

ADDENDUM NO. 1

August 21, 2020

**RE: Salem Water Users Association PWA
2019 System Improvements
Contract – 1 Reed Trail Tank
2.0 M Gallon Elevated Composite Tank
Pulaski County, Arkansas**

FROM: GarNat Engineering, LLC
3825 Mt Carmel Road
Bryant, Arkansas 72022

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated **April, 2020** as noted below. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of two (2) sheets and three (3) attachments consisting of seven (7) sheets.

GENERAL

Acknowledge receipt of this addendum by signing in the space provided below and returning this page to the Engineer by fax to (888) 900-3068 or by e-mail to garnatengineering@gmail.com.

Signature

Company Name

CHANGES TO DRAWINGS

- A. Sheet 2 – Site & Grading Plan
1. Delete sheet and replace with enclosed document.

- B. Sheet 5 – Tank Ground Floor Plan & Piping Details
 - 1. Delete sheet and replace with enclosed document.

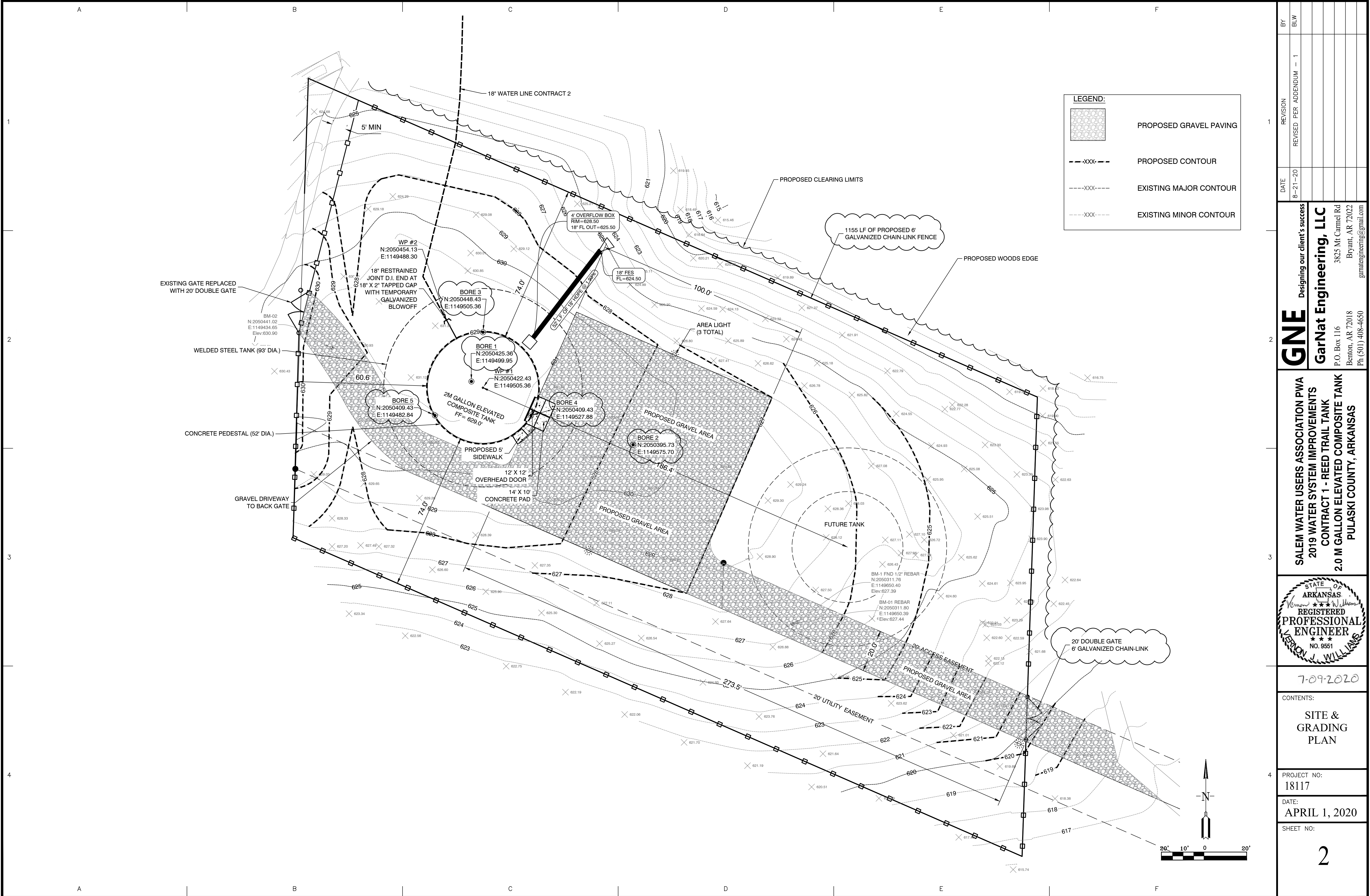
CHANGES TO BIDDING REQUIREMENTS

- C. Section 00200 – Information Available to Bidders
 - 1. Add Paragraph 9. Supplemental Geotechnical Information, Salem Water Tank, Salem, Arkansas
- D. Section 00300 – Bid Form – Unit Price
 - 1. Clarification: Allowance A1 for Telemetry System is sixty thousand dollars (\$60,000.00).

CHANGES TO SPECIFICATIONS

- E. Section 01025 – Measurement and Payment
 - 1. Delete paragraph 1.02.A and replace with the following:
BID ITEM 1 – 2,000,000 GALLON ELEVATED COMPOSITE TANK:
Payment for the Tank will be made by lump sum price bid for this item. The price shall be full compensation for all work required to provide a complete working water storage tank including construction of the tank, water piping, electrical work, site work, and every item of construction not specifically set out to be paid for under other items of the bid.
- F. Section 02640 – Valves and Hydrants
 - 1. Delete paragraph 2.07. Check Valve specified on Sheet 5 of Plans.
- G. Section 13100 – Composite Elevated Water Storage Tank
 - 1. Delete paragraph 3.02.A.6 and replace with the following:
The forming system for the pedestal wall shall be fully engineered and detailed with procedures to meet the increased demands of architectural concrete. The support wall shall be constructed with a jump form process using form segments prefabricated to match the wall curvature. Concrete pour height shall be a minimum of 6 ft. and a maximum of 12 ft. Form panels shall be designed for lateral pressures associated with full height plastic concrete head and eccentric loads resulting from the segmented wall pour procedure.

END OF ADDENDUM



BY		REVISION		DATE		8-21-20		REVISED PER ADDENDUM		1		BLW	
Designing our client's success													
GarNat Engineering, LLC													
P.O. Box 116													
3825 Mt Carmel Rd													
Benton, AR 72018													
Bryant, AR 72022													
garnatengineering@gmail.com													
Ph (501) 408-4650													

SALEM WATER USERS ASSOCIATION PWA	
2019 WATER SYSTEM IMPROVEMENTS	
CONTRACT 1 - REED TRAIL TANK	
2.0 M GALLON ELEVATED COMPOSITE TANK	
PULASKI COUNTY, ARKANSAS	

STATE OF ARKANSAS	
VERNON J. WILLIAMS	
REGISTERED PROFESSIONAL ENGINEER	
NO. 9551	
7-09-2020	

CONTENTS:	
SITE & GRADING PLAN	

PROJECT NO:	
18117	
DATE:	
APRIL 1, 2020	
SHEET NO:	
2	

N:2050454.13
E:1149468.30

A

B

C

D

E

F

1

2

3

4

BY

BLW

REVISION

REVISED PER ADDENDUM - 1

DATE

8-21-20

Designing our client's success

GNE

GarNat Engineering, LLC

382.5 Mt Carmel Rd
Bryant, AR 72022
garnatengineering@gmail.com
Ph (501) 408-4650

SALEM WATER USERS ASSOCIATION PWA
2019 WATER SYSTEM IMPROVEMENTS
CONTRACT 1 - REED TRAIL TANK
2.0 M GALLON ELEVATED COMPOSITE TANK
PULASKI COUNTY, ARKANSAS



04-23-2020

CONTENTS:

TANK GROUND
FLOOR PLAN &
PIPING DETAILS

PROJECT NO:
18117

DATE:
APRIL 1, 2020

SHEET NO:

5

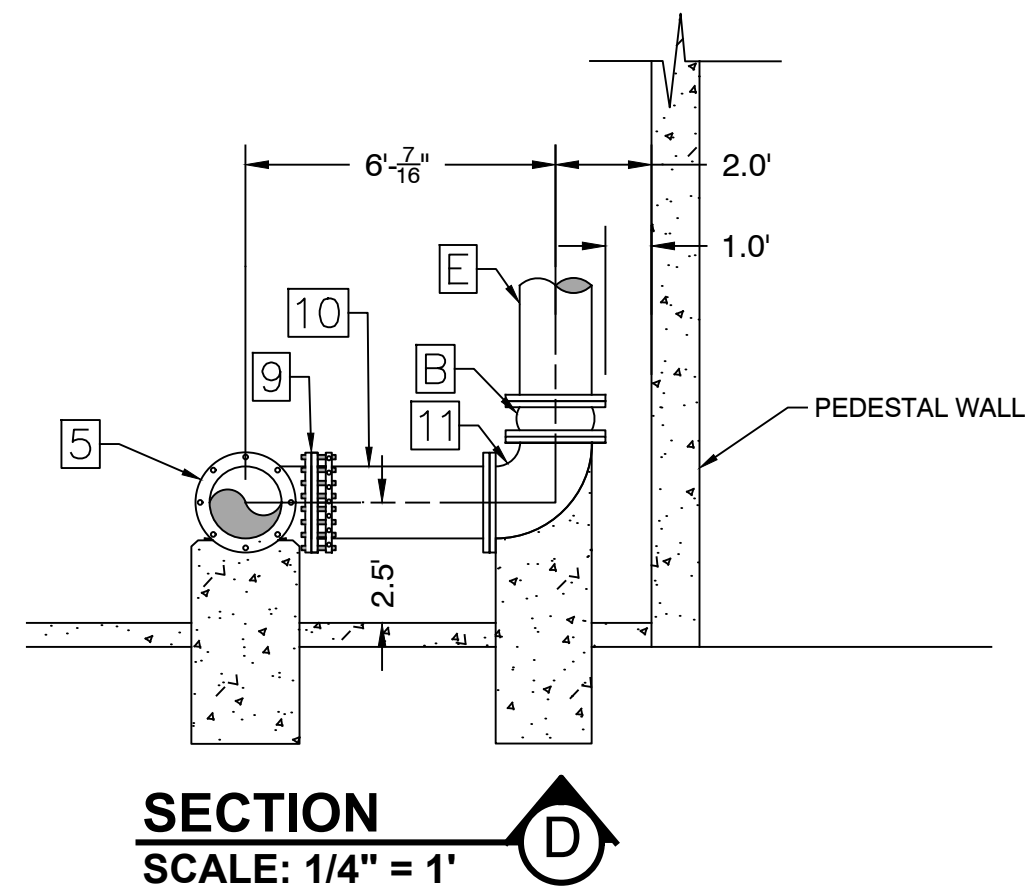
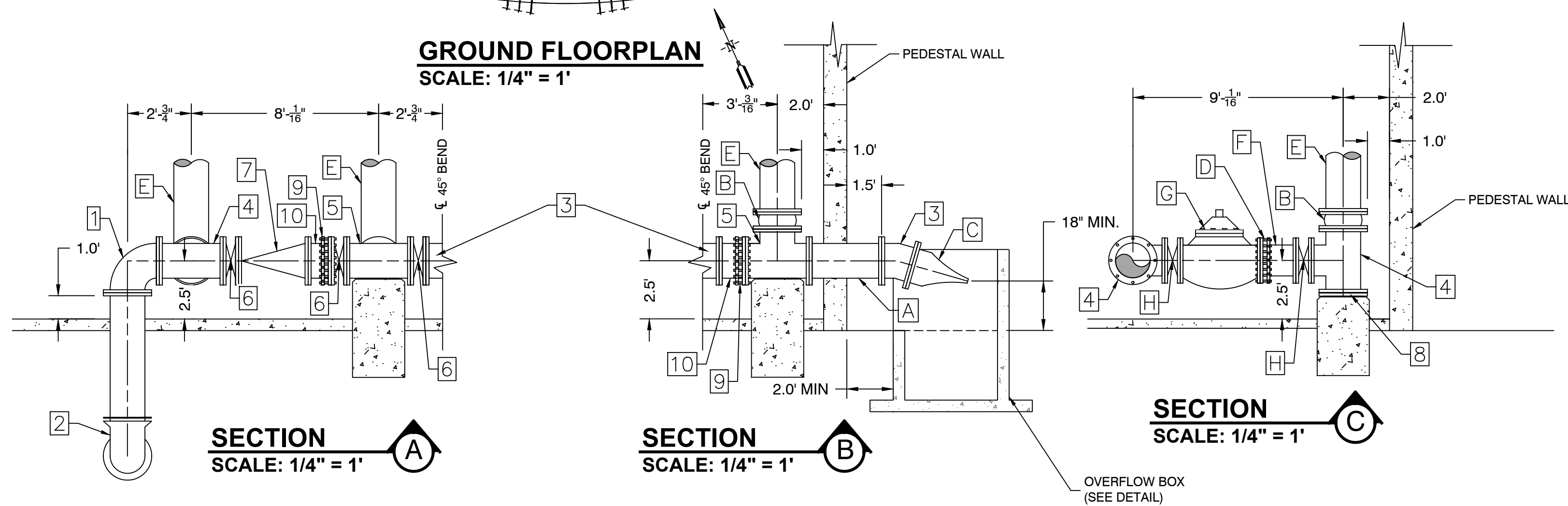
KEYED NOTES

1	18" FL D.I. 90° BEND TAPPED WITH HOSE BIB
2	18" MJ D.I. 90° BEND W/ MEGALUGS
3	18" FL D.I. 45° BEND
4	18" X 16" FL D.I. TEE
5	18" FL D.I. TEE
6	18" FL BUTTERFLY VALVE WITH HAND WHEEL (DEZURIK D10386 OR EQUAL) (SEE NOTE 2)
7	18" FL CHECK VALVE (VALMATIC SWING-FLEX SERIES 500 OR EQUAL)
8	18" BLIND FLANGE
9	18" FLANGE COUPLING ADAPTOR (EBAA MEGAFLANGE SERIES 2100 OR EQUAL)
10	18" D.I. SPOOL (FL X PE)
11	18" FL D.I. 90° BEND
A	18" FL D.I. PIPE
B	18" EXPANSION JOINT (MAXI-JOINT 1101HP OR EQUAL)
C	18" FL DUCKBILL CHECK VALVE (TIDEFLEX SERIES 35 OR EQUAL) (SEE NOTE 3)
D	16" FLANGE COUPLING ADAPTOR (EBAA MEGAFLANGE SERIES 2100 OR EQUAL)
E	18" S.S. PIPE
F	16" D.I. SPOOL (FL X PE)
G	16" FL ALTITUDE VALVE (CLA VAL 210-01 OR EQUAL)
H	16" FL BUTTERFLY VALVE WITH HAND WHEEL (DEZURIK D10386 OR EQUAL) (SEE NOTE 2)
I	8" D.I. PIPE
J	8" DUCKBILL BAND CLAMP CHECK VALVE (TIDEFLEX SERIES TF-2 OR EQUAL) (SEE NOTE 3)
K	15" FLOOR DRAIN (ZURN Z1737 OR EQUAL)

NOTES:

- ALL PIPING SHALL BE RESTRAINED JOINT. ABOVE SLAB DUCTILE IRON SHALL HAVE FLANGED JOINTS. BELOW GRADE DUCTILE IRON SHALL BE MECHANICAL JOINT WITH MEGALUG OR PUSH ON JOINT WITH RESTRAINED JOINT GASKET.
- VAL-MATIC SERIES 2000 IS AN EQUIVALENT TO DEZURIK D10386.
- CLA-VAL SERIES RF-DBF IS AN EQUIVALENT TO TIDEFLEX SERIES 35. CLA-VAL SERIES RF-DBO IS AN EQUIVALENT TO TIDEFLEX SERIES TF-2.

GROUND FLOORPLAN SCALE: 1/4" = 1'





ANDERSON ENGINEERING CONSULTANTS, INC.

10205 ROCKWOOD ROAD – LITTLE ROCK, ARKANSAS 72204

PHONE (501) 455-4545 FAX (501) 455-4552

August 20, 2020

Mr. Vernon J. Williams, P.E.
GarNat Engineering, LLC
406 West South Street, Suite B
Benton, Arkansas 72015

Job No. 15096

Email: garnatengineering@gmail.com

Re: Supplemental Geotechnical Information
Salem Water Tank
Salem, Arkansas

Dear Mr. Williams:

This letter is provided to present the results of additional borings performed for the above referenced project. Our firm performed a geotechnical investigation for the project, the report of which was dated September 2, 2016. At your request, three additional borings were performed to verify soil conditions within the footprint of the proposed tank. The Plan of Borings, Plate 1, shows the location of the original borings (Borings B1 and B2), in addition to the recent borings. The boring logs are provided on Plates 2 through 5.

The recent borings encountered very similar soils, essentially silty to shaley clay that transitioned to clayey shale and ultimately weathered shale. However, the depth to weathered shale varied across the footprint of the tank. The depth to shale was determined to range from ± 9.5 feet to ± 28.0 feet (Boring B1). Based on these conditions, the recommendations contained in our report remain valid and no modification is considered necessary. A potential bidder has contacted this firm inquiring about an increased bearing capacity for deeper bearing foundations. A maximum allowable bearing capacity of 3000 psf is considered appropriate to limit potential differential settlements, regardless of bearing depth up to 10.0 feet. Increasing the allowable bearing capacity and limiting differential settlements would require foundations to bear on shale bedrock and/or significant ground improvement techniques.

The information contained herein should be considered supplemental to that contained in our original report. The recommendations contained therein should be considered valid for use in design. It has been a pleasure to provide this information to you. Please do not hesitate to contact us with any questions.



Very truly yours,

ANDERSON ENGINEERING CONSULTANTS, INC.

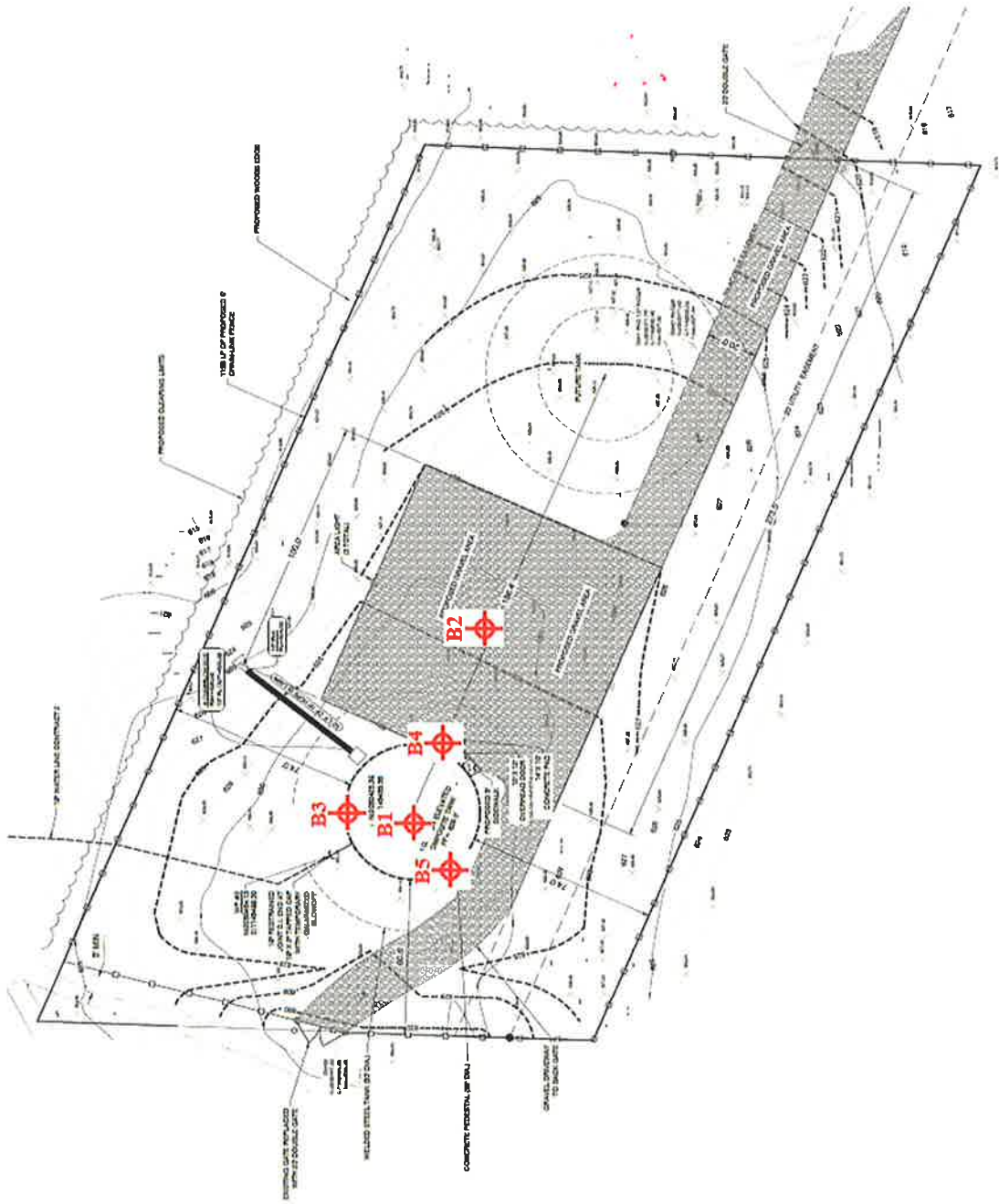
Stuart M. Scheiderer, R.E.P., P.E.
Senior Geotechnical Engineer



SMS/llb
15096.Ltr-Sup

Enclosures: Plates 1 through 4

NOT DRAWN TO SCALE.



PLAN OF BORINGS

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Geotechnical Engineering – Environmental Assessments – Quality Control of Construction Materials

LOG OF BORING

PROJECT: SALEM WATER TANK
SALEM, ARKANSAS
FOR: GARNAT ENGINEERS

BORING NO: B3

LOCATION: SEE PLAN OF BORINGS

DATE: 08/13/20

JOB NO: 15096

BORING TYPE: AUGER W/SPT

DRILLER: BRADBURY
SIMCO 2400

GEOTECHNICIAN: BRADBURY

GROUND ELEVATION: NOT FURNISHED

Depth In Feet	Sample Type & No	N-Blows Per Foot	Graphic Symbol	LEGEND		
				S Shelby Tube	NV Diamond Core	P Penetration Test
				Core	Standard Penetration	J - Jar
				Static Water Table	Hydrostatic Water Table	No Recovery
VISUAL DESCRIPTION OF STRATUM						
0	P1	18		VERY STIFF MOIST REDDISH BROWN SHALEY CLAY (CL) PP = 2.00 KSF		
	P2	22		CONTINUES SHALEY (CL) PP = 2.25 KSF		
5	P3	33		MEDIUM DENSE TO DENSE MOIST BROWN AND GRAY CLAYEY SHALE		
	P4	20		CONTINUES CLAYEY SHALE		
10	P5	24		CONTINUES CLAYEY SHALE		
15	P6	27		CONTINUES CLAYEY SHALE		
20	P7	25		CONTINUES CLAYEY SHALE		
25	P8	50/0"		HARD WEATHERED GRAY SHALE		
				AUGUER REFUSAL AT 28.5 FEET ON SHALE		
30				BOTTOM OF HOLE AT 28.5 FEET. BORING REMAINED OPEN. NO WATER WAS ENCOUNTERED IN THIS BORING.		

GROUND ELEVATION: NOT FURNISHED

PLATE 3

ANDERSON ENGINEERING CONSULTANTS, INC.

10205 ROCKWOOD ROAD, LITTLE ROCK, ARKANSAS 72204

LOG OF BORING

PROJECT: SALEM WATER TANK
SALEM, ARKANSAS
FOR: GARNAT ENGINEERS

BORING NO: B5**LOCATION:** SEE PLAN OF BORINGS**DATE:** 08/13/20**JOB NO:** 15096**BORING TYPE:** AUGER W/SPT

DRILLER: BRADBURY
SIMCO 2400

GEOTECHNICIAN: BRADBURY**GROUND ELEVATION:** NOT FURNISHED

Depth In Feet	Sample Type & No	N-Blows Per Foot	Graphic Symbol	LEGEND		
				S Shelby Tube	NV Diamond Core	P Penetration Test
				Core	Standard Penetration	J - Jar
				Static Water Table	Hydrostatic Water Table	No Recovery
VISUAL DESCRIPTION OF STRATUM						
0	P1	20		VERY STIFF MOIST REDDISH BROWN SHALEY CLAY (CL) PP = 2.00 KSF		
	P2	23		CONTINUES SHALEY (CL) PP = 2.50 KSF		
5	P3	23		MEDIUM STIFF MOIST BROWN AND GRAY CLAYEY SHALE		
	P4	22		CONTINUES CLAYEY SHALE		
10	P5	50/6"		SOFT TO HARD WEATHERED GRAY SHALE		
15	P6	50/5"		CONTINUES SHALE		
20	P7	31		CONTINUES SHALE		
25	P8	50/0"		CONTINUES SHALE AUGUER REFUSAL AT 26.0 FEET ON SHALE		
				BOTTOM OF HOLE AT 26.0 FEET. BORING REMAINED OPEN. NO WATER WAS ENCOUNTERED IN THIS BORING.		
30						