ADDENDUM NO. 3

STRUCTURAL REPAIRS FOR AMERSON WTP

MACON WATER AUTHORITY
MACON, GEORGIA

ADDITIONAL INFORMATION DOCUMENTS

The following document:

- Questions and Responses
- Geotechnical Report

is being provided with this addendum for informational purposes only. The document listed above is not, and will not, be considered as part of the Contract Documents.

PLANS

No modifications to the plans are included in this addendum.

SPECIFICATIONS

Specification Section 00020, first Paragraph

Replace "… 2:00 P.M., local time, Tuesday, April 14, 2026,…"
with
"… 2:00 P.M., local time, Tuesday, April 21, 2026,…"

Bidder Must Acknowledge Receipt of this Addendum on Bid Form

April 10, 2026
Barge Design Solutions, Inc.
1201 Front Ave, Suite F
Columbus, Georgia 31901
706-321-4583

QUESTIONS AND RESPONSES

STRUCTURAL REPAIRS FOR AMERSON WTP

MACON WATER AUTHORITY
MACON, GEORGIA

QUESTIONS:

Pre-bid Meeting:

Question: If the contractor wishes to use and equivalent product for crack injection, should that product be submitted for consideration?

Response: Yes, contractors may submit equivalent products for the Engineer's consideration.

Question: Are water and power accessible for the contractor?

Response: Yes, water and power are accessible for the contractor to utilize.

Question: For the exterior concrete slabs, are there issues with them sinking or any trip hazards? Would polyurethane injection be considered for this instead of grouting?

Response: MWA staff stated that they do have issues with sinking/trip hazards. Alternative technologies and products will be considered at the Engineer's discretion. Alternative product/technologies should be submitted as a formal question for the Engineer's review.

Question: Will the piping for the dehumidifier be going through the poured concrete wall or the CMU wall?

Response: The Engineer is not hard set on where the piping leaves the building, but obviously it needs to be out of the way and it must conform to the manufacturer's recommendations for size, routing, slope, etc.

Question: Will the Geotechnical report be provided?

Response: The Geotechnical report is included in this addendum (Addendum #3).

Received Questions:

Question: Instead of pressure grouting, we can do the slab remediation using a dual component, structural, hydrophobic, polyurethane injections. Pressure grouting uses a non-hydrophobic material, which means it will wash out over time. It is also a heavier material compared to polyurethane. Please let me know if you need any further information in considering structural polyurethane for this case.

Response: Barge takes no exception to polyurethane injection as an alternate to pressure grouting for this application. Contractor to submit product data for review/approval.

Question: For the crack injections, I wanted to submit an alternative product to the Sika 215, Alchatek's (Formerly Alchemy-Spetec) AG200. Alchatek Spetec AG200 is submitted for consideration as an alternate to Sika Inject-215 for acrylic injection resin applications. I have attached the TDS and NSF certificate. I have copied a message from the manufactuer.

"Spetec AG200 is a low-viscosity, three-component acrylic injection resin that cures to a flexible, water-swellable gel and is intended for curtain injection, crack and void sealing, and injection hose applications in below-grade waterproofing work. Published Alchatek product data identifies AG200 for filling and waterproofing gravel nests, waterproofing underground concrete and masonry structures, waterproofing cracks in rock formations, injection of re-injectable hoses, and below-grade expansion joints. The current Alchatek technical data sheet lists a mixed viscosity of 6 cP and NSF/ANSI/CAN 61 certification.

Published Sika product literature describes Sika Inject-215 as a low-viscosity, elastic polyacrylic injection resin with adjustable reaction time, very good penetration, and use in injection hoses, water-bearing cracks and voids, and curtain or membrane injections in damp or water-saturated ground. (Sika USA)

Based on the published technical information, Spetec AG200 is an appropriate alternate for this use category where the design intent is a flexible, low-viscosity acrylic injection grout for below-grade waterproofing and seepage control. Installation shall be in accordance with the manufacturer’s current written instructions and remain subject to engineer approval based on project-specific conditions, exposure requirements, and submittal review."

Response: The attached documentation is for AP LIFT 430 FAST. This does not appear to comply with NSF 61. Alternative products (single component) may be submitted for review/approval, but they must conform with NSF 61. Product data for Alchatek Spetec AG200 was not attached, but may be submitted for review. Please keep in mind that products used for this application must comply with NSF 61. Requests for product substitutions are to comply with the Project Specifications.

Question: For the helicals, I couldn't find any information on the spacing or recommended depth. I believe there was a geotechnical report mentioned.

Response: Spacing and recommended depth of helical anchors is to be determined by the specialty foundation contractor. Signed and sealed drawings and calculations are to be submitted for review/approval. Geotechnical report is attached to this addendum (Addendum #3).

Barge Design Solutions, Inc.
1201 Front Ave, Suite F
Columbus, Georgia 31901
706-321-4590

514 Hillcrest Industrial Blvd.
Macon, GA 31204
P (478) 757-1606
F (478) 757-1608
Terracon.com

February 28, 2025

Barge Design Solutions, Inc.
615 3rd Avenue South, Suite 700
Nashville, TN 37210

Attn: Ms. Zinah Rosenberg

Re: Report of Slab and Subgrade Evaluation
Macon Water Treatment Plant – Filter Building
Macon, Georgia
Terracon Project No. HN251004

Dear Ms. Rosenberg:

Terracon Consultants, Inc. is pleased to present this report of subgrade and slab evaluation for the above site. Our findings and analysis can be found below.

We greatly appreciate the opportunity to provide these services to you. If you have any questions, or if we can be of further assistance, please do not hesitate to call.

Sincerely,
Terracon Consultants, Inc.

Brad Thigpen, P.E.
Project Engineer

Jerry B. Williams
Construction Manager

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SLAB AND SUBGRADE EVALUATION

Terracon representative Brad Thigpen was on site to perform a slab and subgrade evaluation within the existing filtration pits and at selected areas around the foundation. Concrete cores were performed on the slab at the bottom of the pits at locations B-1 and B-2. Borings B-3 through B-6 were performed outside of the building at the west and east ends. Terracon measured the thickness of the existing slab and subbase in each pit borings and determined the type of subgrade at each boring location. Each boring location was probed below the slab and the subbase material to determine the firmness of the subgrade. A Dynamic Cone Penetrometer (DCP) was used at selected intervals and core locations to evaluate the subgrade materials. At the completion of the exploration, the core areas were backfilled with non-shrink grout and the auger areas were backfilled with cutting and sand.

VISUAL OBSERVATIONS

Terracon performed a visual inspection of the site as part of the scope of work. There were no obvious cracks in the floor of the filter pit. There was some minor cracking of the wall; however, none of the cracks extended down into the slab. The alcove at the west end of the building appeared to be experiencing significant settlement. The brick veneer was observed to be separating from the building, and the slab is cracked and separating from the main building. There is a void underneath the slab where water can infiltrate the subgrade soils. The columns also appear to have shifted due to settlement. The east side of the building is exhibiting some minor holes forming alongside the foundation.

FIELD RESULTS

The subgrade at each core location inside the filter pit was found to be firm. The fill soils at the exterior of the building were relatively loose to the depth explored of 5 feet. A summary of the findings can be found in the table below.

Boring Number	Slab Thickness (in)	Dynamic Cone Penetrometer (Blows Per Increment) Feet Below Slab	Subgrade Soil Classification
B-1	25″-Concrete Slab	39″ – 25+ bpi	25″ to 39″ – Fill - #57 Stone 39″ to 41″ – Fill – brown silty sand (SM) (refusal @ 41″ due to very dense soils)
B-2	27″-Concrete Slab	N/A	27″ to 45″ – Fill - #57 Stone (refusal @ 45″ due to cave-in)
B-3	N/A	6″ – 4 bpi 1.5′ – 14 bpi 3′ – 5 bpi 5′ – 6 bpi	0′ to 1.5′ – Fill – red/tan clayey sand (SC) 1.5 to 3′ – Fill – brown silty sand (SM) 3′ to 5′ – Fill – brown/tan sandy silt (ML) Soils wet throughout
B-4	N/A	1′ – 6 bpi 3′ – 4 bpi 5′ – 4 bpi	0′ to 1.5′ – Fill – red/tan clayey sand (SC) 1.5 to 3′ – Fill – brown silty sand (SM) 3′ to 5′ – Fill – brown/tan sandy silt (ML) Soils wet throughout

Boring Number	Slab Thickness (in)	Dynamic Cone Penetrometer (Blows Per Increment) Feet Below Slab	Subgrade Soil Classification
B-5	N/A	1′ – 3 bpi 3′ – 2 bpi 5′ – 2 bpi	0′ to 1.5′ – Fill – red sandy clay (CL) 1.5 to 3′ – Fill – brown silty sand (SM) 3′ to 5′ – Fill – brown/tan sandy silt (ML) Soils wet throughout
B-6	N/A	1′ – 2 bpi 3′ – 6 bpi 5′ – 6 bpi	0′ to 1.5′ – Fill – Red clayey sand (SC) 1.5 to 3′ – Fill – brown silty sand (SM) 3′ to 5′ – Fill – brown/tan sandy silt (ML) Soils wet throughout

CONCLUSION AND RECOMMENDATIONS

Based on the field testing and observations, it appears that the settlement exhibited on the west side of the building, and the pitting exhibited on the east side are due to loose/wet fill soils. A combination of improper compaction of the fill soils and improper drainage around the building are the likely cause of the settlement. We recommend the alcove area at the west end of the building be reinforced with pressure grout and repaired, reinforced with helical piles to support the slab and columns, or be removed and undercut the poor soils and backfill and recompact to 95% of the maximum dry density of the Standard Proctor, with 98% compaction in the upper 1-foot. The filter pit area subgrade did not reveal any voids below the slab. The slab thickness and subbase and subgrade specs appeared to be installed per the plans.

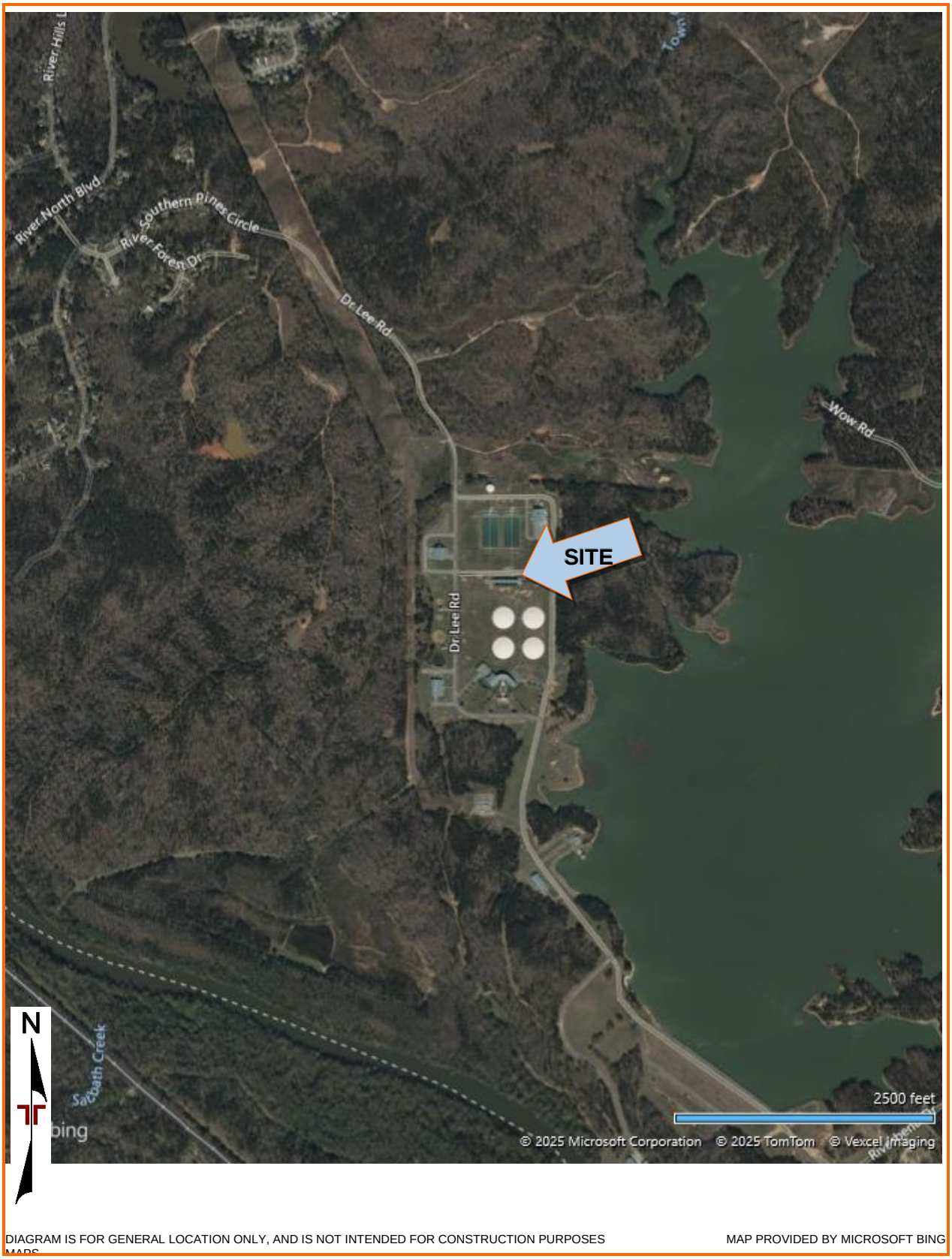

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

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