.6 CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME
- 1.7 CONTRACT DOCUMENTS - The Contract, including Advertisement For Bidders, BID, Bid Bond, Agreement, Payment Bond, Performance Bond, NOTICE OF AWARD,

- NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS and ADDENDA
- 1.8 CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS
 - 1.9 CONTRACT TIME - The total number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK
 - 1.10 CONTRACTOR - The person, firm or corporation (holder of a State of Georgia Utility Contractors License) with whom the OWNER has executed the Agreement
 - 1.11 DRAWINGS - The part of the CONTRACT DOCUMENTS, which show the characteristics, and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER
 - 1.12 ENGINEER - The person, firm or corporation named as such in the CONTRACT DOCUMENTS
 - 1.13 FIELD ORDER - A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction
 - 1.14 NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
 - 1.15 NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
 - 1.16 OWNER - A public or quasi-public body or authority, corporation, association, partnership or individual for whom the WORK is to be performed.
 - 1.17 PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS
 - 1.18 RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof
 - 1.19 SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed
 - 1.20 SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship
 - 1.21 SUBCONTRACTOR - An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site
 - 1.22 SUBSTANTIAL COMPLETION - That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in

accordance with the CONTRACT DOCUMENTS, so the PROJECT or specified part can be utilized for the purposes for which it is intended

- 1.23 SUPPLEMENTAL GENERAL CONDITIONS - modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws
- 1.24 SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site
- 1.25 WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT
- 1.26 WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party or his authorized representative on the WORK

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- 2.1 The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS
- 2.2 The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS

- 3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.
- 3.2 Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, estimated date of completion of each part and, as applicable:
 - 3.2.1 The dates at which special detail drawings will be required; and
 - 3.2.2 Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment
- 3.3 The CONTRACTOR shall also submit a schedule of payments that he anticipates he will earn during the course of the WORK.

4. DRAWINGS AND SPECIFICATIONS

- 4.1 The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all

incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.

- 4.2 In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern general DRAWINGS.
- 4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or and inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS

- 5.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S review of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. SHOP DRAWINGS, which substantially deviate from the requirement of the CONTRACT DOCUMENTS, shall be evidenced by a CHANGE ORDER.
- 5.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 Portions of the WORK requiring a SHOP DRAWING or submission shall not begin until the SHOP DRAWING has been reviewed by the ENGINEER. A copy of each SHOP DRAWING bearing the Engineer's review stamp shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES

- 6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete and deliver the WORK within the specified time.
- 6.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.

- 6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sales contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3 The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.
- 7.5 Inspections, tests or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6 The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
- 7.7 If any WORK is covered contrary to the written instruction of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.
- 7.8 If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

- 9.1 The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design or the product of a particular manufacturer or manufacturers is specified, however if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

- 10.1 The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR, shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets
- 10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
- 10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for the by CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the

conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13 CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS

- 11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR

- 12.1 The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR shall employ a state "UTILITY MANAGER" certificate holder to supervise his utility work. The "UTILITY MANAGER" will have oversight of and be in charge of all construction on the PROJECT. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the

CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK

- 13.1 The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 13.2 The ENGINEER, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30) days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE

- 14.1 The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:
- a) Unit prices previously approved
 - b) An agreed lump sum
 - c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed 15% of the actual cost of the WORK to cover the cost of general overhead and profit.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- 15.1 The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the

OWNER the amount for liquidated damages as specified in the CONTRACT AGREEMENT for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

- 15.4 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.
 - 15.4.1 To any preference, priority or allocation order duly issued by the OWNER
 - 15.4.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and
 - 15.4.3 To any delay of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK

- 16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.
- 16.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS

- 17.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:
 - 17.1.1 Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or
 - 17.1.2 Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.
- 17.2 The OWNER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless he has given the required WRITTEN NOTICE; provided that the OWNER may, if he

determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION AND DELAY

- 18.1 The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.
- 18.2 If the CONTRACTOR is adjudged a bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4 After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the Contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5 If, through no act of fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public

authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.

- 18.6 If the performance of all or any portion of the WORK is suspended, delayed or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time; an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME or both shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENTS TO CONTRACTOR

- 19.1 All payments to the CONTRACTOR will be made according to an approved partial payment estimate submitted as required, but not more than once per month. The CONTRACTOR will, on or before the 5th day of the month, submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. The period covered by the partial payment estimate will end on the 25th of the previous month. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within fifteen (15) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment based on the approved partial payment estimate. The OWNER shall retain 10% of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after 50% of the WORK has been completed, if he finds that satisfactory progress is being made, shall reduce retainage to 5% of the contract amount on the current and remaining estimates.

When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below 5% to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

- 19.2 The request for payment may also include an allowance for the cost of such major materials and equipment, which are suitably stored either at or near the site.
- 19.3 Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4 The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK.
- 19.6 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.
- 19.7 If the OWNER fails to make payment thirty (30) days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- 20.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BONDS.

21. INSURANCE

- 21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts of them may be liable:
- 21.1.1 Claims under workmen's compensation, disability benefit and other similar employee benefit acts
- 21.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees
- 21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees
- 21.1.4 Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person
- 21.1.5 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom
- 21.2 Coverages under the policies will not be canceled unless at least thirty (30) days prior WRITTEN NOTICE has been given to the OWNER.
- 21.3 Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK.
- 21.4 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:
- 21.4.1 CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident, and a limit

of liability of not less than \$2,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$2,000,000 aggregate for any such damage sustained by two or more persons in any one accident.

- 21.4.2 The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.
- 21.5 The CONTRACTOR shall procure and maintain at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the work is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of his employees not otherwise protected.
- 21.6 The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft and smoke during the CONTRACT TIME, and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, the ENGINEER, and the OWNER.
- 21.7 The CONTRACTOR shall acquire and maintain, if applicable, Flood and Hazard Insurance, any flood insurance made available under the National Flood Insurance Act of 1968, as amended, for WORK to be performed. The insurance shall be in an amount at least equal to the contract amount costs, excluding cost of uninsurable improvements, or to the maximum limit of coverage made available under the National Flood Insurance Act of 1968, as amended, whichever is less.

22. CONTRACT SECURITY

- 22.1 The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a Performance Bond and a Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the

CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such bond is declared a bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal BONDS, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS

- 23.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION

- 24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- 24.2 In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- 24.3 The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS

- 25.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other

CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

- 25.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.
- 25.3 If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefore as provided in Sections 14 and 15.

26. SUBCONTRACTING

- 26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR (S) in excess of 50% of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- 26.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY

- 27.1 The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions, which may arise as to quality, and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the

WORK. Inspection may be made at the factory or fabrication plant of the source of material supply.

27.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures or construction safety.

27.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LANDS AND RIGHTS OF WAY

28.1 Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights of way necessary for carrying out and for completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.

28.2 The OWNER shall provide to the CONTRACTOR information, which delineates and describes the lands owned and rights of way acquired.

28.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTY

29.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance BOND shall remain in full force and effect through the guarantee period.

30. ARBITRATION BY MUTUAL AGREEMENT

30.1 All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2 Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute or other matter in question that would be barred by the applicable statute of limitations.

30.3 The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. TAXES

31.1 The CONTRACTOR will pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

SUPPLEMENTAL GENERAL CONDITIONS

1. SCOPE – These “Supplemental General Conditions” shall apply to work as whole and to each and all branches of the work. Subcontractors shall be supplied with a copy of the “Supplemental General Conditions”, and no arrangement of contracts with the subcontractors is to be such as to conflict with same. They shall also apply to any modifications or extra work.
2. SPECIFICATIONS AND DRAWINGS - In addition to Sections 4.2 and 4.3 of the “General Conditions of these Specifications,” if the Contractor fails to call any discrepancy to the attention of the Engineer, the subsequent decision of the Engineers regarding the Specifications and Drawings as to which is correct shall be binding and final.
3. SANITARY PROVISION - The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the regulation of the State Board of Health and all local ordinances. No nuisance will be permitted.
4. TAXES –
 - A. Social Security / Payroll Taxes: The Contractor assumes and is liable specifically for all state and federal so-called payroll or Social Security taxes that may be in force at the time of the award of the Contract, and guarantees to hold the Owner harmless in every respect against same.
 - B. State and Federal Sales and Use Taxes: The Contractor assumes and is liable specifically for all state and federal sales and use taxes that may be in force at the time of the award of the Contract, and guarantees to hold the Owner harmless in every respect against same.
 - C. State of Georgia Sales Tax Rebate O.C.G.A. 48-8-3 Machinery and Equipment Used to Reduce or Eliminate Water Pollution: The Owner may be eligible for a refund from the State of Georgia for sales tax paid by the Contractor on certain equipment. If requested by the Owner, the Contractor shall provide necessary sales tax documentation to the Owner for the sales tax refund request.
5. USE OF PREMISES - The Contractor shall not load nor permit any part of any structure to be loaded with a weight, which will endanger its safety. The Contractor shall confine his apparatus; the storage of materials and the operations of his workmen to the limits defined by laws, ordinance, permits or directions of the Engineer and shall not unduly encumber the premises with his material.

The Contractor shall enforce the instructions of the Engineers regarding signs, advertisements, fire and smoking.
6. GUARDS, LIGHTS, ETC. - The Contractor shall provide all barricades, guards, lights or other such protection and walks around his work as are required by the regulation of state, county or federal laws and shall assume all responsibility of same, and keep them in repair. The necessary lighting, if required, to facilitate overtime work shall be provided. All barricades, etc. shall be promptly removed on completion of the work.

7. MOVING MATERIALS - If it becomes necessary at any time during the construction to move materials which are to enter into the construction, the materials having been temporarily placed, the Contractor or subcontractor shall, when so directed by the Engineer, move them or cause them to be moved without additional cost to the Owner.
8. CLEANING DURING CONSTRUCTION AND AT COMPLETION OF WORK- The Contractor shall keep the premises clean at all times and shall remove all rubbish as often as directed by the Resident Inspector or Owner. If the Contractor does not at all times provide men to attend to the cleaning up, on request, in a manner satisfactory to the Resident Inspector, the Resident Inspector may employ such men to direct and charge the cost of same to the account of the Contractor. Every effort shall be made to minimize siltation and bank erosion during construction.

Upon completion of the work, the Contractor shall leave the grounds in a neat and clean condition. Construction areas shall be replanted with grass and shrubs where they have been removed and where necessary, at the request of the Engineer, the ground shall be sprigged or sodded. All areas disturbed by construction shall be restored to present or better condition. Any existing structure, which is damaged during construction, shall be repaired or replaced to original condition at the Contractor's expense.

9. REMOVAL OF MATERIALS - All materials of unsound or otherwise unfit character and not in accordance with the terms of the Contract will be condemned by the Engineer.

The Contractor shall promptly remove from the premises all condemned materials whether incorporated in the work or not. The Contractor shall promptly replace the materials to the satisfaction of the Engineer. If the Contractor does not remove such condemned materials within a reasonable time fixed by written notice, the Owner may remove them and store at the expense of the Contractor. If the Contractor does not pay to the Owner the expense of such removal within 10 days' time thereafter, the Owner may upon 10 days written notice sell such materials at auction or private sale, and shall account for the net proceeds thereof, after deduction of all cost and expenses that rightfully should have been borne by the Contractor.

10. MAINTENANCE - The Contractor will be required to maintain all work done by him in a first class condition for 30 days after the same has been completed as a whole and the Engineers have notified the Contractor in writing that the work has been finished to their satisfaction. The retained percentage will not be due or payable to the Contractor until the 30 day maintenance period has expired.

Any damage to the site or surroundings, including paving, shoulders, culverts, drainage structures, grass, etc., shall be repaired by the Contractor and all parts of the site shall be left in as good repair as before the work started.

11. QUANTITIES OF ESTIMATE - The estimated quantities of work to be done and materials to be furnished under this Contract shown in any of the documents, including the Proposal, are given for use in comparing bids and to indicate approximately the total amount of the Contract; the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract.

12. PUBLIC CONVENIENCE AND SAFETY - No street, alley or other roadway shall be closed to the public by the Contractor, except by written permission of the Engineer, and except while so closed, the Contractor shall maintain traffic over, through or around work with the maximum practical convenience for the full 24 hours of each day whether or not work has ceased temporarily. The Contractor shall notify the Engineer in writing, at the earliest practicable date and in any case before starting any construction that might in any way inconvenience or endanger traffic, regarding each proposed closure and proposed schedule of operations thereon, so all necessary arrangements may be made.

The convenience of the general public and of residents along the working area shall be provided for in a reasonably adequate and satisfactory manner. Where existing roadways are not available for use as detours, traffic shall be permitted to pass through the work, except as otherwise specified or directed by the Engineer. The Contractor shall provide and maintain at his expense and in a manner approved and deemed practicable by the Engineer, such temporary roads as may be necessary to provide convenience access to driveways, houses, buildings, business establishments, and other property abutting the work as well as temporary approaches to and crossings of intersecting streets and other roadways. The Contractor shall provide at his expense temporary bridges for pedestrians, as required, at all street intersections over ditches, etc.

Materials and equipment stored along streets and other roadways shall be so placed and the work at all times shall be conducted as to insure minimum danger and obstruction to the traveling public.

Fire hydrants in operating condition shall be accessible at all times to the fire department. No material or other obstructions shall be placed closer to an operating fire hydrant than permitted by ordinances, rules or regulations. No operating fire hydrant shall be disconnected, removed or otherwise rendered inoperable without the written permission of the fire department.

The Contractor shall give the Chief of the fire department at least 24 hours' notice in writing before closure of each street and each street intersection.

13. PUBLIC UTILITIES - The Contractor will be held responsible for the protection of the property and services of public utilities within the limits of the work. Where such physical properties conflict with the performance of the work under the Contract, he shall anticipate such conflicts and give proper advance written notice thereof to the owners of the utilities involved. Until satisfactory arrangements are made for continuance of service, the Contractor shall not commence any operations which may interfere with or impair the efficiency of the existing physical properties.

Unless otherwise specified or approved, utility lines shall be maintained in continuous service and shall be properly supported and protected by the Contractor.

In no case shall interruption to water or sewer service be allowed to exist outside of working hours except as permitted by the Engineer on the pipe lines to be altered or replaced under this Contract. Operating fire hydrants shall be kept accessible to the fire department at all times, and shall be kept clear of excavated materials and other materials, as specified in these Supplemental General Conditions.

In the event of interruption to water or other utility services as a result of accidental breakage, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service as promptly as practicable. In the event that such pipes or other facilities are broken or improperly supported, the Contractor will be held responsible for their complete and prompt restoration in substantial and workmanlike manner and for any claim for damage which may arise as a result of such interruption of service.

14. WATER SUPPLY, FUEL AND ELECTRIC CURRENT – The water for the Contractor's use shall be supplied by the Contractor. The Contractor shall make his own arrangements for obtaining a water supply for his construction operations. The Contractor shall furnish fuel and electric current required for construction purposes, including any temporary incoming power connections, transformers, poles and metering equipment required therefore. The Contractor may use existing electrical systems while modifying existing facilities subject to approval by the Engineer. The Owner will furnish without charge all electric current required for operating tests of permanent equipment installed under the Contract and for permanent operation.

15. MAINTENANCE DURING CONSTRUCTION - The Contractor shall maintain at his expense the work during construction and until final acceptance of all work under the Contract. Continuous and effective work shall be prosecuted day by day, with adequate equipment and forces as required to keep the backfill, pavement, structures, pipe lines and other features in satisfactory and acceptable condition at all times.

In the event that the Contractor fails to remedy any unsatisfactory maintenance within 24 hours after receipt of written notice from Engineer describing the unsatisfactory conditions, the Owner may immediately proceed with adequate forces and equipment to maintain the project, and the entire cost of this maintenance will be deducted from the monies otherwise due the Contractor under the Contract. As an alternative to the above specified maintenance, all of the items which are not properly maintained may be deducted at the Contract prices from the current partial payment estimate even if such items have been paid for in previous estimates.

16. ERRORS AND OMISSIONS - The Contractor shall take no advantage of any apparent error or omission in the Drawings or Specifications; but if such error or omission does occur, the Engineer shall have the authority to make corrections and interpretations deemed necessary to fulfill the intent of the Drawings and Specifications; nor shall such corrections or interpretations, if any, be construed as a waiver of any Contract provision.
17. 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 A.P.A. or U.S.D.A. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.
18. SCHEDULE OF WORK - The Contractor shall schedule his work to create minimal interruption of the treatment process of the existing facility and the work schedules and functions of the plant personnel. The schedule of work shall conform to that specified in Section 1 – General Requirements. The Contractor shall notify the Engineer and City personnel before starting any new construction to verify that no unavoidable interruption of service will be encountered.

19. PROGRESS PAYMENT REQUESTS - The proposed format for use in monthly pay requests along with an estimated schedule of progress payment amounts for the full construction period must be submitted for approval before notice to proceed will be issued. Progress payment requests should include:
 - a. Work in place
 - b. Material and/or equipment which have been delivered to the construction site and when conditional or final acceptance is made by the Owner. It shall be the Contractor's responsibility to provide adequate insurance and appropriate security measures for the protection of the subject materials and/or equipment.
20. CONTRACTOR PROPOSED WORK SCHEDULE - A work schedule showing the proposed work schedule with the time required to complete shall be submitted for approval prior to the notice to proceed. This work schedule shall be updated and resubmitted with each monthly payment request. Engineer approval of the work schedule is required.
21. COORDINATION - The Contractor shall coordinate with the Engineer and Owner to insure the proper and successful completion of this contract.
22. RESIDENT INSPECTOR - The Resident Inspector, as the Engineer's representative on the project, shall assist and advise the Contractor as to interpretation of the Drawings and Specifications. He shall be authorized to inspect all work done and all materials furnished including preparation, fabrication and manufacture of the materials to be used. The Resident Inspector shall not be authorized to alter or waive any requirements of the Specifications without prior approval from the Engineer. He shall call the attention of the Contractor to any failure of the work or material to conform to the Specifications and Contract. He may reject material or suspend the work until any questions at issue can be referred to and decided by the Engineer.

The presence of the Resident Inspector shall in no way lessen the responsibility of the Contractor. The Contractor in no way relieves himself of responsibility for adequacy of the work by following the directives of the Resident Inspector.
23. PRECONSTRUCTION CONFERENCE - A preconstruction conference shall be held prior to issuance of notice to proceed. The Contractor shall be represented by at least one principal of the firm, the job superintendent and, if applicable, the superintendent of the electrical subcontractor. The Contractor shall at that time present the construction schedule, progress payment format and estimates, any available subcontractor approval requirements, required insurance, and any other documents deemed necessary.
24. EXISTING PIPING AND STRUCTURES - The Contractor shall verify the location of existing piping and structures in an area prior to beginning new construction in that area.
25. INSURANCE - In addition to the requirements of Article 21 of the Standard General Conditions, the Owner and the Engineer shall be listed as Certificate Holders on the Contractor's and Subcontractor's General Liability Policy and Builders Risk in the same amounts as required for the Contractor and Subcontractor. The certified endorsements for the Certificate Holders shall be in the same amounts as required for the Contractor and Subcontractor, listed on the Certificate of Insurance and attached to the Certificate of Insurance. Certificates of Insurance and endorsements shall be provided with executed

contract. In addition to required policy endorsements, package shall include the following forms:

- *Policy Change Endorsement*
- *Owners, Lessees or Contractors – Complete Operations*
- *Owners, Lessees or Contractors – Scheduled Person or Organization*
- *Changes Cancellation and Nonrenewal*

26. EVIDENCE OF CONTRACTOR'S INSURANCE - When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by Contractor. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
27. EVIDENCE OF SUBCONTRACTOR'S INSURANCE - Contractor shall provide to Engineer, copies of the Subcontractor's policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by Subcontractor. Subcontractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
28. MODIFICATIONS - The Contractor and his subcontractors must submit in writing any requests for modifications to the Drawings and Specifications. Shop drawings that are submitted to the Engineer for his review do not constitute "in writing" unless it is brought to the attention of the Engineer that specific changes are being suggested. In any event, changes to the Drawings and Specifications by means of shop drawings become the responsibility of the person initiating such changes.

SECTION 1 GENERAL REQUIREMENTS

- 1.01 Location: The work described in these Specifications is located in the City of Port Wentworth, Georgia.
- 1.02 Work to be Done: Project consists of the furnishing of all materials, labor and equipment for the complete construction of Sewerage System Rehabilitation, March 2022 for the City of Port Wentworth, Georgia consisting of:
- Sewerage system rehabilitation including smoke testing approximately 218,000 linear feet of sewer lines, perform approximately 970 manhole inspections infiltration and low flow investigations between 12 a.m. to 5 a.m., cleaning and televising approximately 80,000 linear feet of sewer lines, and pressure testing and grouting of mainline joints and lateral connections.
- 1.03 Schedule of Work: The Contractor shall schedule the work to minimize interruptions or shutdowns of the existing sewerage system and to not have any sewage overflow during the work without prior concurrence by both the Owner and Engineer.
- The Contractor shall notify the Engineer and the Owner before starting any new construction to verify that no interruption of service will be encountered.
- 1.04 Drawings: The Drawings entitled Sewerage System Rehabilitation, for the City of Port Wentworth, Georgia, March 2022 form a part of the Construction Agreement.
- 1.05 Specifications: The Specifications form a part of the Construction Agreement, and include this Section and Section 2 as identified below:

Section Number	Title of Section
2	Sewerage System Inspection

- 1.06 Protecting Existing Utilities and Structures: Prior to any excavation, the Contractor shall call the Utilities Protection Inc. "Call Before You Dig" number (811). Any damage done to existing utility lines, drains, power and telephone cable, poles, and structures of every nature, not indicated to be replaced and/or abandoned shall be repaired or replaced by the Contractor at his own expense. The approximate position of certain known underground lines and structures are shown on the Drawings according to the best available information. Existing small lines are not shown. The Contractor shall locate, excavate and expose all existing underground lines in advance of trenching and other construction operations. Where connections are to be made at underground structures and pipe lines, elevations and locations shall be verified prior to construction of the pertinent work. Where underground utilities or obstructions are encountered which conflict with the new work, the location and/or alignment of the new or existing lines may be changed to avoid interference upon written concurrence by the Engineer.
- 1.07 Subsurface Investigations: A subsurface investigation has not been made on the work. The prospective bidder must form his own opinion of the character of the subsurface materials to be encountered in excavating for and the construction of the various facilities.

- 1.08 Easements: The Owner has obtained easements for all work on private property. The Contractor will be provided copies of all easement agreements to the Owner. The Contractor shall review any special conditions of any easement agreement and notify the Engineer of any condition which cannot be met under the Plans and Specifications without an increase in contract price.
- 1.09 Working Drawings: The Contractor's attention is directed to the requirements of the "Instructions to Bidders and Special Provisions" with reference to working drawings. The Contractor shall submit a digital copy of the drawings and details, covering Reinforcing Steel, Structural Steel, Miscellaneous Metals, Piping and such other items of work as may be necessary for successful completion of the work of the Project, to the Engineer for review. After review, the Engineer will return the digital copy to the Contractor. The Contractor will forward three printed copies, exactly as marked in the returned digital copy, to the Engineer.
- A. The Contractor shall check all working drawings for accuracy of dimensions and details and for conformity with the Drawings and Specifications before submitting working drawings to the Engineer. The Contractor shall indicate that working drawings have been checked by him by affixing an appropriate stamp or notation on the face of each of the working drawings.
 - B. Responsibility for Accuracy: The Engineer's review stamp shall not relieve the Contractor of the responsibility for accuracy of dimensions and details. The Contractor shall be responsible for agreement and conformity of working drawings with the Drawings and Specifications.
 - C. The contract price shall include the cost of furnishing all working drawings and the Contractor will be allowed no extra compensation for such drawings.
- 1.10 Shop Drawings: The Contractor shall submit shop drawings and details covering the required items of work and such other items which may be necessary for the successful completion of this Contract to the Engineer for checking and review before any fabrication, erection or installation shall commence. A reviewed set of shop drawings with Engineer's review stamp shall be kept on the job at all times.
- The Contractor shall notify the Engineer in writing about any information in the shop drawings which deviates from the Contract Documents.
- Shop drawings, product data and engineering calculations covering all equipment, material, fabrications and similar items shall be submitted to the Engineer for review. Submittals shall verify compliance with the contract documents with any deviations noted by the Contractor.
- The Contractor shall submit a digital copy of drawings and details to adequately describe the function, performance characteristics, dimensions, arrangement, support, anchorage and other similar information to allow for installation, operation and maintenance. After review, the Engineer will return the digital copy to the Contractor. The Contractor will forward three printed copies, exactly as marked in the returned digital copy, to the Engineer within seven calendar days.
- A. Submittal Identification: Each submittal shall cover items from one Specification Section unless multiple sections are required for clarity. Each submittal shall be

accompanied with a cover sheet that bears the Project Name, Engineer's project number, and the Contractor's name along with the following information:

1. Submittal Date
 2. Submittal Number: Submittal numbers shall be sequentially numbered without division by trades. Resubmittals shall be given the number of the original submittal followed by the letter A for the first resubmittal, the letter B for the second resubmittal, etc. (Example: 10A, 10B, etc.)
 3. Item Name
 4. Location: Identify the location(s) where the material or equipment is to be placed. (Example: RAS pump station, yard piping, construction joints greater than 12" thick.) The noted location shall be as specific as possible.
 5. Subcontractor or Supplier: Identify the equipment or material provider.
 6. Manufacturer: Identify the manufacturer of the material or equipment being submitted.
 7. Drawing or Identification Number: When available, list the shop drawing or identification number given by the contractor, supplier or manufacturer. Such numbers are typically found shop drawings for piping details, reinforcing steel, miscellaneous metals, etc.
 8. Specification Section: Identify the Specification Section(s) applicable to the equipment or material being submitted.
- B. Contractor Review: The Contractor shall check all working drawings for accuracy of dimensions and details and for conformation with the Drawings and Specifications before submitting working drawings to the Engineer for review. The Contractor shall indicate that working drawings have been checked by him by affixing an appropriate stamp on the face of each of the working drawings and the submittal cover sheet. All notes by the contractor shall be in GREEN.
1. Pertinent Information: Where catalogs or data sheets include multiple listings, the Contractor shall highlight all entries that are pertinent to the submittal. Information that is not pertinent to the review shall be crossed out.
 2. Deviations: The Contractor must clearly identify any deviations from the contract Specifications or Drawings and provide additional data that may be required for the Engineer's review. When applicable, the Contractor must identify any required modifications to other components resulting from the deviation and may include but not limited to structural components, piping systems, electrical systems, etc.
- C. Engineer's Review: The Engineer shall review all shop drawings for general compliance with the contract documents. All corrections required by the Engineer will be noted in RED. The Engineer's review stamp shall be placed on the submittal cover sheet and/or the working drawing indicating the status of the returned submittal and date of review.

- D. Responsibility for Accuracy: Verification of all dimensions, quantities, material, identification numbers and other similar details shall be the sole responsibility of the Contractor. The Contractor shall be responsible for agreement and conformity of working drawings with the Contract Drawings and Specifications. The Engineer's review stamp shall not relieve the Contractor of these responsibilities, including errors and omissions.
- E. Resubmittals: The Contractor shall verify that all corrections and additional information requested by the Engineer have been provided on the resubmittal. The Contractor shall clearly identify any additional revisions to the submittal that were not specifically called out or requested in the initial review. Resubmittals shall be numbered as noted in these Specifications.
- F. Colors and Samples: Provide colors and samples as required by individual specification sections or when required for a complete and accurate review of the equipment or material. The samples should be submitted in the quantity required to be returned, plus one to be retained by the Engineer / Owner.
1. The Contractor shall provide samples that are identical to the proposed item. Where indicated in the Specifications or when requested by the Engineer, full size samples shall be provided.
 2. Owner's Color Selection: All products requiring color selection shall be submitted as early as possible. The Engineer will coordinate selection with the Owner after all samples, colors and finishes for the accepted products have been received. The Engineer will provide the Contractor with a schedule of the Owner selected colors and finishes.
 3. Sample Identification: Samples, color charts or similar data shall be identified as a decimal of the related submittal number. (Example: If the flooring submittal is Number 10, all samples related to the flooring submittal shall be numbered 10.1, 10.2, 10.3, etc.)
- 1.11 Clean-Up: Upon completion of the work, all excess material and rubbish shall be removed from the job site and disposed of as directed by the Engineer. The surrounding construction area shall be left in essentially as good a condition as existed prior to construction.
- All unsuitable excavated material must be properly disposed of in a manner acceptable to the Engineer and in a manner that will not adversely impact the environment.
- 1.12 Payment: No separate payment will be made for the work of this Section. The cost of the work and all cost incidentals thereto shall be included in the price bid for the item to which the work pertains.

SECTION 2 CONTROL OF MATERIALS

- 2.01 Source of Supply and Quality of Materials: The source of supply for all materials and equipment shall be submitted to the Engineer for review before orders are placed. Suppliers of reinforcing steel, fabricated metal work, and metal castings may be required to submit guarantees of conformity with Drawings and Specifications. Representative preliminary samples of the character and quantity prescribed shall be submitted by the Contractor or producer for examination and tested in accord with the methods referred to under the samples and testing materials section of these Specifications. Only materials conforming to the requirements of the Specifications and reviewed by the Engineer shall be used in the work. All materials proposed to be used may be inspected or tested at any time during their preparation and use. If, after trial, it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish materials from other approved sources. No material, which after approval has in any way become unfit for use, shall be used in the work.
- 2.02 Samples and Testing of Materials: Unless otherwise specified, standard tests of materials shall be made in accord with the Specifications and tests of the American Society for Testing Materials, by a commercial testing laboratory accepted by the Engineer. Reports of the tests shall promptly be furnished to the Engineer. Tests shall be arranged by the Contractor. The cost of all tests will be paid for by the Contractor unless otherwise specified.
- 2.03 Schedule of Materials and Standard Tests: The following schedule of materials and the standard test to which each is to be subjected is given for the Contractor's guidance.
- A. Cement (any quantity): Certificate of mill test to be furnished by producers of laboratory tests made as per ASTM C-1
 - B. Fly Ash: Independent laboratory test as per ASTM C 618
 - C. Sand (any quantity for use in cement concrete): Tests to indicate conformity with ASTM C-33
 - D. Stone and Gravel (any quantity for use in cement): Coarse Aggregate, similar to sand
 - E. Concrete: Cylinder compression tests of concrete placed in the work from 4 cylinders made for each day's placing of each class of concrete of each 50 cubic yards or fraction thereof. One cylinder shall be broken at 7 days, 2 cylinders shall be broken at 28 days, and one cylinder shall be held in reserve.
 - F. Brick (1 to 5,000): Visual inspection for shape, color soundness, freedom from cracks, balls of clay, and particles of lime
 - G. Concrete Masonry Units: Visual inspection for shape, soundness and freedom from cracks and fractures. Laboratory tests are required on at least 5 units as per ASTM C-140.

- H. Structural Tile: Visual inspection for shape, soundness, color, texture and crazing. Laboratory tests are required on at least 5 units as per ASTM C-126.
- I. Building Stone:
1. 1 to 5 Tons: Visual inspection for shape and color
 2. For Each Additional 5 Tons or Part Thereof: Visual inspection for shape and color and test for compression as per ASTM C-97 and C-170
- J. Cast Iron Pipe and Ductile Cast Iron Pipe:
1. Field Inspection: Visual inspection for dimensions, coating, cement lining, holes, hammer test, weights
 2. Laboratory Tests: Certified test reports by foundry
- K. Steel Pipe: ASTM A-134 and A-139
- L. Polyvinyl Chloride Pipe:
1. Visual Inspection: To ensure that pipe is homogenous throughout, free from cracks, nicks, gouges, severe scratches, voids, inclusions and other defects, reasonably uniform in color density and other physical properties. Quality Control Certification Seal and markings to include manufacturer's name or trademark, nominal pipe size and size base, PVC Cell Classification or Material Code, Dimension Ratio or Standard Dimension Ratio Number, product type, pressure class or pressure rating standard specification designation, production records code.
 2. Laboratory Tests: In amounts and character as per ASTM D-3034 for sewer pipe and AWWA C 900 for water pipe
- M. Structural Steel:
1. Any Quantity: Field inspection for rust, shape, and dimensions
 2. 25 to 200 Tons: Independent shop inspection and certified copies of mill tests
 3. For Structures and Buildings: See ASTM A-36
- N. Concrete Reinforcement Steel:
1. Up to 50,000 Pounds: Field inspection for rust, shape and dimensions
 2. 50,000 Pounds and Up: Independent laboratory inspection as follows:
 - a. Billet Steel: ASTM A-615
 - b. Roll Steel: ASTM A-616
 - c. Cold-Drawn Steel Wire: ASTM A-82
 - d. Wire Fabric: ASTM A-185
- O. Cast Iron Castings:
1. Field Inspection: For dimensions, coatings, holes, hammer test

2. Laboratory Tests: Certified test reports by foundry

- 2.04 Payment: No separate payment will be made for work under this Section of the Specifications. The cost of such work and all cost incidentals thereto shall be included in the price bid for the item to which the work pertains.

SECTION 3 SEWERAGE SYSTEM INSPECTION

3.01 Scope: The Contractor shall furnish all materials and equipment for the inspection of the sewerage system as shown. The work shall include all smoke testing, manhole inspection, low flow investigation, bypass pumping, cleaning, televising sewer lines, and traffic control as directed by the Engineer.

3.02 Smoke Testing:

- A. Equipment: The Contractor shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained and capable of producing a minimum of 4,500 cubic feet of air per minute. Blowers with less cfm may be approved by the project manager provided it is demonstrated that sufficient pressure is generated for the testing. If inadequate pressure is being generated, then additional blowers (dual blowers) or larger blowers may be required. Adequate pressure is being provided when smoke is exiting the vent stacks as a plume or, where no vent stacks are present, smoke is exiting the upstream/downstream manhole casting/vent hole/pick hole, etc. In general, the larger the pipe line diameter being tested, the higher the smoke blower capacity (cfm) required

The base of the blower shall have appropriate adapters and seals to make a good connection to the manhole without excessive loss of smoke.

Smoke fluid, smoke candles, or approved equal, shall produce continuous smoke that can be controlled by the testing crew for the duration of the test. The smoke generated shall be white to gray in color, leave no residue, and shall be non-toxic and non-explosive

In addition to the blower, the Contractor shall provide all other equipment, tools, and incidentals required to perform smoke testing as required by these Specifications including, but not limited to, sewer line stoppers, sand bags, cameras, confined space entry equipment, and traffic control equipment.

- B. Daily Notifications: The Contractor shall notify, by hand delivery of approved door hangers to each address, all residences and businesses in the study area. All notification door hangers shall be approved by the Project Manager before printing and distribution. The Contractor shall place door hangers on all residences and business 2 to 7 days prior to smoke testing at those specific addresses. Notification shall be an ongoing process throughout the project and shall be limited to the area provided in the look ahead schedule. Door hangers shall not be placed for areas which will not be tested within 7 days. If smoke testing is delayed for more than 7 days due to rain, etc., the area shall be re-notified. Logs will be maintained to document notification of hospitals, nursing homes, schools, high rise buildings, etc. The logs will include the facility name, notification date, time and individual notified. Notification of sensitive locations such as hospitals, nursing homes, day care, schools and the like must be done again immediately prior to testing.

The Contractor shall check with all residents who expressed special concerns or special needs/notification prior to testing. Notification of Emergency Services and dispatch centers shall be completed each morning prior to testing that day. Contractor shall provide the required contact information for notifications to Engineer.

- C. Work Schedule: Upon award of the Contract, and prior to commencing any work, the Contractor shall provide a complete work schedule to the Engineer for review and approval. The work schedule shall be typed and indicate the planned progress for the proposed work.

Smoke testing shall not occur on days for which rainfall greater than $\frac{1}{8}$ " the previous day has occurred.

The work schedule shall consist of a study area map showing the anticipated area to be tested each week. Work hours must be approved by the Owner and Engineer. However, the Contractor shall not typically commence testing before 8:00 a.m. local time and shall terminate testing no later than 5:00 p.m. each day.

Smoke testing shall not be performed on weekends or on holidays without the prior approval of the Engineer.

- D. Performing Tests: Unless otherwise approved by the Engineer, the sections of sewer subject to testing shall typically consist of a central manhole, where the blower will be positioned and an upstream and downstream manhole and the sewer pipe between them. With 3 manholes and 2 pipe sections, lengths should not exceed 1,000'.

The walk through for locating defects will not begin until smoke is highly visible with a smoke plume emanating from the plumbing vents of houses at the end of the setup location (maximum 500' radius) from the smoke testing machine. A locate flag will be placed at the location of the defect. Walkers shall traverse, not only the sidewalk but between all homes and in back yards, looking for illegal connections including patio, pool drains, roof drain connections and buildings where vent stacks do not exhibit smoke.

Defects must be located, documented and entered into a database with the following information:

1. Sub-meter GPS coordinates
2. Defect number
3. Upstream and downstream manhole numbers
4. Photographs of the defect and surrounding area
5. Street address
6. Sketch
7. Flow Control: The Contractor shall provide temporary plugs, sandbags or flow barriers as required to contain an adequate volume of smoke within the section of sewer being tested. The Contractor shall monitor the

resulting surcharged sewer at the manhole upstream of the tested section of sewer and prevent overflow conditions from occurring by removing the flow barriers or removing sewage by vacuum trucks.

All smoke testing information shall conform to the most recent version of the NASSCO smoke testing codes and database structure. Data will be accurately and neatly recorded on field worksheets as provided by the Engineer.

8. For each sewer main tested, the Contractor shall prepare a field log identifying each point of smoke exfiltration from:
 - a. Roof gutters
 - b. Sewer cleanouts
 - c. Leakage in house laterals
 - d. Patio or area drains
 - e. Storm drain cross connections
 - f. Manholes
 - g. Sewer vents (lack of smoke)
 - h. Any other source not stated above
9. A photograph of all leaks using a digital camera shall be included in the field log. Photographs of smoke evidence shall have a location indicated in the photograph using a defect flag where possible. All photographs shall be clearly cross-referenced to the typed and/or computer-generated log indicating the location of the leak. Once the defect has been flagged the Contractor will snap a digital picture (delivered in minimum 640 x 480 resolution) showing the smoke exiting from the defect, flag and physical features at or near the defect. Photographs should include sufficient field of view so that drainage patterns can be discerned.
10. The Contractor shall provide two flash drives and two printed copies of the following deliverables:
 - a. Maps of study area with corrections noted.
 - b. Database with GPS coordinates, completed field forms, photographs and sketches that document the testing and findings using the NASSCO smoke testing codes.
 - c. Completed field forms and sketches that document the testing and findings using the NASSCO smoke testing codes.
 - d. Summary of defect findings

3.03 Manhole Inspection:

- A. Work Included: The work covered by this section includes furnishing all labor, equipment, and materials to uncover and inspect the designated sanitary sewer

manholes as specified. A copy of all completed manhole investigation reports shall be furnished to the Owner once inspection work is complete.

- B. Reporting: The Contractor shall utilize the manhole inspection report included at the end of this section. An inspection report shall be completed for each manhole shown on the contract drawings to be inspected. All items on the inspection report shall be completed for each manhole or noted as not applying.
 - C. Low Flow Investigation: Contractors shall conduct a low flow investigation to target the location of infiltration in the sewerage system. This investigation shall be conducted between 12 a.m. and 5 p.m. when people are sleeping and not using water. This investigation shall consist of the following steps:
 - 1. Open the manhole
 - 2. Inspect manhole for flow
 - 3. Determine if flow is significant. If flow exists open consecutive manholes upstream to determine where flow is derived from. Generally a 2" wide bead of water is a limit of "significant" infiltration. Results of the low flow investigation will be summarized by Pump Station Basin with pipe segments highlighted (noted) that have significant infiltration.
 - D. Photographs: The Contractor shall furnish photographs of each manhole as follows:
 - 1. Above ground showing a noticeable landmark in the background.
 - 2. Above ground, looking vertically into the manhole, with the downstream end oriented at the top of the photo.
 - 3. Closeup(s) of any noted defects or evidence of infiltration.
 - 4. All photos shall have the manhole number displayed on the photo and should be furnished digitally.
- 3.04 Cleaning of Pipe Lines: Prior to video survey, the sewer lines to be video inspected shall be cleaned to provide a clear, unobstructed view of the interior of the sewer pipe. Cleaning of the sewer will include, but is not limited to, removal of all debris, silt or sediment deposits, grease or broken pipe. Contractor shall be responsible to prevent obstruction or blockage of downstream sewers and manholes with debris from this work. Cleaning is defined as removing deposits of debris with an average visual depth of 2" or less. Removal of grease and roots from sewer lines shall be paid for as quoted in the unit prices bid. Payment for removal of roots, protruding service connections and other obstructions will be made separately.

All debris removed from the sewer lines being cleaned shall be removed from the site of the work and disposed of at an approved landfill.

Measurement shall be based on the actual horizontal length of sewer cleaned as field-measured from center of manhole to center of manhole along the axis of the sewer. The length occupied by the manhole itself shall not be deducted.

Payment shall be made at the bid price per linear foot of sewer acceptably cleaned and will include full compensation for furnishing the labor, equipment and materials required to accomplish the work.

- 3.05 Backups, Overflow or Spillage of Sewage: The video work may require the temporary blocking and backups of sewers and sewage. Contractor shall be responsible to limit the extent and duration of such blockages and backups, so overflows and spillage onto public or private property and into storm sewers, waterways and streets do not occur. Bypass pumping shall occur wherever overflows are possible. In the event that such spillage or overflows do occur during the course of or as a result of the work, the Contractor performing the work shall immediately eliminate the spillage or overflow and, as necessary, remove the blockage and eliminate the back up. On elimination of the spillage or overflow, the Contractor is to clean up and disinfect the area of possible contamination taking all steps that may be deemed by the Engineer. Work to stop or contain such events is to be deemed **EMERGENCY** in nature and sufficient justification for total mobilization of resources, the use of overtime or double-time and any other reasonable measures to assure correction of the problem without delay.

Damages arising from blockages, backups, spillage or overflows of sewage during the course of the work or because of the work shall be the sole responsibility of the Contractor.

Bypassing of raw wastewater onto the ground or into a receiving stream is prohibited.

Prevention of spillage or overflows of sewage is considered incidental to the other items of work in the bid proposal, and no additional compensation shall be paid to the Contractor for their prevention or for expenses incident to clean-up and disinfection that may be required because of failure to prevent on the Contractor's part.

- 3.06 Time of Construction: Construction schedules will be submitted and reviewed by the Engineer. At no time will any service connection remain inoperative for more than a 10-hour period. Any service that will be inoperative for more than 10 hours will be temporarily connected to a bypass system at the Contractor's expense.

3.07 Video Inspection:

A. Work Included: The work covered by this Section includes furnishing all labor, equipment and materials required to clean and inspect the designated sanitary sewer lines as specified. A CD/DVD/Flash Drive and logs shall be furnished to the Engineer for inspection before lining can start. The CD/DVD/Flash Drive shall be labeled with the Contractor name, project name and number, date of videos, and line segments in order as on CD/DVD/Flash Drive. The line segments shall be saved onto the CD/DVD/Flash Drive in numerical order. Each file name on the CD/DVD/Flash Drive shall indicate the corresponding line segment.

B. Printed Submittals: The Contractor shall provide two notebooks with printed copies of the following:

1. Summary table in order by upstream manhole number which includes the following:

- a. Size
 - b. Material
 - c. Number of active services
 - d. Line length, line length cleaned and line length surveyed
 - e. Street name
 - f. Direction of video
- 2. Graphical Report showing defects found for each line
- 3. Map showing any differences between the inspection map and field conditions with regards to sewer line and manhole locations
- 4. Manhole inspection reports
- C. Digital Submittals: Two CDs/DVDs/Flash Drives with the following:
 - 1. Summary table in order by upstream manhole number which includes the following:
 - a. Size
 - b. Material
 - c. Number of active services
 - d. Line length, line length cleaned and line length surveyed
 - e. Street name
 - f. Direction of video
 - g. Graphical Report showing defects found for each line. Reports shall have text that is searchable.
 - h. Map showing any differences between the inspection map and field conditions with regards to sewer line and manhole locations
 - i. Manhole inspection reports
 - j. Videos named using the manhole numbers
 - k. Manhole pictures
- D. Quality Assurance: Prior to the start of any work under this project, the Contractor shall make available to the Engineer all equipment that is to be utilized in the execution of this contract. A preconstruction conference will be held to discuss the sequence of work, methods, inspection and monitoring requirements and debris disposal.
- E. Equipment:
 - 1. The basic equipment for use in cleaning and inspection operations shall consist of hydraulically propelled or mechanically operated cleaning equipment and a self-propelled full color television inspection camera with footage meter and pan and tilt functions.

2. Prior to televising, the Contractor shall thoroughly clean the pipe lines of debris, grease, roots, sediment, broken pipe or other obstructions that could retard the movement of the television camera. Precautions shall be taken to protect the sewer lines being cleaned from damage by the cleaning equipment.
3. When sewage flow depth is greater than 25%, flow depth must be decreased by plugging or bypass pumping. Plugs shall be designed to pass any desired portion of the sewage flow. If bypass pumping is required, the Contractor shall provide all necessary equipment, manpower and expertise. The Contractor is responsible for all damage to public or private property resulting from these operations.
4. The sewer line cleaning equipment shall be a combination of high velocity (hydro-cleaning) jet and vacuum system, and truck mounted for mobility and ease of operation. The hydro-cleaning equipment for sewer lines shall include a minimum 1,000 gallon water storage tank, auxiliary engines and pumps and include a minimum of 600' of 1¼" I.D. high pressure hose on a power-driven hose reel. The equipment shall have a selection of two or more high-velocity nozzles capable of producing a scouring action 15° to 45° in 36" pipe. The pump nozzle combinations shall be capable of producing water flow rates adequate for the cleaning and a minimum flow of 60-gpm at 1,200-psi. The vacuum system shall have a blower with a minimum of 4,200-cfm at 15" of mercury.
5. All materials removed from the sewer lines during cleaning operations shall be trapped and removed from the system at the downstream manhole of the section being cleaned. All materials shall be disposed of in a legal and approved manner.
6. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be reset on the other manhole and cleaning again attempted. If again, successful cleaning cannot be performed or the equipment fails to traverse the entire manhole section, it will be assumed that a major blockage exists, and the cleaning effort shall be terminated only at the direction of the Engineer.
7. During all sewer cleaning operations, satisfactory precautions shall be taken to protect the sewer lines from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force or any tools which retard flow of water in the sewer line are used, precautions shall be taken to ensure that the water pressure created does not cause any damage to or flooding of public or private property being served by the manhole section involved. Any damage done to public or private property shall be repaired immediately at the expense of the Contractor.
8. Roots shall be removed in the sections where root intrusion is a problem. Special precautions should be exercised during the cleaning operation to

assure complete removal of visible roots from the joint area. Any visible roots that may impact rehabilitation efforts shall be removed. Procedures may include the use of mechanical devices such as rodding machines, expanding root cutters and porcupines, and hydraulic procedures such as high pressure jet cleaners.

9. To aid in the removal of roots and at the option of the Contractor, manhole sections with root intrusion may be treated with an approved label herbicide. The application of the herbicide to the roots shall be done in strict accordance with the manufacturer's recommendations and specifications in such a manner to preclude any damage to the surrounding vegetation. Any damaged vegetation so designated by the Engineer shall be replaced by the Contractor at no additional cost to the Engineer. All safety precautions as recommended by the manufacturer shall be strictly adhered to concerning handling and application of the herbicide.
10. The Contractor, after cleaning a section of pipe, shall utilize the television camera to inspect the main. No line shall be considered cleaned until acceptance is granted by the Engineer.
11. The television camera shall be moved through the line in either direction at a uniform rate, stopping when necessary to insure proper documentation of the sewer's condition, but in no case shall the television camera travel at a speed greater than 30' per minute. If during the inspection operation the television camera will not pass through the entire section, the Contractor shall reset his equipment in a manner so that the inspection can be performed from the opposite manhole. If again, the camera fails to pass through the entire section, the inspection shall be considered complete and no additional inspection work will be required.
12. The television camera shall travel through the lines using its own power. The pictures taken of the entire inside periphery of the pipe shall be clear and visible. Picture quality and definition shall be to the satisfaction of the Engineer, and if unsatisfactory, the equipment shall be removed and no payment made for unsatisfactory inspection.
13. At all service laterals the camera shall be stopped and panned to such an angle that an internal view of the service lateral is available to determine if the lateral is active or dead and plugged. Where other pipe deficiencies are noted, the camera shall be stopped to observe the condition, record information and take photographs. Any service lateral or deficiency observed in the sewer line shall be photographed and described on the photograph.
14. All internal pipe damage shall be photographed in color by the Contractor utilizing picture capture equipment and shall be clearly labeled as to date, reach number, footage and type of defect. These photographs shall be the property of the Owner.

15. The television camera used for the inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture of the entire periphery of the pipe. The camera shall be operative in 100% humidity conditions. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500 line resolution picture. All internal pipe damage shall be photographed in color by the Contractor utilizing picture capture equipment and shall be clearly labeled as to date, reach number, footage and type of defect. These photographs shall be the property of the Owner.
16. The Contractor shall provide a mobile vehicle with video monitoring equipment specifically compatible with the camera equipment being used. The equipment shall include dual video recorders, dual monitors, and picture capture capability. The vehicle shall be large enough to accommodate at least three people at any time for viewing of the monitor. The Owner and Engineer shall have unrestricted access to observe the television screen and all other operations at all times.
17. Basic Module (1) – Survey/Logging Reporting:
 - a. The software's core module shall be capable of providing complete survey reports.
 - b. There will be a minimum of 116 pre-programmed pipe line defect conditions.
 - c. There will be WRc or PACP compliant codes pre-programmed.
 - d. The software shall be capable of customization with the ability to modify or add to the pipe line condition and to group them for ease of use.
 - e. The footage reading from the camera equipment shall be automatically entered into the Survey Log through RS232 cable and shall directly correspond to the noted service and defect locations throughout the pipe graphic and tabular reports generated.
 - f. The inspection and reporting software program will be menu driven and will have a complete on-screen help file.
 - g. Drop-down boxes shall be utilized to quickly reference common information such as defects, pipe materials, survey purpose, locations, pipe usage, etc.
 - h. The browser screen will allow quick viewing of:
 - 1) Sequential survey/segment as setup number (automatically input by software)
 - 2) User selected categories
 - 3) Upstream and downstream manhole numbers

- 4) Street name
 - 5) Pipe segment details
- i. All relevant pipe segment information will be entered prior to the actual survey. The below listed minimum pipe detail must be supplied in the software for proper system management. The graphic and tabular survey reports generated shall include the following:
- 1) Pipe diameter
 - 2) Starting manhole number
 - 3) Ending manhole number
 - 4) Starting manhole depth
 - 5) Ending manhole depth
 - 6) Direction of survey
 - 7) Pre-clean (y/n)
 - 8) Total surveyed length
 - 9) Pipe material
 - 10) Pipe section length
 - 11) Pipe shape
 - 12) Road name
 - 13) Address or place name
 - 14) Work order number
 - 15) Video cassette number
 - 16) Engineering Drawing number
 - 17) Purpose of survey
 - 18) Pipe age (year of construction)
 - 19) Inspection or survey date
- j. The basic module software shall maintain a database of underground pipe and manhole assets. The database shall have a structure similar to the one referencing pipe usage (i.e. sanitary storm drainage, etc.), sections (i.e. projects, areas or quadrants), surveys with a method of pipe segment numbering and a chronological survey set-up numbering system.
- k. The software's basic module database shall have the means to sort in ascending and descending order according to date, pipe segment, reference number, road name, manhole numbers,

observed footage, pipe materials, pipe diameters, work order numbers, etc. A filtering system shall also be made available.

- l. The basic module software shall also have search capabilities in order to find information about past surveys located in the database.
- m. A summary paragraph shall be made available for a conclusive pipe segment assessment. A minimum of 15 summary statements shall be quickly accessible stating the overall condition of the pipe.
- n. The graphical reports shall print in color for quick glance referencing of the defect category. The color-coding scheme shall allow for quick reference as to the quality of service, structural, hydraulic and constructional defects within a particular survey.
- o. A scoring system incorporated in the software will assist the user/management personnel in making proper assessment of pipe conditions. Scoring is to be based upon defect severity entered by the operator.
- p. An inspection “health check” feature shall be incorporated to ensure that the information has been correctly entered. The health check allows for verification of essential information to complete a survey. This feature can be implemented individually or on a total section basis.
- q. A site sketch feature shall also be supplied, so a drawing or sketch will indicate special details or locations about a particular set-up site.
- r. The software shall also have the capability to import and export survey results in a variety of industry standard formats.
- s. Complete video logs shall be provided on DVDs or a flash drive hard drive format in duplicate copies.

18. Basic Module (1) – Summary Reporting:

- a. Summary reports compiling data from multiple inspections shall be available. Such reports shall indicate individual survey results in tabular form and list (sort) surveys based on a user defined description field.
- b. Defect report shall be programmable to list specific defects observed with corresponding footage, starting and ending manhole numbers, structural pipe defects (i.e. cracks, offsets, defective laterals, collapsed pipe, etc.) and service-oriented defects (i.e. roots, grease obstructions, infiltration, etc.).
- c. A drainage schedule report including starting and ending manhole numbers and depths, pipe material, total survey length and pipe diameter shall be available.

- d. The grading scores report shall summarize the manhole numbers, pipe material, pipe diameter and the grade scores for each survey with totals.
- e. Service and structural aspect scoring reports shall list the pipe segment, reference number, total score with reference to the condition of the total pipe, average of the pipe, total defects and average of defects.
- f. Section summary reports are to be made available, so all surveys within a section are listed showing purpose of inspection, dates, work order numbers, manholes, road names and total lengths.

3.08 Pressure Testing and Grouting:

- A. Equipment: The basic equipment used for mainline pipe joints and for laterals connected to the mainline shall consist of a remotely operated color television camera capable of pan and tilt, joint testing device (referred to hereafter as a packer), and test monitoring equipment. The equipment shall be constructed in such a way as to provide means for introducing air under pressure into the void area created by the expanded ends of the packer against the host pipe and a means for continuously measuring, viewing and recording the actual static pressure of the test medium and grout within the void area only. The packer shall be of a size less than the diameter of the host pipe, with the cables at either end used to pull it through the line and may be constructed in such a manner as to allow a restricted amount of sewage to flow at all times. Packer shall be expanded by air pressure. Packers shall be of low void space construction with void volume given by the packer manufacturer.

The device for testing lateral connections shall consist of inflatable mainline end elements and a lateral grouting plug that creates a void area extending beyond the main connection. Whenever possible, use a lateral grouting plug sized to match the diameter of the lateral being grouted with an effective sealing length of at least 5'. Where the lateral is capped, utilize alternate lateral grouting plug or equipment sized appropriately for the capped lateral. In cases where the lateral transitions from 6" to 4" in diameter, use a 4" lateral grouting plug. However, it is possible that due to physical restrictions the lateral plug may not launch and thus the service may not be able to be grouted.

The basic equipment for 4" and 6" laterals connected to manholes shall consist of a flexible push-type packer and mini-push camera. The device for testing lateral pipe connected to the manhole shall be capable of testing the joints within 5' of the lateral or to the cleanout, whichever comes first, from the manhole toward the building. If the lateral contains a transition, the Contractor may change out diameters of push packer or grout lateral using only a 4" push packer.

Void pressure data shall be transmitted from the void area to the monitoring equipment or video picture of a pressure gauge mounted on the packer and connected to the void area. All test monitoring shall be above ground and in a

location to allow for simultaneous and continuous observation of the televising monitor and test monitoring equipment.

Grouting equipment shall consist of the packer, appropriate pumping and hosing systems capable of supplying an uninterrupted flow of sealing materials to completely fill the voids. Grout pumping system shall be sized to deliver a mixed volume of grout at a minimum of 3 gpm and 30 gallons of uninterrupted flow within 10 minutes.

Volume of mixed grout pumped must be capable of being measured and recorded for each grouted joint/connection. Generally, the equipment shall be capable of performing the specified operations in sewers where flows do not exceed 25% of pipe diameter unless permitted by Engineer.

Connection and lateral service sealing shall be accomplished using the lateral grouting plugs and push packers specified above. Provide back-up bladders for each packer on-site at all times during grouting procedures.

Equipment for cleaning lateral blockages shall be readily available while any lateral grouting work is being performed.

B. Grouts – General: All grout materials must have the following characteristics:

1. While being injected, the grout must be able to react /perform in the presence of water (groundwater).
2. The ability to increase grout mix viscosity, density and gel strength by increased concentration of constituents or the use of approved additives.
3. The cured grout must withstand submergence in water without degradation.
4. The resultant grout formation must be homogeneous and prevent the passage of water (infiltration) through the pipe joint.
5. The grout must not be biodegradable.
6. The cured grout should be chemically stable and resistant to organics found in sewage.
7. Residual grout shall be easily removable from the sewer line to prevent blockage of the sewage flow.
8. Handle, mix, and store grout in accordance with the manufacturer's recommendations. The materials shall be delivered to the site in unopened original manufacturer's containers.

C. Chemical Grouts:

1. Water based chemical grouts shall have the following characteristics:
 - a. A minimum of 10% acrylamide base material by weight in the total grout mix. A higher concentration of acrylamide base material is recommended to increase strength or offset dilution during injection.

- b. The ability to tolerate some dilution and react in moving water during injection.
 - c. A viscosity of approximately 2 centipoise, which can be increased with approved additives.
 - d. A controllable reaction time from 10 seconds to 1 hour.
 - e. A reaction (curing) that produces a homogenous, chemically stable, nonbiodegradable, firm, flexible gel.
 - f. The ability to increase mix viscosity, density and gel strength by increased concentrations of the mix constituents or by the use of approved additives.
 - g. Product Manufacturer: Avanti AV-100, Avanti AV-118; or equal.
2. Acrylate base grout shall have the following characteristics:
- a. A minimum of 10% acrylate base material by weight in the total grout mix.
 - b. The ability to tolerate some dilution and react in moving water during injection.
 - c. A viscosity of approximately 1 to 3 centipoise, which can be increased with approved additives.
 - d. A controllable reaction time from 10 seconds to 1 hour.
 - e. A reaction (curing) that produces a homogenous, chemically stable, nonbiodegradable, firm, flexible gel.
 - f. The ability to increase mix viscosity, density and gel strength by the use of approved additives.
 - g. Product Manufacturer: a. DeNeef AC-400, DeNeef Gelacryl SR, Avanti AV-160; or equal
3. Additives: At the Contractor's discretion and according to field conditions, additives may be selected and used within the manufacturers recommended quantities.
- a. Strengthening Agents: For joint grouting, a latex or "diatomaceous earth" additive may be added to increase compressive and tensile strength. The quantity of strengthening agent additive shall be as recommended by the manufacturer and approved by Engineer.
 - b. Product Manufacturer: Avanti AV-257 Icoset, DeNeef Reinforcing Agent; or equal
 - c. Root Inhibitor: When roots are present, for joint and lateral connection joint grouting, a root deterrent chemical shall be added to control root re-growth. The quantity of inhibitor shall be as recommended by the manufacturer and approved by Engineer.
 - d. Product Manufacturer: Avanti AC-50W; or equal

4. Dye: A manufacturer approved water soluble dye without trace metals may be added to the grout tank for visual confirmation.
5. Gel Time Modifier: A gel time extending agent may be used in accordance with the manufacturer's recommendations to extend gel time as necessary.
6. Freeze / Thaw: In those lines where the grouting material may be exposed to a freeze / thaw cycle, ethylene glycol or other Engineer approved additive shall be used to prevent chemical grout cracking once set.

When using non soluble additives the grout tank must have mechanical mixing devices to keep the additives in suspension and maintain a uniform solution of grout and additive.

D. Execution:

1. Pipe Preparation: Prior to the application of the chemical grouting materials, the Contractor shall thoroughly clean the sewer designated to receive the chemical grouting. Cleaning shall constitute removal of all loose debris and solids which inhibit proper seating of the packer. If mineral deposits or protruding taps are present, they shall be removed and paid for per the applicable line items. Removal of other hardened materials such as concrete shall be considered beyond the scope of this work.

The Owner shall have cleared the designated sewer line of obstructions such as dropped joints, protruding lateral connections, and broken pipe / crushed pipe which will prevent the use of the grouting equipment. If the CCTV inspection reveals a condition for which an applicable pay item has not been included on the Proposal, the Contractor shall inform the Engineer. The Engineer may choose to make a point repair or will direct the Contractor to abandon the section of pipe scheduled for test and seal.

2. Roots and Loose Debris in Lateral Connections: Remove all roots and loose debris from laterals connected to manholes for the length of lateral to be tested/grouted.

During mainline sewer cleaning or joint testing, document all lateral connections containing roots, mineral deposits or obstructive conditions that are either (a) greater than fine roots or (b) of a nature to prevent testing and sealing of connection. For each such connection, submit a screen shot image clearly showing the extent of roots or obstructive condition to the Engineer. Submit images in electronic format, labeled and organized in a manner to easily retrieve the image for the lateral connection in question. The list of lateral connections with roots shall include upstream and downstream manhole numbers and stationing. Engineer will review the list of lateral connections containing roots and obstructions and direct Contractor as to which laterals are to be (a) cleaned and grouted, (b) grouted without cleaning – in which case such lateral connection would be excluded from warranty testing, or (c) removed from

the scope of work – in which case no payment for such lateral will be made. Cleaning of lateral connections will be paid per the applicable item on the Proposal.

3. Grout Preparation: Follow the manufacturer's recommendations for the mixing and safety procedures.

Adjust gel time as necessary to compensate for changes in temperature in grout component tanks or hoses. The addition of dilution water to extend gel times is not acceptable unless resulting base grout tank only material exceeds 20% by weight for solution grouts.

During the grouting process, the Contractor shall monitor the grout component tanks to make sure that proper ratios are being pumped. If unequal levels are noted in the tanks, repeat the pump test as described above and correct any defective equipment.

4. Testing and Grouting Defects:

- a. Testing and grouting will not be required on pipe exhibiting the following conditions or characteristics:

- 1) Longitudinally cracked, fractured or broken pipe
- 2) Sections of the pipe with structural defects between joints
- 3) Any sections of pipe or joints that are in such poor structural condition, that in the judgment of Engineer, significant structural damage of the pipe would occur as a result of the pressure test

- b. Any structurally undamaged joint that structurally fails (breaks) during testing and grouting that are documented on video to have been done under normal pressure conditions shall be the Owner's responsibility and cost to repair.

- c. Grout all circumferential cracks and fractures or other defects as specified or as directed by Engineer. Do not test or grout any other pipe defects unless so specified or shown, or directed by Engineer to do so. Any structurally failed pipe or joint that is grouted at the Engineer's direction that further fails/breaks during testing and grouting that are documented on video to have been done under normal pressure conditions shall be the Owner's responsibility and cost to repair. Promptly repair any other sewer damage resulting from the Contractor's operations at no additional compensation

5. Joint Testing Procedure for Mainline Sewer and Laterals Connected to Manholes: Joint testing pressure shall be equal to 0.5 psi per vertical foot of pipe depth plus 2 psi; however, test pressure shall not exceed 10 psi without the approval of the Engineer where test joints in laterals which are directly connected to manholes to a predetermined distance by Engineer. If there is a transition in the laterals connected to manholes test the transition. Direct visual observation and measured cable lengths shall be

used to position the lateral packer for laterals directly connected to manholes.

- a. Individually test each sewer pipe joint at the above-specified pressure (and retest after sealing) in accordance with the following air test procedure:
 - 1) The packer shall be positioned within the pipe in such a manner as to straddle the joint to be tested.
 - 2) The packer ends shall be expanded so as to isolate the joint from the remainder of the pipe and create a void area between the packer and the pipe joint. The ends of the testing device shall be expanded against the pipe as per manufacturer's recommendations. If all attempts to isolate the joint fail, pump grout in an attempt to seal the leak around the packer end elements. The Contractor shall be paid the unit price for grout to seal the packer unless the Engineer determines that the sewer was inadequately cleaned or the packer is not performing properly.
 - 3) After the void pressure is observed to be equal to or greater than the required test pressure, the air flow shall be stopped. If the void pressure decays by more than 1.0 psi within 15 seconds, the joint will have failed the test and shall be sealed.
 - b. Upon completing the testing of each individual joint, the packer shall be deflated with the void pressure meter continuing to display void pressure. Should the void pressure meter fail to drop to 0.0 +/- 0.5 psi, clean the test equipment of residual grout material or make the necessary equipment repairs to provide for an accurate void pressure reading.
6. Lateral Connection Testing Procedure: Lateral connection joint testing pressure shall be equal to 0.5 psi per vertical foot of pipe depth plus 2 psi; however, test pressure shall not exceed 10 psi without approval of the Engineer.
- a. Air testing lateral connections shall be accomplished by isolating the area to be tested with the lateral connection packer and by applying positive pressure into the isolated void area. A pan and tilt camera shall be used to position the lateral packer for laterals directly connected to the mainline sewer. The lateral bladder shall be inverted from the mainline assembly into the lateral pipe and inflated. The mainline elements shall then be inflated to isolate the lateral connection and the portion of the lateral to be tested. A sensing unit shall monitor the pressure of the packer void and will accurately transmit a continuous readout of the void pressure to the

control panel at the grouting truck or to a pressure gauge on the packer recorded by the CCTV camera.

- b. The test procedure will consist of applying a controlled air pressure into each isolated void area. Air shall then be slowly introduced into the void area until a pressure equal to or greater than the required test pressure, but in no cases greater than 2 psi above the required test pressure, is observed on the pressure monitoring equipment. Once the designated pressure in the isolated void is displayed on the meter of the control panel, the application of air pressure will be stopped and a 15 second waiting period will commence. The void pressure will be observed during this period. If the void pressure drop is greater than 2.0 psi within 15 seconds, the lateral shall be considered to have failed the air test and shall be grouted and retested.
 - c. After completing the air test for each individual lateral specified herein, deflate the lateral packer with the void pressure meter continuing to display void pressure. If the void pressure does not drop to 0.0 +/- 0.5 psi, the equipment shall be adjusted to provide a zero void pressure reading at the monitor.
7. Grouting – General: Grout all joint and lateral connections that failed the pressure test by the injection method. This method shall be accomplished by forcing grout through a system of pumps and hoses into and through the joints of the sewer from the packer within the sewer pipe. Remove excess grout from pipe and laterals. The excess grout shall be defined as a thickness of grout that given its location, size and geometry, could cause a blockage. Flush or push forward to the next downstream manhole, remove from the sewer system, and properly dispose of the excess grout.
8. Pipe Joint Sealing by Packer Injection Grouting for Mainline Sewers and Laterals Connected to Manholes:

Position the mainline packer over the joint or defect to be sealed by means of a CCTV camera in the line. Position the push/pull packer over the joint or defect to be sealed by a means of visual observation, marked push rod, or where a cleanout is available, through a CCTV camera in the lateral. For push packers, start work at the most distant point to be grouted. Take an accurate measurement of the location of the defect to be sealed using a portion of the packer as a point of reference for positioning the injection area of packer over the defect. Pneumatically expand the packer sleeves such that they seal against the inside periphery of the pipe to form a void area at the joint now completely isolated from the remainder of the pipe line.

Pump grout materials, in stages if needed, into this isolated area to refusal until and the void or surrounding soil has been filled or solidified with the goal of applying 0.25 to 0.5 gallons of grout per inch-diameter per pipe joint. Refusal is when the packer void pressure during grout pumping

instantaneously rises or “spikes” by 4 to 5 psi or more above the normal void pressure experienced during grout pumping operation. Refusal may also be revealed when pumping void pressure exceeds the holding pressure of the packer end elements as evidenced by “blow-by” past the packer sealing end elements. Refusal shall mean, when the joint will not accept any more grout because it has flowed throughout the void, through any joint failure and into the surrounding soil; gelled or filled the available void space; and formed a cohesive seal stopping further grout flow, then the joint will have then been sealed. Record the amount of grout pumped on the sealing log.

Upon completion of the injection, deflate the packer to break away from the ring of gel formed by the packer void. The packer should then be re-inflated and the joint retested at a pressure equal to the initial test pressure. If the joint fails this air test, repeat the grouting procedure at no additional cost to the Owner, except for the additional grout used. Repeat this sequence of air testing, grouting and subsequent air testing until either the joint is sealed or it is determined that the grout consumption is too high. The final determination to stop subsequent attempts to seal a joint will be made jointly between the Engineer and the Contractor. Should the void pressure meter not read zero \pm 0.5 psi, clean the equipment of residual grout or make the necessary equipment repairs/adjustments to produce accurate void pressure readings.

If a mainline or lateral joints require more than 0.5 gallon of grout per inch-diameter per pipe joint, modify grouting procedure to perform stage grouting by pumping additional grout in up to 4 gallon increments, waiting 1 gel set cycle time or 1 full minute, whichever is greater between stages. Maximum number of stages shall not exceed two stages of 4 gallons each unless approved by Engineer.

9. Lateral Connection Sealing from the Mainline by Packer Injection Grouting:

Lateral connection sealing begins if the lateral connection does not pass the air test, shows evidence of leakage, has been successfully cleaned to remove roots, or where Contractor has been directed. The lateral packer shall remain in position during the pressure test, thus maintaining the isolated void. Pressure inject grout through the lateral packer into the annular space between the lateral grouting plug and the lateral pipe.

When pumping grout, operate the pumps until the mixed grout has flowed through any joint failure, through any annular space, and into the surrounding soil; gelled or filled the available void space; formed a cohesive seal stopping further grout flow; and minimum of 8 psi back pressure is achieved while pumping. As grout pumping continues the void pressure will slowly rise to a range of about 2 to 4 psi, continue pumping until a point where there is a sudden increase in the void pressure. This increase from 2 to 4 psi to over 8 to 10 psi takes place in a matter of a few

seconds. If the grout pumped exceeds 1 gallon per foot of lateral bladder plus 3 gallons, it will be suspected that there are significant voids on the outside of the pipe or that the packer is not properly sealed. Check that the packer is sealed properly. If it is, modify grouting procedure to stage grouting by pumping additional grout equivalent to 1 gallon plus 0.25 gallon per foot of lateral bladder, waiting one full minute, and retesting. The maximum number of stages shall not exceed two stages unless authorized by Engineer.

Upon completion of the lateral connection sealing procedure, deflate the lateral bladder, re-inflate and air test the lateral connection a second time to confirm the sealing of the connection in accordance with the air testing procedure. If the lateral connection fails this air test, repeat the grouting procedure at no additional cost to the Owner, except for the additional grout used. Air tests after grouting laterals containing roots is not required.

Confirm lateral flow after sealing of each lateral connection. If a grout blockage exists, the Contractor shall immediately clear the lateral at no additional cost to the Owner. Blockages in the lateral that are not the result of grouting operations shall not be the responsibility of the Contractor.

After grouting lateral connections (with the appropriate size lateral bladder), a thin residual grout film may be present inside the lateral wall. The amount of residual grout film present is dependent on the lateral bladder used, geometry of the lateral and positioning of the packer. This thin layer of cured grout is normal and will eventually peel off the sidewall of the pipe. The residual chemical grout film is not "sandwiched" between two structures and will eventually peel off the sidewall of the pipe. This residual chemical grout film is not considered excess grout. Removal of residual grout shall be requested by the Engineer and paid for under the unit price for post lateral connection residual grout cleaning.

10. Joint Sealing Verification: Record grouting of joints in conjunction with the testing of joints. Record the void pressure drop continuously on video and in writing immediately before sealing, and immediately after grouting. After the packer is deflated and moved, record on video the visual inspection of the joint. Use of standardized test and seal data sheets and PACP data codes is highly recommended.
11. Disposal: Collect and properly dispose of cleaning materials used in the cleaning of the grouting equipment.
12. Post Construction Inspection: After grouting is complete, all pipe sections shall be final inspected by means of a color CCTV system. The inspection shall be conducted as per the NASSCO Pipeline Assessment and Certification Program. One set of DVD's and reports shall be submitted.

- 3.09 Flow Bypassing: The Contractor shall provide for the diversion of flow at an existing upstream manhole (if available) and pump the flow into an existing downstream manhole. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The proposed bypassing system shall be submitted to the Engineer for review, and no work shall commence until acceptance is granted. At no time shall raw sewage be allowed to spill or flow on the ground.
- 3.10 Obstruction Removal: A high speed rotation hydraulic cutter will be used to cut protruding service laterals, offset joints, roots, barnacles, concrete, or other obstructions in vitrified clay pipe (VCP), concrete pipe, and cast iron pipe (CIP).
The cut will be made flush with the wall of the pipe to be video inspected and the debris will be pushed down the pipe to the downstream manhole.
- 3.11 Safety: The Contractor shall conform with all work safety requirements of pertinent regulatory agencies and shall secure the site for the working condition in compliance with the same. The Contractor shall erect such signs and other devices as are necessary for the safety of the worker and work site.
The Contractor shall also perform all of the work in accordance with applicable OSHA standards. Emphasis is placed upon the requirements for entering confined spaces and working with steam.
- 3.12 Traffic Control: The Contractor shall maintain at least one lane of traffic at all times. The Contractor shall properly sign all work within the right of way. Signs shall be installed per *Part VI of the Manual of Uniform Traffic Control Devices, latest edition* or as directed by the Engineer. Lane closings along state routes will require the use of certified flagmen. The Contractor will be allowed to close local roads and detour through traffic around the work site. The Contractor must provide notification to local fire and police departments prior to road closings. Under no circumstances will the Contractor be allowed to close a state route.
- 3.13 Measurements for Payment: All measurements shall be as specified or made by conventional means with accuracy consistent with field conditions and common practice. Measurement and payment for all work will be made in accordance with details shown, as specified and as provided for in the proper item in the Proposal. Measurement for payment shall be based on the following schedule:
- A. Pipe Line Cleaning: Pipe line cleaning shall be paid for at the unit price bid per linear foot of each size pipe. Measurement of the actual number of feet cleaned shall be made from center of manhole to center of manhole. Sewer lines requiring multiple passes to clean will only be measured once. All disposal and landfill fees shall be included in the unit price bid for cleaning, root, grease and obstruction removal.
Removal of roots and grease will be determined from the video inspection. The quantity shall be estimated by the Contractor and adjusted as necessary by the Engineer.
 - B. Pipe Line Television Inspection: Pipe line television inspection of the sewer lines shall be paid for at the unit price bid per linear foot of each size pipe.

Measurements of the actual number of feet inspected shall be made from the center of manhole to center of manhole.

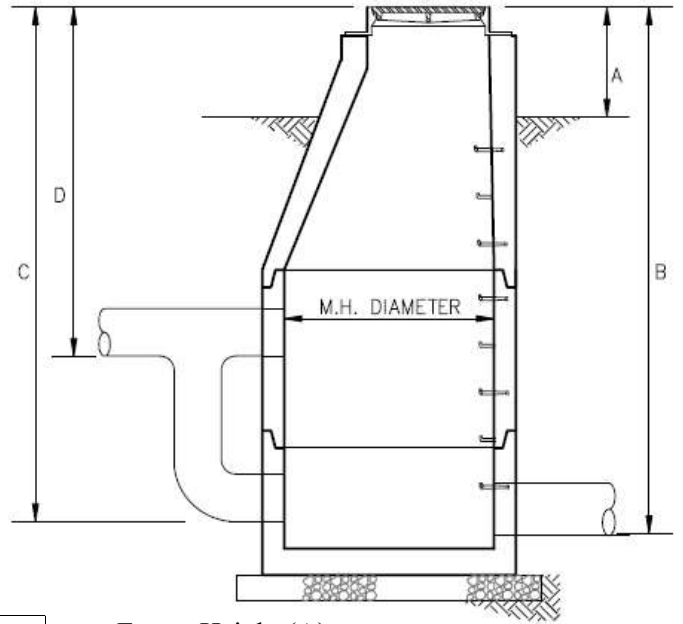
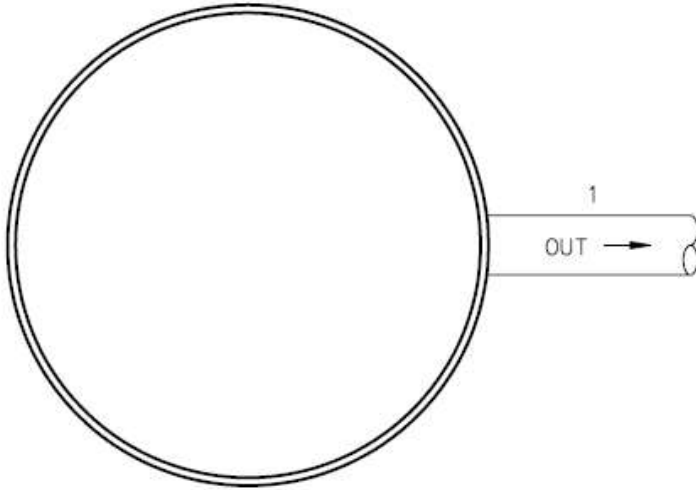
- C. Pumping and Bypassing: Pumping and bypassing of sewer flows will not be measured for payment. The cost of this work is to be included in the cost of the project.
- D. Traffic Control: Traffic control will not be measured for payment. The cost of this work is to be included in the cost of the project.
- E. Protruding Pipes: Removal of any protruding pipes or obstructions to allow for the work to be accomplished will be paid at the unit price bid.

Manhole Inspection Report

Owner: Port Wentworth, GeorgiaProject No.: 212469

Inspection Completed By: _____ Date: _____

Manhole #: _____ Location: _____



Photographs

Sketch invert and connection
Note areas of inflow/Infiltration

	Number
above ground	
invert	

Frame Height (A): _____
Manhole Material: _____
Manhole Diameter: _____

Connections	Size	Pipe Material	Depth	Drop	Notes
1. (Out)			DIM B:		
2.			DIM C:	DIM D:	
3.			DIM C:	DIM D:	
4.			DIM C:	DIM D:	
5.			DIM C:	DIM D:	
6.			DIM C:	DIM D:	
7.			DIM C:	DIM D:	

Manhole Conditions: _____

Frame and Cover

Type of frame and cover: Bolted/Watertight ☐ or Vented ☐ or Standard ☐Frame or cover missing: Yes ☐ or No ☐Frame loose or offset from manhole: Yes ☐ or No ☐Signs of infiltration/inflow: Yes ☐ or No ☐ Describe: _____

Manhole Walls

Do walls show signs of deterioration: Yes ☐ or No ☐ Level of Deterioration: 1 2 3 4 5 6 7 8 9 10Imminent
FailureNew
ConstructionSigns of infiltration/inflow: Yes ☐ or No ☐ Describe: _____Evidence of Surcharging: Yes ☐ or No ☐Does manhole appear to be in area prone to frequent flooding: Yes ☐ or No ☐Does manhole appear to become completely submerged during flooding: Yes ☐ or No ☐



City Council
7224 GA Highway 21
Port Wentworth, GA 31407

SCHEDULED

AGENDA ITEM (ID # 2662)

Meeting: 05/10/22 07:00 PM
Department: All
Category: Ordinance
Prepared By: Zahnay Smoak
Department Head: Steve Davis

10.B

DOC ID: 2662

Adoption of Millage Rate

Issue/Item: The City annually adopts a millage rate for the property within the city.

Background: The City is financially vibrant with a growing tax digest and does not require a tax increase. We are proposing adopting the same rate (4.16 mills) we have had since 2019.

Facts and Findings: The city has 6% more properties than last year and we are projecting a similar increase in valuation.

Funding: N/A

Recommendation: Approval.

ATTACHMENTS:

- PUBLIC NOTICE - CURRENT 2022 TAX DIGEST AND 5 YEAR HISTORY OF LEVY (PDF)
- ADOPTION ORDINANCE MILLAGE RATE 2022 (PDF)
- PT 38 FOR 2022 (PDF)
- PT 32.1 FOR 2022 (PDF)

PUBLIC NOTICE

The City of Port Wentworth does hereby announce that the millage rate will be set at a meeting to be held at the regular City Council Meeting to be held at Port Wentworth City Hall on Tuesday, May 10, 2022 at 7:00 pm pursuant to the requirements of O.C.G.A. Section 48-5-32 does hereby publish the following presentation of the current year's tax digest and levy, along with the history of the tax digest and levy for the past five years.

CURRENT 2022 TAX DIGEST AND 5 YEAR HISTORY OF LEVY

	2017	2018	2019	2020	2021	2022
Real & Personal	437,586,659	435,691,155	488,698,006	526,533,766	540,375,932	572,798,488
Motor Vehicles	5,308,800	3,751,150	3,075,650	3,397,540	2,523,690	2,675,111
Mobile Homes	759,396	473,676	225,360	199,444	205,524	217,855
Timber - 100%	-	-	-	61,062	24,738	26,222
Heavy Duty Equipment	-	-	6,108	12,052	42,530	45,082
Gross Digest	443,654,855	439,915,981	492,005,124	530,203,864	543,172,414	575,762,759
Less M& O Exemptions	42,423,056	44,040,936	48,487,444	55,596,483	55,868,287	59,220,384
Net M & O Digest	401,231,799	395,875,045	443,517,680	474,607,381	487,304,127	516,542,375
Gross M&O Millage	8.885	9.291	8.910	8.450	8.541	8.541
Less Rollback (LOST)	4.314	4.720	4.750	4.290	4.381	4.381
Net M&O Millage	4.571	4.571	4.160	4.160	4.160	4.160
Total Taxes Levied	1,834,031	1,809,545	1,845,034	1,974,367	2,027,185	2,148,816
Net Taxes \$ Increase	89,116	(24,486)	35,489	129,333	52,818	121,631
Net Taxes % Increase	5.11%	-1.34%	1.96%	7.01%	2.68%	6.00%

ORDINANCE NO.

An ordinance for the purpose of establishing a city millage rate for ad valorem tax for the year 2022 tax digest.

Be it ordained by the Mayor and Council of the City of Port Wentworth, Georgia. It is hereby ordained by the authority thereof:

The City of Port Wentworth has adopted a millage rate of 4.160.

APPROVED BY THE MAYOR AND COUNCIL OF THE CITY OF PORT WENTWORTH ON THE 10 DAY OF MAY, 2022.

Mayor Gary Norton

Clerk of Council Zahnay E. Smoak

Attachment: ADOPTION ORDINANCE MILLAGE RATE 2022 (2662 : Adoption of Millage Rate)

PT32.1 - Computation of MILLAGE RATE ROLLBACK AND PERCENTAGE INCREASE IN PROPERTY TAXES - 2022COUNTY **CHATHAM** TAXING JURISDICTION **CITY OF PORT WENTWORTH****INFORMATION FOR THE SHADED PORTIONS OF THIS SECTION MUST BE ENTERED**

This information will be the actual values and millage rates certified to the Department of Revenue for the applicable tax years.

DESCRIPTION	2021 DIGEST	REASSESSMENT OF EXISTING REAL PROP	OTHER CHANGES TO TAXABLE DIGEST	2022 DIGEST
REAL	454,135,163	11,771,790	18,925,951	484,832,904
PERSONAL	86,240,769		1,724,815	87,965,584
MOTOR VEHICLES	2,523,690		151,421	2,675,111
MOBILE HOMES	205,524		12,331	217,855
TIMBER -100%	24,738		1,484	26,222
HEAVY DUTY EQUIP	42,530		2,552	45,082
GROSS DIGEST	543,172,414	11,771,790	20,818,555	575,762,759
EXEMPTIONS	55,868,287	1,644,246	1,707,852	59,220,384
NET DIGEST	487,304,127	10,127,544	19,110,703	516,542,375
FLPA Reimbursement Value			0	
Adjusted NET DIGEST	487,304,127	10,127,544	19,110,703	516,542,375
	(PYD)	(RVA)	(NAG)	(CYD)
2021 MILLAGE RATE >>>	4.160	2022 PROPOSED MILLAGE RATE >>>		4.160

THIS SECTION WILL CALCULATE AUTOMATICALLY UPON ENTRY OF INFORMATION ABOVE

DESCRIPTION	ABBREVIATION	AMOUNT	FORMULA
2021 Net Digest	PYD	487,304,127	
Net Value Added-Reassessment of Existing Real Property	RVA	10,127,544	
Other Net Changes to Taxable Digest	NAG	19,110,703	
2022 Net Digest	CYD	516,542,375	(PYD+RVA+NAG)
2021 Millage Rate	PYM	4.160	
Millage Equivalent of Reassessed Value Added	ME	0.082	(RVA/CYD) * PYM
Rollback Millage Rate for 2022	RR	4.078	PYM - ME

COMPUTATION OF PERCENTAGE INCREASE IN PROPERTY TAXES

If the 2022 Proposed Millage Rate for this Taxing Jurisdiction exceeds Rollback Millage Rate computed above, this section will automatically calculate the amount of increase in property taxes that is part of the notice required in O.C.G.A. Section 48-5-32.1(c) (2)	Rollback Millage Rate	4.078
	2022 Millage Rate	4.160
	Percentage Increase	2.01%

CERTIFICATIONS

I hereby certify that the amount indicated above is an accurate accounting of the total net assessed value added by the reassessment of existing real property for the tax year for which this rollback millage rate is being computed.

Chairman, Board of Tax Assessors_____
Date

I hereby certify that the values shown above are an accurate representation of the digest values and exemption amounts for the applicable tax years.

Tax Collector or Tax Commissioner_____
Date

I hereby certify that the above is a true and correct computation of the rollback millage rate in accordance with O.C.G.A. Section 48-5-32.1 for the taxing jurisdiction for tax year 2022 and that the final millage rate set by the authority of this taxing jurisdiction for tax year 2022 is _____

CHECK THE APPROPRIATE PARAGRAPH BELOW THAT APPLIES TO THIS TAXING JURISDICTION

____ If the final millage rate set by the authority of the taxing jurisdiction for tax year 2022 exceeds the rollback rate, I further certify that the required advertisements, notices, and public hearings have been conducted in accordance with O.C.G.A. Sections 48-5-32 and 48-5-32.1 as evidenced by the attached copies of the published five year history and current digest advertisement, the "Notice of Intent to Increase Taxes" showing the times and places when and where the required public hearings were held, and a copy of the press release provided to the local media.

____ If the final millage rate set by the authority of the taxing jurisdiction for tax year 2022 does not exceed the rollback rate, I further certify that the required five year history and current digest advertisement have been published in accordance with O.C.G.A. Section 48-5-32 as evidenced by the attached copy of such advertised report.

Signature of Responsible Party_____
Title_____
Date

Attachment: PT 32.1 FOR 2022 (2662 : Adoption of Millage Rate)



City Council
7224 GA Highway 21
Port Wentworth, GA 31407

SCHEDULED

Meeting: 05/10/22 07:00 PM
Department: All
Category: Contract
Prepared By: Zahnay Smoak
Department Head: Steve Davis

10.C

AGENDA ITEM (ID # 2661)

DOC ID: 2661

Next Site – Commercial Development Consultants

Next Site - Commercial Development Consultants

Issue/Item: The City is in need of new economic development tools to attract retail and restaurants. The city is growing exponentially and the residents as well as the patrons of our hotels need options for entertainment, food and other retail services. Next Site does market analysis and uses its connections to draw new development from numerous brands.

Background: We have prime commercial property across our city in need of commercial development. Including along a state highway at an interstate interchange that is ripe for new attractions.

Facts and Findings: This consultant contract can offset the need for city personnel bringing a team of experts to partner with our local groups to attract our specific needs. Next Site does not work with industrial development.

Funding: \$15,000 annually for 3 years.

Recommendation: Approval.

ATTACHMENTS:

- NextSite Agreement and Proposal - Port Wentworth GA (003) (PDF)



AGREEMENT TO PROVIDE RESEARCH, MARKETING & CONSULTING SERVICES

THIS AGREEMENT is entered into by and between NextSite, LLC, an Alabama limited liability company (hereinafter referred to as “Consultant”) and the City of Port Wentworth, Georgia (hereinafter referred to as “Client”) on this the **16th** day of **May 2022**, as follows:

WHEREAS, the Client desires to have performed those services identified on Exhibit A attached hereto (the “Project”) relating to the agreement with the City of Port Wentworth, Georgia, which it believe will promote the efficient operation of the Client; and,

WHEREAS, Consultant has made a proposal to the Client to provide research, marketing and consulting services related to the Project to the Client as further forth below.

W-I-T-N-E-S-S-E-T-H:

NOW, THEREFORE, this agreement is made and entered into on the date first above written by and between the Client and Consultant, by which Consultant will provide research, marketing and professional consulting to the Client as hereinafter specified, through individuals possessing a high degree of professional skill where the personality of the individual will play a decisive role as follows:

1. SCOPE OF SERVICES

Consultant agrees, for the consideration stated herein, to provide research, marketing and professional consulting and related services to the Client for the Project as set out in Exhibit A. The engagement will focus on the pro-active recruitment of commercial development and redevelopment for those site(s) identified by the Client and Consultant. In accomplishing the Project, Consultant shall take such steps as are appropriate to ensure that the work involved is properly coordinated with related work and policies being carried on by the Client.

2. TERM; TIME OF PERFORMANCE

The term of this agreement shall be for **three (3)** years which shall be calculated as commencing on **May 16, 2022** and ending **May 15, 2025**.

3. COMPENSATION

The Client agrees to pay Consultant for the services as set forth herein, the sum of **\$15,000** per year plus the success fees outlined in Exhibit A below. Payment is to be made upon execution of this agreement and receipt of invoices from NextSite, LLC. Client shall pay Consultant in U.S. dollars within fifteen (15) days of receipt of invoices.

4. CLIENT RESPONSIBILITIES

The Client shall provide Consultant with access to relevant personnel, facilities, and materials including, but not necessarily limited to, those items specified in Consultant's proposal to Client, and such other records, reports, and information as reasonably requested by Consultant and in Client's possession within the scope of Consultant's services.

5. LEVEL OF COMPETENCE

Consultant represents and warrants that appropriate persons working on the Project for Client shall be qualified and competent to perform the services required. Such personnel shall not be employees of or have any pre-existing contractual relationship with the Client. All services required hereunder will be performed by Consultant or under its supervision. The Project Directors for the performance of services by Consultant pursuant to the terms and conditions of this agreement will be Chuck Branch, CEO of NextSite. Consultant will also use additional employees to assist with the performance of this Agreement as Consultant deems appropriate in Consultant's discretion.

6. MATERIALS/CONFIDENTIALITY

The Client agrees to cooperate with and provide Consultant with access to facilities and information within its reasonable possession and control, requested by Consultant for its review and use in performing the services herein. Provided, however, all such documents, information, results, memoranda and all other written information ("information") shall be held confidential by Consultant and any of its sub-contractors and shall not, without the prior written consent of the Client, be used for any purpose other than the performance of this agreement nor be disclosed to

any other entity not connected with performance of this agreement. Upon completion of services, Consultant shall return all such information to the Client. The Client shall retain ownership of all such information provided by Client.

7. INTELLECTUAL PROPERTY

The Client and Consultant, jointly and separately, acknowledge and agree that the intellectual property of both parties shall remain owned by the respective party. Except for Consultant's periodic and final reports generated for performance of this agreement to or for the Client, reports, memorandums, electronic mail, facsimile transmissions and other written and prepared documents shall be owned by the party who authored, generated or who originally possessed the same and nothing in this agreement shall contravene said rights.

8. INFORMATION AND REPORTS

Consultant shall furnish periodic reports concerning the status of the Project to the Client's representative pursuant to a schedule agreed upon by Consultant and Client, but no later than semi-annually. Consultant shall furnish the Client, upon request, electronic copies of all documents and other material prepared or developed as part of the project. Such requests shall be reasonable and within normal business practices for such work.

9. COPYRIGHT INFORMATION

The Client acknowledges that all intellectual property developed during the course of this agreement by Consultant shall belong exclusively to Consultant. However, the Client may utilize any of the foregoing for and on behalf of its internal operations, to support existing business and entrepreneurial growth and all commercial development efforts in its communities and county, but will take steps reasonably necessary with its employees with respect to the use, copying, protection and security of the foregoing.

10. APPLICABLE LAWS

Consultant shall register and comply with all Georgia or Federal laws and/or regulations they may relate to the services or activities of the Consultant to the Client.

11. INSURANCE

Consultant shall carry all appropriate and necessary insurance to be in compliance with

state and national laws regarding the insurance coverage of its employees.

12. CONFLICT OF INTEREST

The Consultant represents and warrants to the Client, to the best of its knowledge, that neither it nor its Project Directors are aware of any conflict of interest which exists by means of its provision of services to the Client pursuant to the terms and conditions of this agreement.

13. NOTICES/PARTIES REPRESENTATIVES

All notices, bills, and invoices required by this agreement shall be sufficient if sent by the parties hereto in the United States Mail, postage prepaid thereon to the addresses noted below:

Client: Steve Davis
City Manager
City of Port Wentworth, Georgia
7224 GA Highway 21
Port Wentworth, GA 31407
(912) 964-4379
stevedavis@cityofportwentworth.com

Consultant: NextSite LLC
880 Montclair Road
Suite 625
Birmingham, AL 35213
Attention: Chuck Branch

14. REPRESENTATIVE CAPACITY

While Consultant's role will be that of consultant to the Client, Consultant shall be and remain an independent contractor and not act in the role of an agent or legal representative on behalf of the Client. Consultant shall not have the authority to bind or obligate the Client, its officers, agents or employees. As part of our work on behalf of the Client, NextSite connects with dozens of retailers, restaurants, developers, brokers and tenant reps. Our focus is to position your community with the decision-makers that drive the development process for concepts likely to consider markets like Port Wentworth, Georgia. Client acknowledges that based on community's size, there are limited opportunities for national and regional recruitment. Client acknowledges that one of the key benefits of this engagement is local support of the community's existing businesses and entrepreneurial opportunities both of which fall outside the scope of NextSite's

services beyond the delivery of the research and market analysis.

15. DISCLOSURE

Client acknowledges that affiliates and strategic partners of Consultant act in the capacity of a real estate advisory service business and may earn fees for services including development, leasing and real estate advisory fees in the performance of such affiliates services as part of the scope of the Project. The fees earned by such affiliates and strategic partners are not the responsibility of the City of Port Wentworth, Georgia.

16. DEFAULT

Except as otherwise provided herein, the failure on the part of either party to comply with any material term, representation, warranty, covenant, agreement, or condition of this agreement, which continues uncured for thirty (30) days after written notice thereof (unless a different time period is specified in the separate document for curing non-performance of a specific task or event) shall constitute an “Event of Default”; provided that an Event of Default will not be deemed to have occurred if such failure is a matter than cannot reasonably be cured within thirty (30) days due to force majeure, and the failure is cured by the end of a period that includes the days lost due to force majeure. No default by the parties shall be actionable or be of other consequence unless and until it shall constitute an Event of Default. In the Event of Default by the Client in the performance of any of its obligations under this agreement, the Consultant’s sole remedy shall be specific performance of the agreement, including, if applicable, the payment of any fees hereunder. Except as otherwise provided, in the Event of Default by the Consultant in the performance of any of its obligations under this agreement, the Village’s remedies shall be specific performance (including payment of money, whether or not denoted as damages), termination of this agreement, damages, and such other rights or remedies as it may be entitled to under this agreement or law. The Client shall not be liable to the Consultant for consequential damages or lost profits.

17. INDEMNIFICATION

Consultant shall indemnify, defend, and hold harmless the Client and its officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including but not limited to legal fees (attorney's and paralegals' fees and court costs), arising from or in any way connected with any act or omission, be it negligent or not, of Consultant or Consultant Parties. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. Consultant shall similarly protect, indemnify and hold and save harmless the Client, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Consultant's breach of any of its obligations under, or Consultant's default of, any provision of this agreement. The obligations of Consultant hereunder shall survive the expiration or termination of this agreement.

18. REPRESENTATIONS AND WARRANTIES

Each party to this agreement represents and warrants to the other as follows:

- A. That it is an individual of the age of majority or otherwise a legal entity duly organized and in good standing pursuant to all applicable laws, rules and regulations.
- B. That each has full power and capacity to enter into this agreement, to perform and to conclude the same including the capacity, to the extent applicable, to grant, convey and/or transfer; areas, assets, facilities, properties, (both real and personal), permits, consents and authorizations and/or the full power and right to acquire and accept the same.
- C. That to the extent required, each party has obtained the necessary approval of its governing body, board, council or other appropriate governing body and a resolution or other binding act has been duly and properly enacted by such governing body or board authorizing this agreement and said approval has been reduced to writing and certified or attested by the appropriate official of the party.
- D. That each party has duly authorized and empowered a representative to execute this agreement on their respective behalf and the execution of this agreement by such representative fully and completely binds the party to the terms and conditions hereof.
- E. That absent fraud, the execution of this agreement by a representative of the party shall constitute a certification that all such authorizations for execution exist and have been

performed and the other party shall be entitled to rely upon the same. To the extent a party is a partnership, limited liability company or joint venture, the execution of this agreement by any member thereof shall bind the party and to the extent that the execution of agreement is limited to a manager, managing partner or specific member then the person so executing this agreement is duly authorized to act in such capacity for the party.

F. That each party represents and warrants to the other that, to the best of its knowledge, there is no litigation, claim or administrative action threatened or pending or other proceedings to its knowledge against it which would have an adverse impact upon this transaction or upon either's ability to conclude the transaction or perform pursuant to the terms and conditions of this agreement.

G. That each party has obtained any and all required permits, approvals and/or authorizations from third parties to enable it to fully perform pursuant to this agreement.

19. SUNSHINE LAWS

Consultant recognizes that the sunshine laws of the State of Georgia may require the Client to release certain documents in its possession upon public request. The Client shall notify Consultant of any such request by facsimile or email. Consultant shall have forty-eight (48) hours after said notice is sent to instruct the Client to agree or deny the request. In the event the documents are produced to the Client by Consultant pursuant to a FOIA request, any instruction to agree or deny the request shall accompany the production of records. The Client shall be under no obligation to comply with Consultant's instruction for any documents not designated "confidential" and shall not be liable to Consultant for any production of documents that are not marked "Confidential." In the event Client is instructed by Consultant to deny a FOIA request, and the Client complies with Consultant's request, Consultant shall indemnify, defend, and hold harmless the Client to and from any claim arising from that decision, including reasonable attorney's fees and costs that may be awarded to the requesting party by the court.

Notwithstanding anything herein to the contrary, Consultant acknowledges that it may be deemed to have been contracted to perform a governmental function and that any documents related thereto in its possession (and not in the possession of the Client) may be considered a public record pursuant to applicable law, provided the same directly relate to the governmental function being performed and are not otherwise exempt from disclosure. Consultant agrees to maintain any and all records received/generated as a result of its performance under this Agreement and to deliver the same to the Client not later than forty-eight (48) hours after receipt

of a request from the Client for the same pursuant to a FOIA request. To the extent Consultant believes that the record(s) do not relate to the performance of a governmental function or is exempt from disclosure under FOIA, it shall respond to the Client in writing in the time-period referenced above with a description of the record(s) and the factual basis for withholding the same. In the event such records are turned over the Client but Consultant believes they are otherwise exempt from disclosure, it shall mark such documents confidential and instruct the Client to deny the request and cite the factual and legal basis therefor.

Consultant agrees that it shall nonetheless comply with any request of the Client to produce any documents withheld from the Client for an in camera inspection in accordance with any order, directive, or request of a court of competent jurisdiction or administrative body/agency responsible for review and, to the extent such inspection results in an order requiring the production of document qualifying as a public record not otherwise exempt from disclosure, abide by such decision or order subject to the Consultant's right to appeal. In the event that Consultant does not produce and deliver such record(s) for production in accordance with a FOIA request, whether or not such record(s) are later determined to be public records or exempt from disclosure, as the case may be, Consultant shall indemnify, defend and hold harmless the Client related to any claims therefor, including reasonable attorney's fees and costs that may be awarded to the requesting party by a court of competent jurisdiction.

20. MISCELLANEOUS

A. It is the intent of the parties hereto that there shall be no third-party beneficiaries to this agreement, except that, the City of Port Wentworth, Georgia may share any research, market analysis, reports, etc. generated by the Consultant as part of the engagement, with agencies and authorities working for or on behalf of the City of Port Wentworth, Georgia

B. This agreement, together with any exhibits or amendments hereto, constitutes the entire agreement of the parties, as a complete and final integration thereof with respect to its subject matter. In the event of a direct conflict between the provisions hereof and any prior agreement or amendment, the latter shall supersede the former. All written or oral understandings and agreements heretofore had between and among the parties are merged into this agreement, which alone fully and completely expresses their understandings. No representation, warranty, or covenant made by any party which is not contained in this agreement or expressly referred to herein have been relied on by any party in entering into this agreement.

C. Neither party to this agreement shall hold the other party responsible for damages or delay in performance caused by acts of God, strikes, lockouts or other circumstances beyond the reasonable control of the other or the other party's employees, agents or contractors.

D. This agreement may not be amended, modified, altered, changed, terminated, or waived in any respect whatsoever, except by a further agreement in writing, properly executed by all of the parties.

E. This agreement shall bind the parties and their respective personal representatives, successors, and assigns.

F. If any provision in this agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

G. The captions of this agreement are for convenience and reference only, are not a part of this agreement, and in no way define, describe, extend, or limit the scope or intent of this agreement.

H. This agreement shall be construed in its entirety according to its plain meaning and shall not be construed against the party who provided or drafted it.

I. The laws of the State of Georgia, but without regard to conflict of laws principles, shall govern the validity of this agreement, the construction of its terms, the interpretation of the rights, the duties of the parties, the enforcement of its terms, and all other matters relating to this agreement.

J. No party to this agreement may assign or delegate its interests or obligations hereunder without the written consent of all other parties hereto obtained in advance of any such assignment or delegation. No such assignment or delegation shall in any manner whatsoever relieve any party from its obligations and duties hereunder and such assigning or delegating party shall in all respects remain liable hereunder irrespective of such assignment or delegation.

K. Non-enforcement of any provision of this agreement by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remaining terms and conditions of the agreement.

L. The date of this agreement is intended as and for a date for the convenient identification of this agreement and is not intended to indicate that this agreement was necessarily executed and delivered on said date.

M. This instrument may be executed in any number of counterparts, each of which so executed shall be deemed an original, but all such counterparts shall together constitute but one and the same instrument.

N. No covenant or agreement contained in this agreement shall be deemed to be the agreement of any official, officer, partner, member, director, agent, employee, planning consultant or attorney of the Consultant or Client, in his or her individual capacity, and no official, officer, partner, member, manager, director, agent, employee or attorney of the Consultant or Client shall be liable personally under this agreement or be subject to any personal liability or accountability by reason of or in connection with or arising out of the execution, delivery, and performance of this agreement, or any failure in connection therewith.

CLIENT:
 City of Port Wentworth, Georgia
 By: _____
 Title: _____
 Date: _____

Consultant:
 NextSite, LLC
 By: _____
 Title: _____
 Date: _____

Exhibit A



Charles Branch
Senior VP of Business Development
205.218.9578
charles@nextsite.net



CONNECTING OPPORTUNITIES

NextSite is a Commercial Development Advisory Firm specializing in identifying and connecting opportunities to developers, tenant reps and end-users to affect positive change in the communities we service across the U.S.

Our focus is to provide a unique research & market analysis based on the consumer travel patterns and customer journeys to key retail assets and your downtown, identify realistic recruitment targets and leverage our developer and tenant rep relationships to support commercial development growth in your community.

In the past 6+ years, NextSite has connected and supported over 26.4 million square feet of commercial development projects resulting in over \$6.7 billion of capital investment.

NextSite has successfully connected developers, tenant reps and end-users to projects across the U.S. including: Single Tenant, Multi-Tenant, Shopping Centers, Multi-Family, Workforce Housing, Hospitality, Entertainment, Mall Redevelopment, Grocery, Mixed-Use, Senior Housing and Student Housing.

While NextSite has only been in existence for 6+ years, the principals and key executives of the company have a combined 100+ years of retail, industrial, multi-family, mixed-use and economic development experience positioning communities for commercial development success. Every member of the NextSite team is a member of ICSC and we participate in a minimum of 12 ICSC Conferences each year plus several shopping center, hospitality, and Retail Live conferences. However, 90% of our success comes from interacting with developers, tenant reps and retailers daily outside of the conference environment.

NextSite CEO Chuck Branch has worked with over 1500 Economic and Workforce development agencies across the country in the past 20 years assisting their research and market analysis needs and for the past 10 years pro-actively recruiting retail and commercial development to grow local economies. Our unique tools allow us to create industry leading analysis that creates a story about the opportunities in your markets. Our success in connecting developer and tenant reps to these opportunities speaks for itself. Developers and Tenant Reps trust our insight, market knowledge and target opportunity identification because we do not have a conflict of interest with their respective services.

Our Customer Journey and Consumer Travel Pattern Analytics form the basis for creating high quality custom trade areas to facilitate the balance of research and marketing deliverables. In many cases we end up with multiple custom trade areas because there is no one size fits all approach. A grocery store may have a substantially different trade area than a women's clothing store or restaurant.



Our Retail VOID Analysis allows us to identify concepts that have shown a propensity to locate in similar size communities with similar demographic profiles and properly distanced from next nearest location to overcome cannibalization concerns.

NextSite's new proprietary **site identification model** estimates the suitability of a community for any given retailer based on the propensity of that retailer to locate in similar markets. Our model analyzes over 250 retail chains with more being added every day. This tool, based on proven statistical methods and back tested on recent site decisions by multiple concepts, allows us to quickly identify markets and sub-markets that match existing locations of the target retailer/restaurant. This information becomes part of our pro-active outreach to developers, tenant reps and retailers. **No other retail consulting firm has this capability.**

NextSite does not establish a minimum number of contacts in our engagements. We are going to identify all potential opportunities based on our analysis of the market and the expansion plans of retailers. Our proactive outreach to our network of developers and tenant reps will communicate your community's story and get decision makers into your market. We will also position each community for potential commercial development in non- retail categories, including multi-family, middle market housing, hospitality, healthcare and mixed-use.

Finally, communication is critical. We use Basecamp for non-time sensitive communication and to make all research and market analysis available to your team. Any time sensitive update, requests, news, etc. that we receive is going to be communicated in a phone call.

"Many of the connections we have made with developers and tenant reps have been the direct result of working with Chuck and the NextSite team. The City of Albertville is thankful for the retail growth opportunities we have had over the last few years and NextSite continues to be a great partner in assisting the city with all our retail recruiting efforts. It is reassuring to know that even when I am not in the room – the folks at NextSite are vetting opportunities for our city with their large network of developer and tenant rep relationships."

Mike Price
City of Albertville, AL – Economic Development Director

Scope & Approach: Commercial Development Analysis & Recruitment*



"Our partnership with NextSite for this ongoing retail study benefits local businesses in two main ways," Roswell Inc. executive director Steve Shroud said. "First, it helps them understand the shopping patterns and behaviors of consumers in our area, which is important for every business to know, so they can adapt their business practices to meet the needs of the market. Second, it helps our organization in attracting and recruiting the right businesses to our city, which strengthens our overall business environment."

Steve Shroud
Executive Director – Roswell Inc.

Research

Within the first 60 days of the agreement, NextSite will identify the appropriate radius, drive time and custom trade areas based on feedback from key community contacts, analysis of peer communities, on-site market visits and analysis of consumer travel patterns and customer journey. The research for each Community will include:

- **Radius Analysis**
- **Drive Time Analysis**
- **Customer Journey Analysis**
- **Custom Trade Area Analysis**
- **Demographic Trend Analysis**
- **Consumer Spending Patterns**
- **Retail GAP/Leakage Analysis**
- **Peer Community Analysis**
- **Retail VOID Analysis**
- **Tapestry Segmentation**
- **Site Maps**
- **Retail Landscape Maps**
- **Traffic Count Maps**
- **Marketing Guide**
- **On – Demand Research Reports**



Customer Journey and Custom Trade Area Research & Analysis

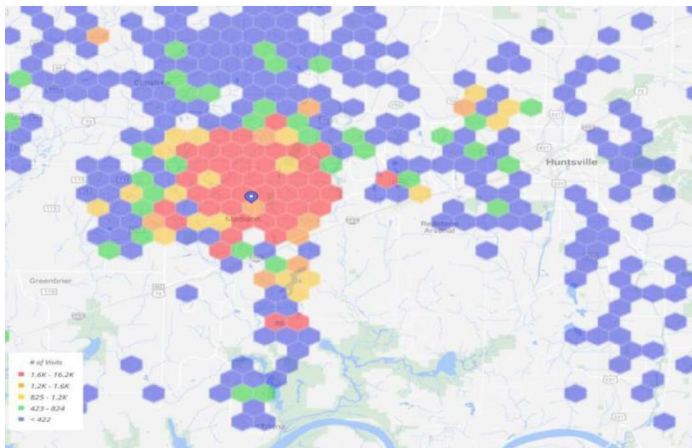
Consumer Travel Patterns using Mobile Device Tracking data allows NextSite to visualize the Common Evening, Common Daytime and Path to Purchase locations of consumers based on visits to a designated retailer or multi-tenant commercial location. This data helps identify clusters of consumers and is often the baseline in our understanding the size and scope of custom trade areas.

Post – Prior

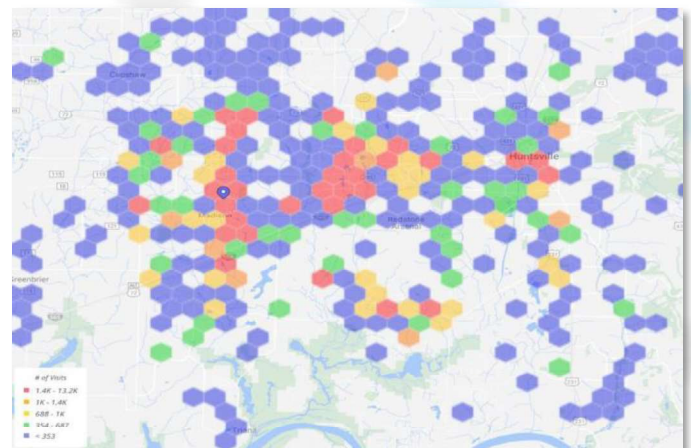
Publix / Hughes Rd

Prior			Post		
	Venue Name	Foot-Traffic		Venue Name	Foot-Traffic
1	Midtown Marketplace / Wall Triana Highway	2.59%	1	Midtown Marketplace / Wall Triana Highway	2.33%
2	Bridge Street Town Centre / The Bridge St	2.15%	2	Redstone Arsenal Commissary / Acton Rd	0.68%
3	Walmart Supercenter / Madison Blvd	1.92%	3	Publix / Zierdt Rd	0.6%
4	The Shoppes of Madison / Hwy 72 W	0.74%	4	Walmart Supercenter / Madison Blvd	0.51%
5	YMCA / Park Square Ln	0.7%	5	Bridge Street Town Centre / The Bridge St	0.46%
6	Publix / Zierdt Rd	0.56%	6	The Shoppes of Madison / Hwy 72 W	0.42%
7	Westside Centre / University Dr NW	0.52%	7	Publix / County Line Rd Ste C	0.39%
8	Hobby Lobby / Hwy 72	0.51%	8	Westside Centre / University Dr NW	0.35%
9	University Place / University Dr	0.45%	9	Kroger / Highway 72 W	0.32%
10	The Home Depot / Lawson Ridge Dr	0.4%	10	Logan Square Shopping Center / Memorial Pkwy SW	0.25%
11	Publix / County Line Rd Ste C	0.37%	11	Applebee's / Hughes Road	0.23%
12	Costco Wholesale / Memorial Pkwy NW	0.36%	12	Dublin Park / Dublin Park	0.19%
13	Lowe's Home Improvement / Highway 72 West	0.36%	13	Primrose School of Madison / Plaza Boulevard	0.19%
14	Dublin Park / Dublin Park	0.32%	14	Madison Centre / Madison Blvd	0.19%
15	Parkway Place / S Memorial Pkwy	0.32%	15	University Plaza / University Dr	0.18%

Home

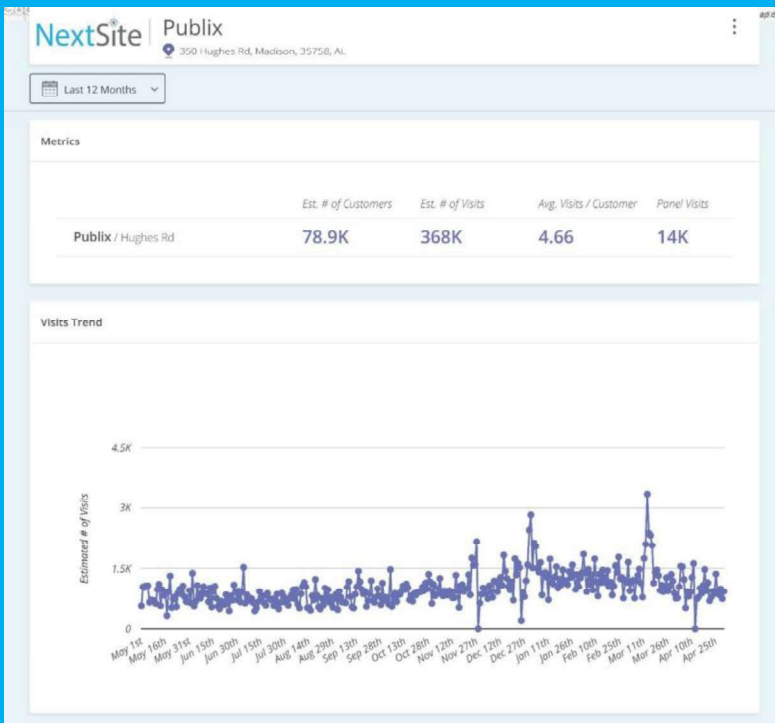


Work



Customer Journey and Custom Trade Area Research & Analysis

Customer Journey Analytics based on a market's primary retailer/commercial assets allows NextSite to gain insight into customer shopping habits and travel patterns as well as assess a community's ability to draw consumers into the market from the surrounding areas. We also create Customer Journey analysis for the Downtown corridors to better understand visit traffic and length of stay.



Estimated Number of Customers, Estimated Number of Visits and Visits Trends – The Customer Journey Analytics report highlights the number of unique customers visiting the primary retailer (or targeted location) as well as the total number of visits.

Ranking Overview - Chain

Kroger / Wall Triana Hwy

United States

475 / 1,229

61%

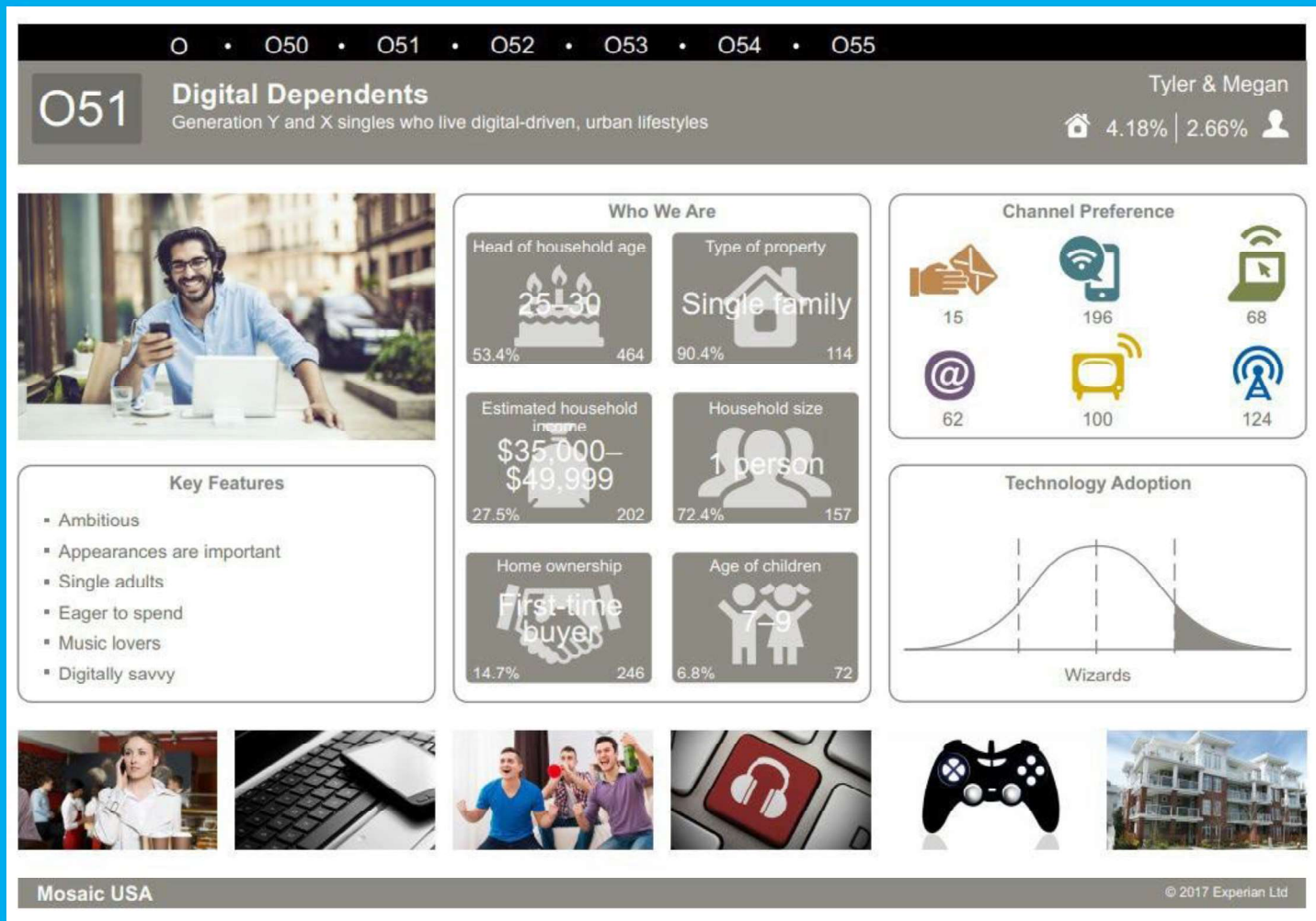
Alabama

4 / 10

65%

The Ranking Overview provides valuable insight into the performance of a particular store location.

Retailers today know the psychographic profiles of their target consumer. Through this data, we review segmentation groups and match the consumer profile of your community's shoppers to prospective retailers. This data can also be critical to retailers regarding the types of product and services offered once the location decision has been reached.



Dawsonville, GA - Immediate Trade Area

NextSite Community Overview

1990 - 2000 - 2010 Census, Q3 2020 Estimates & Q3 2025 Projections
Calculated using TAS Retrieval
Latitude: 34.421268 Longitude: -84.116943
Dec 22, 2020



Population

	Immediate Trade Area	2020 Population	2020 Households
2020 Population	52,675		
2025 Projected Population	60,661		
Population Growth %:	2.86%		
2020 Households	18,857		
2025 Projected Households	21,718		
Household Growth %:	2.86%		
Expected Value Indicator (EVI)	1.01		

Total Population by Age

	Immediate Trade Area	Average Age	Total Population by Age
Average Age	38.91		
0 - 4 Years	3,283	6.23%	
5 - 9 Years	3,345	6.35%	
10 - 14 Years	2,681	6.53%	
14 - 18 Years	2,793	5.30%	
18 - 22 Years	3,561	6.76%	
22 - 25 Years	2,224	4.22%	
25 - 35 Years	6,281	11.92%	
35 - 45 Years	6,030	11.45%	
45 - 55 Years	7,358	13.97%	
55 - 65 Years	6,937	13.17%	
65 - 75 Years	5,122	9.72%	
75 - 85 Years	2,582	4.90%	
85 +	478	0.91%	

Once the Retail Trade Areas are identified, we begin the process of performing detailed demographic research, GAP/Leakage analysis across all retail categories and household level consumer expenditure reviews. Our Custom Demographic Research includes: Historical, Current and Projected Demographics from multiple sources. One caveat – we have found most retailers/restaurant are more interested in the demand side of the trade area and not the supply side.

Demographic Trends

Calculated using TAS Retrieval
Latitude: 33.732780 Longitude: -84.920127
Jan 11, 2021



Villa Rica, GA

Population

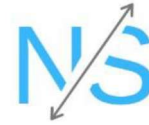
Regional Trade Area	Population
Q3 2020 Population (Est)	113,266
Q2 2020 Population (Est)	112,511
Q1 2020 Population (Est)	112,089
Q4 2019 Population (Est)	111,968
Q3 2019 Population (Est)	111,265
Q2 2019 Population (Est)	110,810
Q1 2019 Population (Est)	110,354
Q4 2018 Population (Est)	110,026
Q3 2018 Population (Est)	109,646

Households

Regional Trade Area	Households
Q3 2020 Households (Est)	39,993
Q2 2020 Households (Est)	39,722
Q1 2020 Households (Est)	39,575
Q4 2019 Households (Est)	39,531
Q3 2019 Households (Est)	39,282
Q2 2019 Households (Est)	39,121
Q1 2018 Households (Est)	38,962
Q4 2018 Households (Est)	38,849
Q3 2018 Households (Est)	38,711

Consumer Spending Patterns - Annual Expenditure

2020 Expenditure
Calculated using TAS Retrieval



Albertville, AL		Regional Trade Area
Food at Home	Total Food at home	\$248,208,856
	Total Cereals and bakery products	\$31,699,621
	Total Cereals and cereal products	\$9,771,033
	Flour	\$577,639
	Prepared flour mixes	\$739,931
	Ready-to-eat and cooked cereals	\$4,574,727
	Rice	\$1,698,544
	Pasta, cornmeal and other cereal products	\$2,180,239
	Total Bakery products	\$21,928,547
	Total Bread	\$6,432,085
	White bread	\$2,827,538
	Bread, other than white	\$3,604,583
	Total Cookies and crackers	\$5,499,022
	Cookies	\$3,098,851
	Crackers	\$2,400,223
Apparel and Services	Total Apparel and Services	\$84,819,745
	Total men and boys	\$19,381,615
	Total men, 16 and over	\$16,338,802
	Men's suits	\$862,757
	Men's sportcoats, tailored jackets	\$322,278
	Men's coats and jackets	\$934,586
	Men's underwear	\$1,780,327
	Men's hosiery	\$893,081
	Men's nightwear	\$79,816
	Men's accessories	\$1,409,561
	Men's active sportswear	\$1,236,470
	Men's shirts, sweaters, and vests	\$4,227,895
	Men's pants and shorts	\$4,416,265
	Men's uniforms	\$117,669
	Men's costumes	\$57,987
	Total boys, 2 to 15	\$3,042,836
	Boys' coats and jackets	\$233,081
	Boys' shirts and sweaters	\$578,981
	Boys' underwear	\$373,102
	Boys' nightwear	\$39,995
	Boys' hosiery	\$274,248
	Boys' accessories	\$203,638
	Boys' suits, sportcoats, vests	\$77,063
	Boys' pants and shorts	\$1,062,288
	Boys' uniforms	\$100,712
	Boys' active sportswear	\$39,098
	Boys' costumes	\$60,598
	Total women and girls	\$33,945,002
	Total women, 16 and over	\$30,151,288
	Women's coats and jackets	\$2,052,441
	Women's dresses	\$3,349,239
	Women's sportcoats, tailored jackets	\$151,281
	Women's shirts, tops, blouses, vests and sweaters	\$8,478,042
	Women's skirts	\$556,803
	Women's pants and shorts	\$4,850,690
	Women's active sportswear	\$2,195,564
	Women's sleepwear	\$861,740
	Women's undergarments	\$2,263,464
	Women's hosiery	\$1,526,924
	Women's suits	\$201,856

Retailers tend to locate in similar communities and/or trade areas. By identifying communities similar to your community from a demographic and business scope, we can combine the city peers with the Retail VOID Analysis to further understand the opportunities for our Opportunity Target list.

City	State	1 mi Population	1 mi Avg HH Inc	3 mi Population	3 mi Avg HH Inc	5 mi Population	5 mi Avg HH Inc	10 mi Population	10 mi Avg HH Inc	15 mi Population	15 mi Avg HH Inc	30 mi Population	30 mi HH Inc
Helena	AL	5,024	\$103,865	26,935	\$92,463	73,575	\$90,981	210,068	\$88,893	454,198	\$86,166	908,208	\$77,009
Madison	AL	8,812	\$113,684	49,065	\$110,755	85,976	\$102,928	228,925	\$82,083	379,206	\$83,488	655,196	\$77,009
Pelham	AL	3,058	\$74,583	25,096	\$84,026	72,192	\$93,686	242,573	\$102,070	520,639	\$90,692	933,906	\$77,009
Canton	GA	5,221	\$59,640	32,886	\$76,476	68,905	\$86,506	211,833	\$98,818	507,579	\$111,279	2,614,040	\$111,279
Evans	GA	3,392	\$130,989	38,499	\$112,586	95,887	\$103,386	246,378	\$83,817	394,943	\$73,525	595,863	\$77,009
Ridgeland	MS	8,579	\$66,428	45,911	\$82,047	88,397	\$91,590	228,733	\$85,089	386,871	\$77,709	507,587	\$77,009
Hendersonville	TN	5,327	\$88,316	48,461	\$88,269	91,230	\$92,283	297,041	\$83,410	577,581	\$78,667	1,421,892	\$83,410
Mount Juliet	TN	5,294	\$98,310	33,901	\$96,633	83,722	\$90,059	248,449	\$87,145	709,674	\$75,195	1,604,437	\$90,059

Retail VOID Analysis

Retail VOID Analysis is used to determine the distance from a market to the next nearest location of any retailer. This allows us to see which retailers have shown a propensity to located in markets with similar demographic profiles. When combined with Peer Analysis, VOID Analysis can make a compelling argument for a retailer or restaurant to locate in your community.

City	State	5 mi Population	5 mi Avg HH Inc	At Home	Kirkland's	HomeGoods	Jo-Ann Fabric and Craft Stores	Old Navy	The Men's Wearhouse	Sprouts Farmers Market	Th...
Spring Hill	TN	55,114	\$102,227	12	2	20	14	16	15	11	20
Tequesta	FL	82,672	\$127,807	11	22	1	11	16	8	4	2
Bonita Springs	FL	85,301	\$116,557	93	9	1	4	12	4	7	1
Madison	AL	85,663	\$102,823	9	4	5	5	4	4	3	10
Limestone Creek	FL	98,169	\$130,004	10	21	4	10	15	7	4	3
Land O' Lakes	FL	98,927	\$101,376	3	5	3	7	6	3	9	10
Oakland	FL	100,849	\$100,478	6	4	4	4	4	2	19	9
Fruit Cove	FL	101,235	\$113,279	10	6	7	10	10	6	11	3
Heathrow	FL	102,939	\$104,224	2	3	2	3	3	8	12	2

City	State	5 mi Population	5 mi Avg HH Inc	Ace Hardware	Harbor Freight Tools	Tractor Supply Co.	At Home	Publix Supermarkets	The Fresh Market	Mooyah	Culver's	Jason's Deli
Helena	AL	73,575	\$90,981	16	3	9	6	1	14	5	5	7
Madison	AL	85,976	\$102,928	1	7	3	9	1	10	83	1	4
Pelham	AL	72,192	\$93,686	12	1	10	5	2	10	5	5	5
Canton	GA	68,905	\$86,506	8	0	6	15	2	13	120	6	16
Evans	GA	95,887	\$103,386	1	7	5	7	2	7	136	6	6
Ridgeland	MS	88,397	\$91,590	3	1	13	2	157	2	133	201	2
Hendersonville	TN	91,230	\$92,283	6	5	3	10	0	21	21	2	11
Mount Juliet	TN	83,722	\$90,059	8	9	3	2	2	19	19	2	2

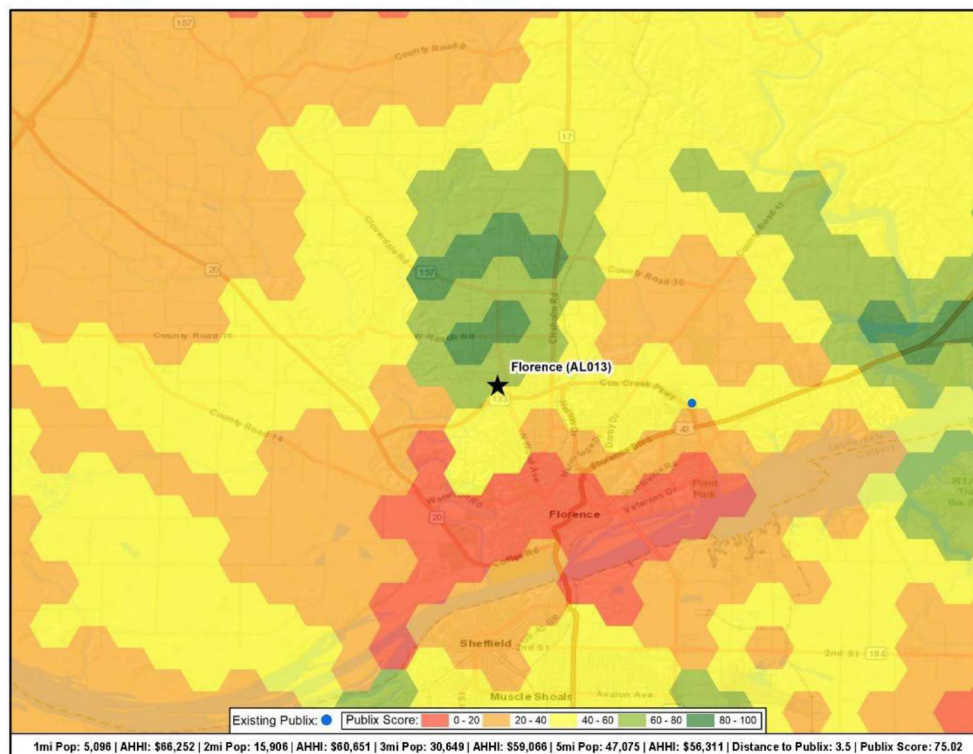
Site Identification Model

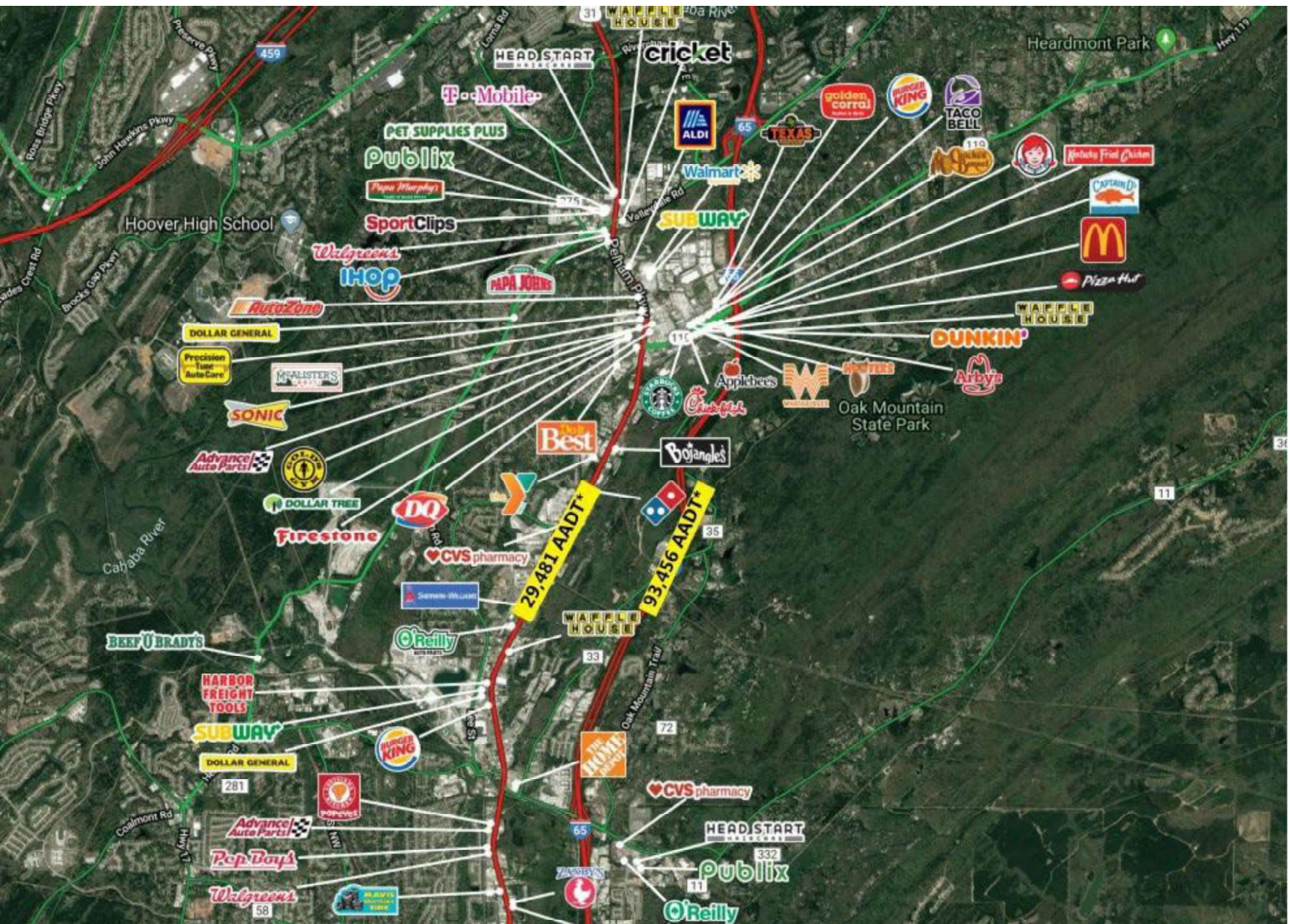
At NextSite our focus is on making the development process easier and more efficient. Our most recent tool has taken months to develop and we believe it is ready for implementation. Our team has developed a proprietary site identification model that uses a complex algorithm to estimate the suitability of a community for a specific retailer. Our model analyzes over 250 retail chains with more being added every day. This tool, based on proven statistical methods and back tested on recent site decisions by multiple concepts, allows us to quickly identify markets and sub-markets that match existing locations of the target retailer/restaurant. We believe this information will prove to be invaluable as we create new solutions to help developers navigate the most recent disruptions in the retail development sector.

NextSite's model begins by calculating the recurring characteristics of every open or coming soon location for a specific retailer/restaurant. These datapoints are then used to create a retailer profile that our algorithm uses to assess the viability of a potential market. The algorithm compares this profile to a set of over 5.1 million evenly distributed nodes throughout the country and gives each node a score based on its similarity to the average location of the retailer/restaurant we are examining. These scores provide NextSite and our developer contacts with valuable insight into the areas of a market or sub-market that present an opportunity for development.

The goal of our model is to look at the characteristics of a given area and determine the probability that this specific combination of characteristics do not represent an outlier when compared with the characteristics of all the open locations of a given retailer. For example, a location with a Publix Score of 90 means that if this location was added as a new Publix location, there is a 90% chance that it would not stand out as an outlier among all the other Publix locations. In other words, there is a 90% chance that Publix has approved similar sites to this location in the past. Because of this, there is the potential for exceptional sites to have a poor score if the characteristics of that area are above and beyond what the retailer typically expects. We've noticed this especially when looking at areas with extremely high average household incomes. Situations like this is where the expertise of NextSite's team come into play with our ability to recognize artificially low scores and see the opportunity despite what the raw numbers may say.

Florence, AL

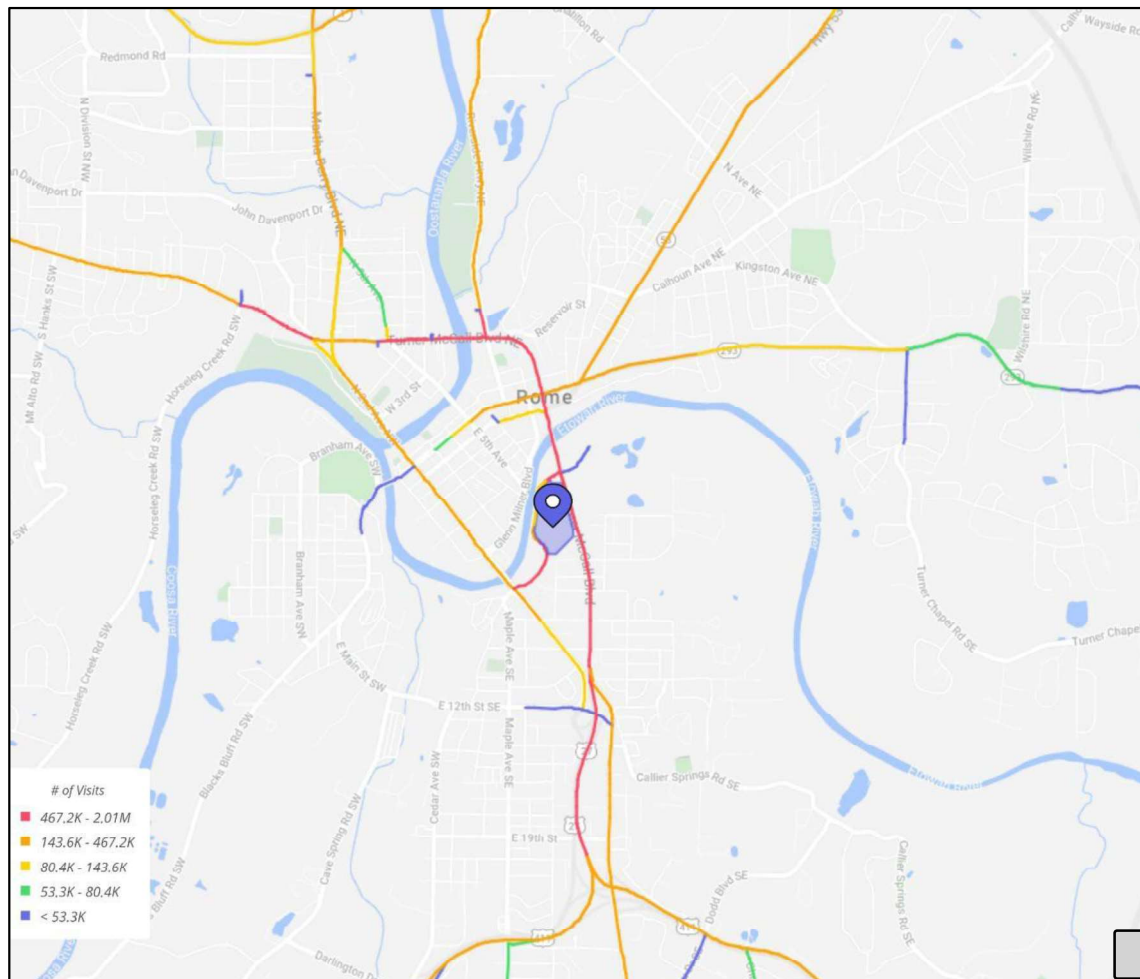
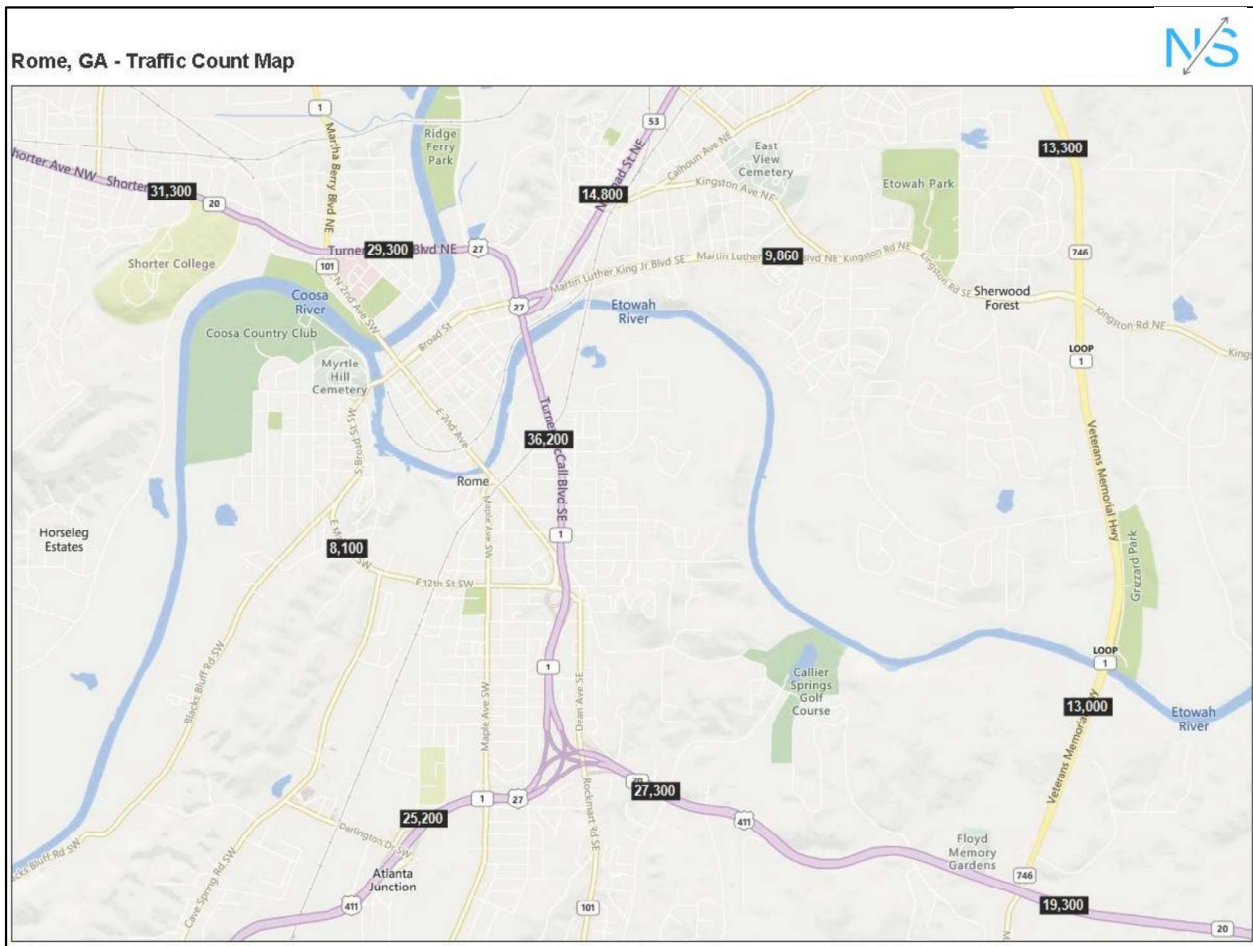




Understanding the location of current retailers in your community and the various retail trade corridors provides valuable insight into co-location opportunities, competitors and available sites for development/redevelopment. We extend this analysis to understand the retailer mix in competitor communities.

"NextSite has proven to be an invaluable team member on several high-profile projects that we have delivered over the years. The quality of data and analytics provided by NextSite has helped us ensure that these projects truly serve the communities in which they are located."

John Gunderson
President – Daniel Communities



NextSite develops marketing materials to market your community and site opportunities to retailers, developers and tenant reps.

Focus Properties

- Tiger Square**
36,000 Sq. Ft.
Berkshire Hathaway CRE
Berkshire Hathaway
- Pepperell Place & 30th St N**
27 Acres
Galaxy Partners, Inc.
H. Hart Cobb
- Parker Crossing**
16.43 Acres
The Shopping Center Group
Ray Jones
- Copp's Landing**
Lot 1 & 2 Capps Way
Fuller Realty
Edie Fuller
- Tiger Town**
Corner Lot Available
Merchants Retail Partners
Bill Leiner
- 3008 Frederick Road**
5+ Acres
The Brown Agency
Bill Brown

Retail Peers

City	State	5 Mile Population	5 Mile Average Household Income
Covington	GA	47,365	\$63,569
Griffin	GA	46,833	\$55,200
Clinton	MS	44,576	\$63,306
Carrollton	GA	44,230	\$66,870
Opelika	AL	43,152	\$64,956
Tupelo	MS	43,143	\$66,633
Columbia	TN	41,962	\$62,219
Lebanon	TN	40,910	\$71,089

OPELIKA, AL

Opelika is conveniently located in east central Alabama along the dynamic I-85 corridor between Atlanta and Montgomery and adjacent to the thriving Auburn University. Opelika presents unparalleled opportunities for business, commercial, retail and industrial development, as well as an exceptional quality of life. The Auburn-Opelika MSA is one of the fastest growing metropolitan areas in the nation.

29 Miles from Columbus, GA
62 Miles from Montgomery, AL
113 Miles from Birmingham, AL

Regional Trade Area Retail Demand

Category	Demand (\$ Million)
General Merchandise	\$483 Million
Supermarkets/ Grocery	\$435 Million
Health & Personal Care	\$233 Million
Full Service Restaurants	\$207 Million
Limited Service Restaurants	\$171 Million
Women's / Family Clothing	\$98 Million
Furniture/ Home Furnishings	\$66 Million
Shoe Stores	\$23 Million

Regional Trade Area

Population	256,787
Households	103,314
Average Age	37.73
Median HH Income	\$46,415
Average HH Income	\$64,933
Per Capita Income	\$26,359
Daytime Population	285,806

Drive Time

10-20-30 Min

Drive Time	Population	Avg HH Income
10 MIN	60,376	\$66,769
20 MIN	121,006	\$70,369
30 MIN	170,727	\$67,449

Radius

3-5-10 Mile

Radius	Population	Avg HH Income
3 Mile	23,528	\$60,459
5 Mile	37,801	\$63,344
10 Mile	106,590	\$70,337

NextSite
Andy Camp
VP of Business Development
and@nextsite.net
706.957.0696

Lon Hugueley
lhugueley@opelika-al.gov
334.705.5115

OPELIKA, ALABAMA






















Major Retail & Restaurants

NextSite

© 2019 NextSite. All rights reserved. NextSite is a registered trademark of NextSite, Inc. All other trademarks are the property of their respective owners.

Real Estate Analysis – Focus Property Identification

Understanding the real estate options within the market for development, redevelopment and higher and best use allows the NextSite team to position specific properties to retail prospects. NextSite and its partners will work with the city to catalog local commercial properties that may be suitable sites for development and/or redevelopment, including those sites that may present a higher and best use. This will include maps, aerials, and all pertinent contact and site-specific information relative to each site. Once we identify the development and redevelopment Focus Properties, we market these opportunities to Developers and Tenant Reps.

 <p>Shorter Ave Frontage 8.17 AC Sammy Rich 706-236-4400</p>	 <p>County Line Rd Development Site 20 Acres Ricky Robinson 256.337.4903</p>	 <p>Site Adj to Waffle House 4.02 AC Lee Rowell 770.318.6153</p>	 <p>Hampton Inn O 2.0 AC Mike Pri 256.279.0</p>
 <p>GA Hwy 53 Site (see former DG site) 3 AC Sammy Rich 706-236-4400</p>	 <p>Clift Farm Mixed-Use Development 345,000 SF Commercial 134,000 SF Office Martin Smith 205.259.2195</p>	 <p>Pad Site Adj to Bojangles 1.21 AC Brian Elrod 706.553.1000</p>	 <p>Morse Si 1.55 AC Mike Pri 256.279.0</p>
 <p>Calhoun Ave Site 4 AC Sammy Rich 706-236-4400</p>	 <p>County Line Road Sites 15 AC for Sale Scott Plummer 205.490.2829</p>	 <p>Hwy 11 & Hwy 138 Site 7.89 AC Brian Elrod 706.553.1000</p>	 <p>Copeland' 5+ AC Mike Pri 256.279.0</p>
 <p>West Rome Site 123.13 AC Sammy Rich 706-236-4400</p>	 <p>1884 Slaughter Road 10K SF for Lease Anusha Davis 256.536.8809</p>	 <p>1011 W Spring St Site 7.02 AC Nathan Purvis 404.819.2520</p>	 <p>King's Inn .70 AC Mike Pri 256.279.0</p>
 <p>South Rome Site .54 AC Sammy Rich 706-236-4400</p>	 <p>Village Shoppes of Madison 1,500 – 2,212 SF Suites Sophia Alcalay 561.414.4679</p>	 <p>Hwy 78 & Hwy 138 Site 35 AC Nathan Purvis 404.819.2520</p>	 <p>Chandler S .84 AC Mike Pri 256.279.0</p>
 <p>White Oak Lane Site 8.36 AC Sadie Krawczyk 770.266.5331</p>			

Rome, GA

Madison, AL

Monroe, GA

Albertville, AL

“Chuck Branch and the NextSite Team are always very helpful, responsive and informative. Anytime I’m entering a market search for a retailer, I reach out to Chuck to see what information he can provide on the market.”

Ray Jones
The Shopping Center Group

Retail Recruitment

The most important service we provide is proactively recruiting **developers and tenantreps** to position the identified Target Opportunity List of retailers/restaurants.

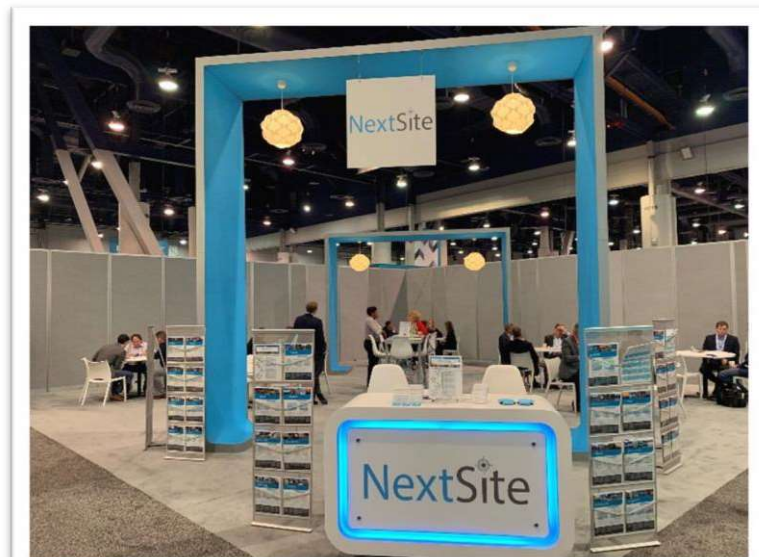
We identify retailers and developers looking to aggressively expand their market presence regionally and nationally. We understand the parameters set by retailers when reviewing potential new locations. We have a roster of developers who are looking to replicate previous developments in similar communities across the Southeast. NextSite meets with these retailers and developers in a variety of settings – office visits, site visits, ICSC and RetailLive and now, virtual meetings – to position opportunities in your community. While ICSC and RetailLive are important opportunities to engage in conversation, **retailers, tenant reps and developers have told us that post conference meetings and calls are the most productive use of their time, and their preferred way to discuss opportunities and share information.**





ICSC Red River Conference and Deal Making
 ICSC West Florida IDEX
 ICSC Carolinas Conference and Deal Making
 ICSC North Florida IDEX
 ICSC RECon
 ICSC Tennessee/Kentucky IDEX
 ICSC Ohio IDEX
 CenterBuild

ICSC Florida Conference and Deal Making
 Retail Live! – Austin
 Retail Live! - Orlando
 ICSC Southeast Conference and Deal Making
 ICSC Chicago Conference and Deal Making
 ICSC New York Deal Making
 Southern Lodging Summit
 NABHOOD





Our process begins with establishing your Basecamp Account and issuing our Getting Started document to the identified primary contact(s) in your community. Simultaneously we begin the research and market analysis. As we complete components of the process, we upload the research, analysis and strategy to your Basecamp Account. Basecamp is also used to upload custom research, updated research and updates on conferences, retail trends and recruitment updates.

A screenshot of a Basecamp project page for "Harpersfield-Geneva JEDD, OH" in Ohio. The page has a blue header with the project name and location. Below the header is a navigation bar with tabs: Overview, Messages, To-Dos, Calendar, Writeboards, Time, and Files. The "Overview" tab is selected. The main content area is titled "Project overview & activity" and shows a chronological list of activities. Activities are grouped by date: Friday, 29 May 2020 (Comment: Re: Taco Bell, Message: Taco Bell); Monday, 27 April 2020 (File: Geneva, OH - Retailer Peers.xlsx); Monday, 20 April 2020 (File: Stakeholder Questionnaire NextSite- Harpersfield OH (1).docx); Tuesday, 14 April 2020 (Files: Harpersfield Township, OH - Baseline - SPIRE Institute - Custom...cs.pdf, Harpersfield Township, OH - COVID-19 Impact - SPIRE Institute - ...cs.pdf, COVID-19 Impact Tracking.pdf); Friday, 27 March 2020 (Message: Spire Institute - Field Growth); Friday, 20 March 2020 (File: Harpersfield Township, OH - Traffic Count Map.pdf); Tuesday, 17 March 2020 (Files: Harpersfield Township, OH - SPIRE Institute - Customer Journey ...cs.pdf, Harpersfield Township, OH - Regional Trade Area - Site Map.pdf, Harpersfield Township, OH - Regional Trade Area - Segmentation.pdf, Harpersfield Township, OH - Regional Trade Area - Retail GAP & ...qe.pdf, Harpersfield Township, OH - Regional Trade Area - Demographic Trends.pdf, Harpersfield Township, OH - Regional Trade Area - Consumer Spen...ns.pdf, Harpersfield Township, OH - Regional Trade Area - Community Overview.pdf, Harpersfield Township, OH - 10 Minute Drive Time - Retail GAP &...qe.pdf).

Standard Engagement - \$15,000/Year

- Minimum 3-year agreement
- Radius, Drive Time and Custom Trade Area Analysis for Retail
- Updated research and analysis with on-demand reporting
- Customer Journey Analysis
- Retail Peer Analysis
- Retail GAP Analysis
- A pragmatic approach to creating a realistic retail and restaurant target list
- Retail Mapping and Aerials
- Retail Marketing Guide
- Representation at 10+ retail real estate conferences
- Connecting opportunities to retail and restaurant developers
- Connecting opportunities to retail and restaurant tenant representation
- Connecting opportunities to retail and restaurant real estate contacts
- Quarterly updates or more frequent as recruitment warrants
- Connecting other commercial development projects when appropriate

