



ADDENDUM #2
ISSUE DATE: Friday, August 7, 2020

This Addendum shall become and form a part of:

Invitation for BID # IFB 2020-00159 Roosevelt Hall Renovations

TO ALL VENDORS

This Addendum, including all articles and corrections listed below, shall become a part of the original Invitation for Bid ("IFB") package and shall be taken into account in preparing your proposal response.

The above-numbered solicitation is amended as set forth below. Vendors must acknowledge receipt of this addendum by signing and completing **Exhibit G: Addenda Acknowledgement Form**. **The Addenda Acknowledgement Form must be submitted with the Firm's response to this IFB.** *Failure to include the Form in the proposal response may subject your firm to disqualification.*

In order to ensure that all firms are given an equal opportunity to submit a competitive response, the following are responses to questions and/or requests for clarification concerning **IFB 2020-0159**:

NOTE:




- 1. Attached you will find the answers to the first phase of questions that were submitted on 8/4/2020. AH acknowledges receipt of questions 2, 3 and 5 however responses will be provided in the next addendum scheduled to be issued on August 17th.**
- 2. Reminder: Final questions will be due on 8/12/2020 by COB.**

Deadline to Send FINAL Questions to ifb@atlantahousing.org (Phase 2)	8/12/2020 COB
Responses to Questions Due	8/17/2020 COB

- 3. Attached you will find the Roosevelt Hall Renovation Wages GA 134 Mod1**
- 4. Attached you will find the listing of participants at the site visit on 8/4/2020**
- 5. Please find attached EXHIBIT G - Addenda Acknowledge Form. The Form must be included in the Firm's response to the IFB.**

ADDENDUM #2
IFB 2020-0159 Roosevelt Hall Renovation

Addenda to this IFB will only be issued and posted on AH's website at <https://www.atlantahousing.org/doing-business-with-ah/>. Addenda **will not** be mailed to potential Respondents. It is the responsibility of the Respondent to monitor AH's website for any addenda issued. Each Respondent must acknowledge all addenda issued by completing and signing **EXHIBIT G - Addenda Acknowledge Form**. *The Form must be included in the Firm's response to the IFB.*

DocuSigned by:
 

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Albert Murillo
Senior Vice President, Contracts & Procurement Department

**MOODY•NOLAN
1201 W PEACHTREE STREET SUITE 750
ATLANTA, GA 30309**

ADDENDUM DATE: August 7, 2020

ADDENDUM NO. 2

TO THE PLANS AND SPECIFICATIONS FOR:

**ISSUED FOR CONSTRUCTION 05-08-2020
ATLANTA HOUSING ROOSEVELT HALL**

TO ALL BIDDERS:

Acknowledge receipt of this Addendum with your Proposal.

This Addendum supplements and amends the original plans and specifications and shall be taken into account in preparing proposals and shall become a part of the Contract Documents.

I: 08/04/2020 BIDDER RFI QUESTIONS AND RESPONSES

- 1. Question:** Davis Bacon. Starting on page 81 of specifications: The Specs have a Davis Bacon Wage sheet. The Construction Type is listed as Residential. Are Davis Bacon Wages required? If yes, are the wage rates to be type Residential.
Response: No, use type Building GA 134 Mod1.
- 2. Question:** Guard Service. Spec 015000: 1.15C indicates Guard Service is at the Contractors option. 1.15A states to provide security. Please confirm if the GC is to include Security Guard services in their proposal for the project.
Response: Owner to clarify.
- 3. Question:** Taxes. Page 7 of general contract and page 16 of specifications Section 4.B: Please confirm that "taxes" will be deleted from contract sum requirements.
Response: Owner to clarify.
- 4. Question:** Contracting Officer. Page 3 of general contract and page 12 of specifications: Who will be the contracting officer for AHA?
Response: Eugene E. Jones Jr.
- 5. Question:** Schedule. Page 8 of general contract and page 17 of specifications Section 6.A.iv: Bidder is requesting that this subsection be deleted.
Response: Owner to clarify.

- 6. Question:** Construction Schedule. Page 2 of general contract and page 11 of specifications: Please confirm 7 day a week work schedule, should be 5 day a week work schedule.
Response: Per Page 2 of the General Contract, Construction schedule should be based on critical path methodologies using a seven (7) day work week. Refer to Specifications Section 01 10 00-02 for Permissible Hours of Construction restrictions.
- 7. Question:** Existing Structure. Drawing Note on Sheet S100 states: "Design of new brace frames is based on there being existing basement wall at perimeter of building." Do bidders need to carry an allowance if walls do not exist?
Response: There is not a wall at this location per existing drawing information. It is assumed there is a wall at this location based on the footing elevation. Both the footing elevation and presence of a wall were not able to be confirmed during design. If the wall does not exist and the footings are at 990', then the design team should be alerted so modifications to the brace design can be made. This would likely include another 'x' brace in the basement level at 4/S521.
- 8. Question:** Design Intent. Fixtures and sinks shown on Page 14 of kick off presentation do not match what is specified on the structural, plumbing, or plumbing specifications. Do bidders need to follow structural and plumbing plans?
Response: Additional clarification to be provided.
- 9. Question:** Hose Bibbs. Sheet P002: Are hose bibbs required on the outside of the building?
Response: Refer to Plumbing drawings.
- 10. Question:** Permeable Pavers. C3.00 - HS5 and HS6: Civil drawings do not show permeable pavers - Are they required?
Response: Provide permeable pavers as indicated on Landscape series drawings. Civil drawings to be updated. See Revised Sheet C3.00
- 11. Question:** Asphalt Pavers. Standard Detail No. TR-G_PV009 is shown in the upper left corner of Sheet C11.00. Is this detail to be used for the asphalt parking lot?
Response: Delete Detail No. TR-G_PV009. Detail TR-B_DR005 to be used for pavement for entire site, unless otherwise noted. See revised Sheet C11.00.
- 12. Question:** Compactor. Sheets P010 and C11.06 detail 703. Coordination compactor is missing hose bibb and sanitary line.
Response: Sanitary line has been added and revised plans submitted to Fulton County Board of Health for dumpster approval. Hose bibb has been added and coordinated with plumbing engineer. See revised drawings sheets C4.00, P100, P101 & P010.
- 13. Question:** Elevator Pit. Sheet 5/S301. Per S101 elevator slab is at 995' and the Level 1 slab is at 1004.4'. This is a difference of 9.4'. Please confirm design.
Response: See attached revised Sheet S101 for clarification. The elevator pit basis of design is 5'. The elevations have been clarified.

- 14. Question:** Existing Footings. Sheets S100 and 2/S521. Are all footings around the perimeter up the basement wall at 990' elevation (2/S521) also as indicated on S004? What is the elevation of existing foundations?
Response: Top of footings seem to be indicated as 990' from existing drawings. T/ftg should be field verified.
- 15. Question:** Existing Footings. On sheet S100, sheet is the elevation of the footing next to the interior helical piers?
Response: Top of footings seem to be indicated as 990' from existing drawings. T/ftg should be field verified.
- 16. Question:** Sump Pumps. Sheet P100 note says "Replace existing Sump Pump in kind." What does "in kind" mean with regards to sump pumps?
Response: Assume 50 gpm pumps picking up floor drains in basement. Pumps are not expected to be used for water infiltration
- 17. Question:** Polished Concrete Walls. Detail B/HS-12. Please provide detail for polished walls per specification 03 30 00 form work has been specified as Class A and no finish provided.
Response: Rubbed Finish. Intention images have been included with response for further clarification. See attachment 01 issued with this addendum.
- 18. Question:** Exterior Concrete. Sheet S001. Please confirm psi of exterior slabs to match specification 32 13 13.
Response: Structural specification takes precedence. Match Specification as directed (4000 PSI @ 28 days).
- 19. Question:** Design Intent. Please confirm that bidders are to use hardscape and civil drawings and not what is shown on Page 8 of kick off presentation.
Response: Confirmed. Design has been adjusted since kick off presentation graphic. AHA has been privy to all adjustments.
- 20. Question:** Concrete Retaining Walls. Sheets S301 and HS12: Please confirm that HJR is to use details A and B on HS-12 for site retaining walls.
Response: Confirmed. Reference details A & B on HS-12 for site retaining walls.
- 21. Question:** Light Poles. Sheet HS-7. Who is to provide salvaged light poles?
Response: Light Poles currently exist on site. They are to be salvaged during demolition and relocated in locations shown on plan.
- 22. Question:** Drawing Scale. Sheet C4.00 and C4.10. Graphic scale in title block is not correct.
Response: Graphic scale in title block will be corrected.
- 23. Question:** Concrete Retaining Walls. Detail A/HS-12. Wall thickness is not provided on plan – please provide.
Response: 1' thickness, typ. Refer to HS-3 (layout plan) for all wall thickness dimensions.

- 24. Question:** Specifications Section 32 13 13. There are two sets of specifications. Which one is correct?
Response: Use Specifications Section 32 13 13 Concrete Paving attached as part of this Addendum.
- 25. Question:** Specifications Section 32 13 13. Please confirm that section 3.8 Special finishes is deleted and finishes noted on HS-17 are to be followed.
Response: Confirmed, follow HS-17.
- 26. Question:** Allowance: Are bidders to carry and allowance for repairs to the utilities?
Response: No.
- 27. Question:** Allowance: Are bidders to carry an allowance for repairs/ replacement of the storefront that remains?
Response: An allowance will be considered. Further clarification to be provided.
- 28. Question:** Flow Test. Sheet C1.00. When were the flow test for hydrant 4460 and 1034 performed?
Response: Refer to Flow Test Data Schedule on Sheet P001.
- 29. Question:** Granite Curbs. Sheet C2.00. Are bidders to provide an allowance to replace granite curbs if unable to reset?
Response: No.
- 30. Question:** Construction Easement. Sheet C2.00. Has AHA received construction easement from CAU to use drive along property line?
Response: AH to confirm whether there has been progress on this front.
- 31. Question:** Water line to pavilion. Sheet P010 TP2. Can the water line be placed in the tree protection area?
Response: Water line rerouted. See attached revised sheet P010.
- 32. Question:** Hardscapes. For Site Layout Plan A/ HS-3, please provide cut section of the transition between the walkway and steps.
Response: Detail to be subsequently provided. Intention Image attached for further clarification for bid. See attachment 01 issued with this addendum.
- 33. Question:** Telecom. Televisions. Are bidders to provide TV's?
Response: No.
- 34. Question:** Landscaping Edges are unclear. Sheet HS-17.
Response: The linework shown is just the border of the landscape material and spacing between that and the adjacent landscape material within a greater landscape bed.
- 35. Question:** Solid Surface. A701 and A851. Please provide quartz and solid surfaces specifications for countertops and window sills.
Response: Refer to Specifications Section 06 40 00.

II GENERAL CLARIFICATIONS:

This Addendum includes Roosevelt Hall Environmental Work Plan, dated August 3, 2020. **SEE ATTACHMENT 02 ISSUED WITH THIS ADDENDUM.**

III: SPECIFICATION REVISIONS

The following specification sections have been revised and are to be replaced in the Project Manual. **SEE ATTACHMENT 03 ISSUED WITH THIS ADDENDUM.**

32 13 13 Concrete Paving

IV. DRAWINGS REVISIONS

The following drawing sheets have been revised in response to bidder questions and regulatory agency comments received. **SEE ATTACHMENT 04 ISSUED WITH THIS ADDENDUM.**

A6.01 VERTICAL CIRCULATION – See attached Sketch SK01/A601
C0.01 COVER
C3.00 SITE PLAN
C4.00 GRADING AND UTILITY PLAN
C11.00 CONSTRUCTION DETAILS
S101 LEVEL 01 FRAMING PLAN
P010 SITE PLAN
P100 LEVEL 00 – FLOOR PLAN – PLUMBING
P101 LEVEL 01 – FLOOR PLAN – PLUMBING
E010 SITE PLAN

ATTACHMENT 01
Landscape Design Intent Images

ADDENDUM NO. 2 – August 7, 2020
ATTACHMENT 01

Design Intent Image 01 – Polished Concrete Walls (RFI 017)



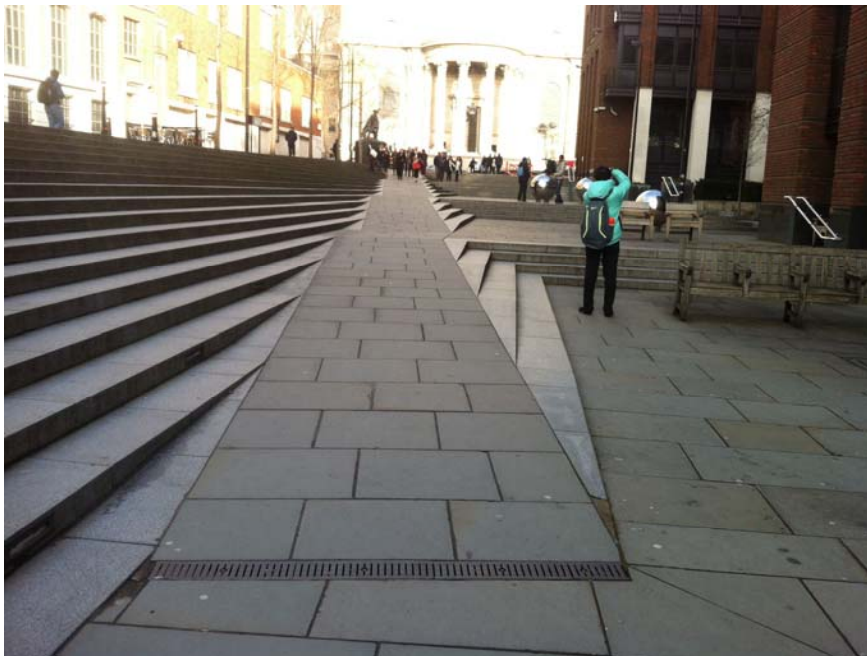
Design Intent Image 02 - Polished Concrete Walls (RFI 017)



Design Intent Image 03: Ramp and Stair (RFI 032)



Design Intent Image 04: Ramp and Stair (RFI 032)



ATTACHMENT 02
Environmental Work Plan



August 3, 2020

Ms. Linda Nunnelly
Moody Nolan
1201 West Peachtree Street, Suite 750
Atlanta, Georgia 30309

**RE: Asbestos and Hazardous Materials Abatement Work Plan
Roosevelt Hall
688 Atlanta Student Movement (fka Fair Street SW)
Atlanta, Georgia**

GLE Project No.: 20000-22736r1

Dear Ms. Nunnelly:

GLE Associates, Inc. (GLE) has prepared the attached Work Plan for the asbestos and hazardous materials abatement project associated with the renovations of Roosevelt Hall, located in Atlanta, Georgia.

GLE appreciates the opportunity to work with you on this project. Should you have questions regarding the Work Plan, please do not hesitate to contact our office.

Sincerely,
GLE Associates, Inc.

Jeremy Jordan
Senior Project Manager

Michael Collins, CIH, CSP, CIEC
Principal Certified Industrial Hygienist

JEJ/MBC/jl

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GLE Associates, Inc.

**ASBESTOS AND HAZARDOUS MATERIALS
ABATEMENT WORK PLAN**

**Roosevelt Hall
688 Atlanta Student Movement (fka Fair Street SW)
Atlanta, GA 30314**

GLE Project No.: 20000-22736r1

Prepared for:

**Ms. Linda Nunnelly
Moody Nolan
1201 West Peachtree Street, Suite 750
Atlanta, Georgia 30309**

August 2020

Prepared by:



**1100 Spring Street NW, Suite 820
Atlanta, Georgia 30309
404-373-3844 • Fax 404-373-3927**

WORK PLAN

(To be used at a minimum unless more stringent regulations are in effect)

1.0 PROJECT LOCATION

Roosevelt Hall
688 Atlanta Student Movement
Atlanta, Georgia 30314

2.0 PROPERTY DESCRIPTION

Roosevelt Hall is a facility that was previously used as an administration building for the former University Homes public housing development, and has recently been vacant. It consists is a two-story structure with a basement level and crawlspace. The facility is currently owned by Atlanta Housing.

3.0 SCOPE OF WORK

3.1 General

- A. The Project consists of the proper removal and disposal of the following asbestos-containing materials to facilitate the planned renovations.
 - 1. Approximately 2,880 square feet (SF) of brown adhesive dots associated with the 2nd floor Large Activity Room ceiling (Room 209);
 - 2. Approximately 1,410 SF of roof flashing;
 - 3. Approximately 280 SF of brown nine-inch by nine-inch floor tile with black mastic beneath the 2nd floor stage;
- B. The Contractor shall submit a cost effective project schedule with the bid submittal to be approved by the Owner. Work hours outside those submitted, may, at the Owner's discretion, be subject to reimbursement by the Contractor to cover the expense of the on-site Consultant and associated analytical fees. The Contractor will be notified when the Notification and abatement activities should be scheduled to begin following selection.
- C. The Project consists of the proper removal and disposal of the following hazardous materials to facilitate the planned renovation.
 - 1. Approximately 270 ballasts throughout the facility.

2. Approximately 796 fluorescent light bulbs throughout the facility.
 3. Approximately two HVAC units (one on the 2nd floor and one on the rooftop) associated with the facility with potential Freon/refrigerant-containing equipment.
 4. Approximately 22 EXIT signs with batteries throughout the facility.
 5. Approximately nine fire extinguishers throughout the facility.
 6. Approximately two elevators, three generators, and nine motorized rolling doors with oil filled equipment associated with the facility.
- D. **The Contractor shall be responsible for providing power to effectively operate on site equipment, including air sampling equipment provided by the Client's on site Consultant.**
- E. **The Contractor shall coordinate water supply for the duration of the project.**
- F. The Contractor shall provide temporary restrooms for onsite personnel.
- G. Anticipated working hours shall be Monday through Friday, from 7:00 a.m. until 7:00 p.m.
- H. All asbestos waste shall be disposed of at a landfill/disposal facility that is approved to handle asbestos waste. All asbestos abatement and related construction activities are to be performed in accordance with applicable federal, state, and local regulations, or GLE's specifications, whichever are more stringent. It is the sole responsibility of the Contractor to be familiar with these regulations and requirements and to provide all required permits and notifications.
- I. All hazardous waste shall be disposed of at a landfill/disposal facility that is approved to handle the hazardous waste. All hazardous waste abatement and related construction activities are to be performed in accordance with applicable federal, state, and local regulations, or GLE's specifications, whichever are more stringent. It is the sole responsibility of the Contractor to be familiar with these regulations and requirements and to provide all required permits and notifications.

- J. **The Contractor shall field verify the conditions for this project and is responsible for verifying quantities and locations of all work to be performed as outlined in this Work Plan. Failure to do so will not relieve the Contractor of his/her obligation to furnish all materials and labor necessary to carry out the provisions of this Contract. Contractors bid shall be based on his/her own determination of quantities.**

The quantities provided in the corresponding asbestos survey report and within this work plan are general estimates. The quantities provided reflect a combination of field verification of material locations and previous survey experience of similar structures. Actual field verification was limited during the survey as a result of accessibility. The quantities provided do not relieve the Contractor from verifying the actual quantities present.

- K. Owner: The Housing Authority of the City of Atlanta, Georgia
- L. Owner's Representative: The Housing Authority of the City of Atlanta, Georgia, Mr. Earl Rollins, Project Manager, Construction and Facilities Management
- M. Owner's Asbestos Consultant: The entity described as the Licensed Asbestos Consultant (Consultant) for the Asbestos Abatement of the Roosevelt Hall, 688 Atlanta Student Movement, Atlanta, Georgia 30314.

Contact Mr. Jeremy Jordan; Phone (404) 819-1265;
e-mail address jjordan@gleassociates.com.

3.2 Schedule

- A. The Contractor shall submit a cost effective project schedule with the bid submittal to be approved by the Owner. Contractor shall adhere to the submitted schedule for the duration of the project.
- B. Miscellaneous
The Contractor shall maintain Safety Data Sheets (SDS) on-site for all equipment and materials, as appropriate. Solvents with a flash point of less than 140 degrees Fahrenheit will not be permitted on this project.

3.3 Site Specific-Work Areas

- A. At least one properly licensed asbestos abatement supervisor shall be on the job site and in immediate contact with those under supervision during all periods of asbestos abatement activity. The abatement supervisor shall require that operations at the asbestos materials job site cease whenever hazardous or unlawful situations are detected, so as to affect a remedy.
- B. All personnel entering these work areas shall wear, at a minimum, half-face respirators with the appropriate filters during non-friable removal activities, and PAPR respiratory protection with appropriate filters during any friable material removal activities.
- C. Appropriate signs are to be posted about the perimeter of the work area while work is in progress and until final clearance has been achieved.
- D. Only licensed persons, responding emergency personnel (i.e. police, fire, EMS), specialists required for assistance as determined by GLE, governmental inspectors or properly trained and authorized Owner's Representatives may enter the regulated area.

4.0 ASBESTOS ABATEMENT PROCEDURES

4.1 Conventional Removal

These methods are designated for removal of asbestos-containing brown ceiling adhesive dots and brown nine-inch by nine-inch floor tile with black mastic.

- A. Preparation
 - 1. Locate and isolate all electrical and mechanical systems within and adjacent to the work area. Verify with Owner that all non-essential electrical and mechanical equipment has been de-energized.
 - 2. Shut down and lock out all non-essential air handling systems supplying air to, from or through work area.
 - 3. Warning signs shall be displayed at all entrances and approaches to the regulated area. Warning signs shall comply with the requirements of OSHA 29 CFR 1926.1101 (k) (1) (ii). The contractor is responsible for ensuring that all building occupants and non-English speaking employees are able to comprehend the warning signs. When necessary the contractor

will display signs in foreign languages, pictographs, and graphics. Signs such as these will be in addition to warning signs in English.

4. Seal with plastic sheeting and tape all penetrations to work area, including, but not limited to, **pipe penetrations, ducts, grills, diffusers**, etc. Adequately seal and waterproof all electrical lines, junction boxes, and control wiring that will remain active and live.
5. Construct critical barriers to demarcate the regulated area. Critical barriers shall be constructed in manner that will permit them to retain their integrity throughout the project, and to prevent the migration of asbestos dust from the regulated area. The regulated area will include the entire building.
6. Construct lockable, worker and equipment/disposal decontamination units in accordance with EPA and OSHA guidelines and regulations. A three-stage decontamination unit shall be present at the entrance to each work area. Provide both hot and cold water for personnel shower. Trap and filter all wastewater using a progressive stage filter system.
7. Place work area under negative air pressure utilizing HEPA filtration systems. Maintain negative air pressure in work area continuously from the start of asbestos removal until successful completion of final clearance air testing. The exhaust of all negative air machines shall be discharged to the outside of the building. Maintain a minimum of 0.02 inches of water negative air pressure and four complete air changes per hour of the work area. When determining the number of negative air units, assume the actual efficiency of the machine is 80 percent of the rated capacity. The Contractor shall supply properly functioning, calibrated manometer for each work area, plus an additional manometer in the event of operational failure of a manometer in use. Manometers shall be equipped to produce a continuous reading strip chart recording and shall remain in operation at all times regulated area is under negative air pressure.
8. Extend the polyethylene wall barrier from the floor to four-feet in height along all walls where asbestos removal activities will occur.
9. Assure that all penetrations in the deck and walls observed are immediately sealed.

10. If the negative air pressure differential indicates a reduction in pressure below the required level, then stop activities that disturb ACM, investigate cause of pressure drop, and implement corrective procedures to re-establish proper pressure differential.
11. In addition to the above requirements, two spare HEPA filtration air movement machines will be kept for each work area for use in the event of equipment failure, filter changes, and other maintenance.
12. Provide temporary power, lighting, and heating/cooling (when necessary) to work area. Install ground fault interrupters on all temporary circuits.
13. Prior to the start of any asbestos abatement activity a contractor's project logbook will be established. This logbook will serve as a vehicle for maintaining all the records associated with the project. The logbook will be used to record accidents, unusual events or occurrences (such as failure of the negative air system or containment barriers) personnel and area air sampling results, notes concerning any deviation from standard work practices, daily sign-in/sign-out of employees and authorized visitors, and a day-by-day account of the work progress. The logbook will also record emergency telephone numbers inside the front cover. The logbook will be hard bound and shall be signed each day by the resident Consultant and the project supervisor.
14. Notify Consultant for observation and approval of work area prior to beginning removal. No removal work shall begin before receiving written approval from the Owner's representative.

B. Asbestos Removal, Clean-up and Clearance Testing

1. Remove and dispose of all asbestos-containing materials (ACM) and/or materials determined to be asbestos contaminated in accordance with all applicable OSHA regulations.
2. Spray ACM until saturated with amended water using an airless sprayer. Apply water throughout removal process to maintain wet condition.

3. Do not permit ACM to fall more than 15-feet.
4. Continuously bag all ACM debris. Do not allow ACM to accumulate or to dry out. All asbestos materials shall be adequately wet before being placed into bags. Twist the neck of the bags, bend bag at twist, and seal with wraps of duct tape the loop created (goose-necking).
5. Clean exterior of waste bags and place at load out station for final surface decontamination prior to removal from work area.
6. All ACM debris shall be double bagged in properly labeled bags and disposed of in an appropriate landfill. For asbestos waste to be stored at the site, a steel, fully enclosed, lockable storage unit shall be supplied and paid for by the Contractor. Posting of the storage unit shall be in compliance with applicable federal, state and local regulations. The storage unit shall be locked at all times except during actual loading activities.
7. Wet clean and HEPA vacuum all surfaces until work area is free of all visible debris.
8. Clean and remove from work area all equipment (if not required for further use), materials, impermeable containers, etc.
9. Notify Consultant for visual observation and approval to determine completeness.
10. Notify Consultant to perform Final Clearance Observation and Air Testing via PCM.
11. **Re-clean at Contractor's expense work areas that do not comply with standard of cleaning for final clearance. Re-clean and Re-sample at Contractor's expense, work areas which do not meet specified final clearance air levels.**
12. Upon notification of successful completion of final clearance air testing, dismantle and remove remaining plastic sheeting, decontamination chamber, and any other materials not previously removed.
13. Notify Consultant for work area observation and approval to determine completeness of “tear down/demobilization” activities.

4.2 Roofing Materials Removal

Roofing material removal procedures for the proper removal and disposal of asbestos-containing roof flashing

A. Preparation

1. Establish a regulated area by installing a rope barrier at a minimum of 10-feet from the edge of the work area, including on the ground level adjacent to the ACM to be removed.
2. Warning signs will be posted along the perimeter at five foot intervals.
3. Seal all penetrations or openings to the building faces, 10-feet from the perimeter of the Work Area with plastic sheeting and duct tape.
4. Remove all movable items from within the regulated area and store them outside the area.
5. Construct worker and equipment disposal wash station adjacent to work area.
6. All personnel entering these work areas shall wear, at a minimum, half-face negative pressure respirators with the appropriate filters and shall be double-suited.
7. Install drop cloths inside the regulated area consisting of one layer of six-mil thick plastic sheeting.
8. Notify Consultant for observation and approval of work area prior to beginning removal. No removal work shall begin before receiving written approval from the Owner's representative.

B. Asbestos Removal, Clean-up and Clearance Testing

1. The surface of the asbestos-containing materials (ACM) must be kept wet at all times during removal. Spray the material with amended water. Wet the materials sufficiently to saturate them to the substrate without excessive dripping.
2. Cut ACM with hand tools. Do not use power tools unless approved by local Air Pollution Control Authority.

3. Carefully remove the ACM. Immediately wet dry areas that become exposed as the material is removed.
4. Discontinue ACM removal and cleaning operations and immediately secure Work Area, and notify Consultant and Owner should any of the following conditions develop:
 - Wind velocities or gusts in Work Area exceed 15 miles per hour.
5. Upon removal, immediately place the ACM in six-mil thick plastic bags. Bags must be sealed so as to provide an air tight seal. All bags or items wrapped in plastic sheeting must be labeled in accordance with OSHA and EPA requirements.
6. Wet clean and HEPA vacuum all surfaces within the regulated area.
7. Notify GLE representative for visual observation and approval to determine completeness.
8. Upon GLE representative's approval remove warning signs and barricades.

5.0 AIR MONITORING

- A. Personnel air monitoring as required by OSHA is the responsibility of the Contractor.
- B. Baseline air samples for analysis by Phase Contrast Microscopy (PCM) will be collected under normal building conditions prior to the disturbance of ACM. GLE will collect baseline samples prior to the Contractor beginning work.
- C. GLE will collect ambient area samples from both inside and outside the negative pressure enclosure (as a minimum, at the negative air unit discharge, entrance to the decontamination unit and at the entrance to the bag-out area) during removal activities. GLE will collect additional samples inside and outside the work area, as necessary during the performance of abatement activities, to evaluate airborne particulate levels. These work in progress samples will be analyzed by PCM, unless TEM analysis is requested by the Owner.
- D. Final clearance air sampling will be performed by Phase Contrast Microscopy (PCM) in general accordance with NIOSH Method 7400 with clearance criteria of all samples below 0.01 fibers per cubic centimeter.

- E. Collection of the final air clearance samples may be performed using aggressive methods.
- F. Additional sampling, as the result of failure of final air clearance testing, will be conducted by the Consultant at the sole expense of the Contractor.

6.0 HAZARDOUS MATERIAL REMOVAL

These methods and guidelines are for removal of hazardous materials identified in Section 3.1.C of this Work Plan.

- A. PCB-Containing Light Ballasts
 - 1. PCB containing light ballasts will be removed intact and placed into protective containers for transport to an approved disposal facility.
- B. Fluorescent and Mercury-Containing Light Bulbs
 - 1. Fluorescent and Mercury-containing light bulbs will be removed intact and placed into protective containers for transport to an approved disposal facility. Broken fluorescent and Mercury-containing light bulb debris will be cleaned by trained personnel donning proper PPE. The broken fluorescent and Mercury-containing light bulb debris will be placed into protective containers for transport to an approved disposal facility.
- C. Freon/Refrigerant-Containing HVAC units
 - 1. Freon/refrigerant will be removed by an EPA certified technician for the handling of refrigerant.
 - 2. Freon/refrigerant will be removed and captured in accordance to section 608 of the clean air act and final regulations, 58 FR 28660, 59 FR 55912 and 68 FR 43786. The Freon/refrigerant will then be prepared for transport to an approved disposal facility.
- D. EXIT Sign Batteries
 - 1. Batteries will be removed intact and transported to an approved disposal facility.
- E. Fire Extinguishers
 - 1. Fire extinguishers will be removed and transported to an approved disposal facility.

F. Oil Filled Equipment

1. Oil will be removed from the equipment and placed into protective disposal containers and transported to an approved disposal facility.

7.0 CONTRACTOR SUBMITTALS

A. Prior to mobilization, the Contractor shall furnish GLE with the following information:

1. The Contractor's asbestos abatement license for the State of Georgia.
2. The notification (NESHAP) and other applicable variances and permits submitted to applicable governing authorities. Submittal of such information is the responsibility of the Contractor.
3. SDS information for all proposed chemicals to be utilized for the project.
4. Training documentation demonstrating that on-site personnel involved with Asbestos Materials abatement have been properly trained.

B. Upon mobilization, the Contractor shall furnish GLE with the following information for each worker for review. Upon arrival of new workers, the following information will be required prior to allowing workers on site:

1. Worker training certifications and/or licenses. A minimum of one properly certified asbestos and HAZWOPER trained supervisor, employed directly by the Contractor, shall be on site at all times during abatement activities.
2. Recent physicals with a physician certifying personnel wearing respirators have been cleared to do so.
3. Respirator fit-test documentation.

C. Following scheduled asbestos abatement and hazardous material removal activities, the following items shall be submitted to GLE. Without these items, the final payment request will not be processed.

1. Any revisions to the notification
2. Waste Manifests
3. Daily Logs
4. Work Area Sign In/Out Logs
5. Supervisor/Worker Training Certificates
6. Fit-Test Documentation

7. Physician Medical Opinions
8. Results of OSHA Compliance Monitoring

END OF WORK PLAN



August 3, 2020

Ms. Linda Nunnelly
Moody Nolan
1201 West Peachtree Street, Suite 750
Atlanta, Georgia 30309

**RE: Asbestos and Hazardous Materials Abatement Work Plan
Roosevelt Hall
688 Atlanta Student Movement (fka Fair Street SW)
Atlanta, Georgia**

GLE Project No.: 20000-22736r1

Dear Ms. Nunnelly:

GLE Associates, Inc. (GLE) has prepared the attached Work Plan for the asbestos and hazardous materials abatement project associated with the renovations of Roosevelt Hall, located in Atlanta, Georgia.

GLE appreciates the opportunity to work with you on this project. Should you have questions regarding the Work Plan, please do not hesitate to contact our office.

Sincerely,
GLE Associates, Inc.

Jeremy Jordan
Senior Project Manager

Michael Collins, CIH, CSP, CIEC
Principal Certified Industrial Hygienist

JEJ/MBC/jl

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GLE Associates, Inc.

**ASBESTOS AND HAZARDOUS MATERIALS
ABATEMENT WORK PLAN**

**Roosevelt Hall
688 Atlanta Student Movement (fka Fair Street SW)
Atlanta, GA 30314**

GLE Project No.: 20000-22736r1

Prepared for:

**Ms. Linda Nunnelly
Moody Nolan
1201 West Peachtree Street, Suite 750
Atlanta, Georgia 30309**

August 2020

Prepared by:



**1100 Spring Street NW, Suite 820
Atlanta, Georgia 30309
404-373-3844 • Fax 404-373-3927**

WORK PLAN

(To be used at a minimum unless more stringent regulations are in effect)

1.0 PROJECT LOCATION

Roosevelt Hall
688 Atlanta Student Movement
Atlanta, Georgia 30314

2.0 PROPERTY DESCRIPTION

Roosevelt Hall is a facility that was previously used as an administration building for the former University Homes public housing development, and has recently been vacant. It consists is a two-story structure with a basement level and crawlspace. The facility is currently owned by Atlanta Housing.

3.0 SCOPE OF WORK

3.1 General

- A. The Project consists of the proper removal and disposal of the following asbestos-containing materials to facilitate the planned renovations.
 - 1. Approximately 2,880 square feet (SF) of brown adhesive dots associated with the 2nd floor Large Activity Room ceiling (Room 209);
 - 2. Approximately 1,410 SF of roof flashing;
 - 3. Approximately 280 SF of brown nine-inch by nine-inch floor tile with black mastic beneath the 2nd floor stage;
- B. The Contractor shall submit a cost effective project schedule with the bid submittal to be approved by the Owner. Work hours outside those submitted, may, at the Owner's discretion, be subject to reimbursement by the Contractor to cover the expense of the on-site Consultant and associated analytical fees. The Contractor will be notified when the Notification and abatement activities should be scheduled to begin following selection.
- C. The Project consists of the proper removal and disposal of the following hazardous materials to facilitate the planned renovation.
 - 1. Approximately 270 ballasts throughout the facility.

2. Approximately 796 fluorescent light bulbs throughout the facility.
 3. Approximately two HVAC units (one on the 2nd floor and one on the rooftop) associated with the facility with potential Freon/refrigerant-containing equipment.
 4. Approximately 22 EXIT signs with batteries throughout the facility.
 5. Approximately nine fire extinguishers throughout the facility.
 6. Approximately two elevators, three generators, and nine motorized rolling doors with oil filled equipment associated with the facility.
- D. **The Contractor shall be responsible for providing power to effectively operate on site equipment, including air sampling equipment provided by the Client's on site Consultant.**
- E. **The Contractor shall coordinate water supply for the duration of the project.**
- F. The Contractor shall provide temporary restrooms for onsite personnel.
- G. Anticipated working hours shall be Monday through Friday, from 7:00 a.m. until 7:00 p.m.
- H. All asbestos waste shall be disposed of at a landfill/disposal facility that is approved to handle asbestos waste. All asbestos abatement and related construction activities are to be performed in accordance with applicable federal, state, and local regulations, or GLE's specifications, whichever are more stringent. It is the sole responsibility of the Contractor to be familiar with these regulations and requirements and to provide all required permits and notifications.
- I. All hazardous waste shall be disposed of at a landfill/disposal facility that is approved to handle the hazardous waste. All hazardous waste abatement and related construction activities are to be performed in accordance with applicable federal, state, and local regulations, or GLE's specifications, whichever are more stringent. It is the sole responsibility of the Contractor to be familiar with these regulations and requirements and to provide all required permits and notifications.

- J. **The Contractor shall field verify the conditions for this project and is responsible for verifying quantities and locations of all work to be performed as outlined in this Work Plan. Failure to do so will not relieve the Contractor of his/her obligation to furnish all materials and labor necessary to carry out the provisions of this Contract. Contractors bid shall be based on his/her own determination of quantities.**

The quantities provided in the corresponding asbestos survey report and within this work plan are general estimates. The quantities provided reflect a combination of field verification of material locations and previous survey experience of similar structures. Actual field verification was limited during the survey as a result of accessibility. The quantities provided do not relieve the Contractor from verifying the actual quantities present.

- K. Owner: The Housing Authority of the City of Atlanta, Georgia
- L. Owner's Representative: The Housing Authority of the City of Atlanta, Georgia, Mr. Earl Rollins, Project Manager, Construction and Facilities Management
- M. Owner's Asbestos Consultant: The entity described as the Licensed Asbestos Consultant (Consultant) for the Asbestos Abatement of the Roosevelt Hall, 688 Atlanta Student Movement, Atlanta, Georgia 30314.

Contact Mr. Jeremy Jordan; Phone (404) 819-1265;
e-mail address jjordan@gleassociates.com.

3.2 Schedule

- A. The Contractor shall submit a cost effective project schedule with the bid submittal to be approved by the Owner. Contractor shall adhere to the submitted schedule for the duration of the project.
- B. Miscellaneous
The Contractor shall maintain Safety Data Sheets (SDS) on-site for all equipment and materials, as appropriate. Solvents with a flash point of less than 140 degrees Fahrenheit will not be permitted on this project.

3.3 Site Specific-Work Areas

- A. At least one properly licensed asbestos abatement supervisor shall be on the job site and in immediate contact with those under supervision during all periods of asbestos abatement activity. The abatement supervisor shall require that operations at the asbestos materials job site cease whenever hazardous or unlawful situations are detected, so as to affect a remedy.
- B. All personnel entering these work areas shall wear, at a minimum, half-face respirators with the appropriate filters during non-friable removal activities, and PAPR respiratory protection with appropriate filters during any friable material removal activities.
- C. Appropriate signs are to be posted about the perimeter of the work area while work is in progress and until final clearance has been achieved.
- D. Only licensed persons, responding emergency personnel (i.e. police, fire, EMS), specialists required for assistance as determined by GLE, governmental inspectors or properly trained and authorized Owner's Representatives may enter the regulated area.

4.0 ASBESTOS ABATEMENT PROCEDURES

4.1 Conventional Removal

These methods are designated for removal of asbestos-containing brown ceiling adhesive dots and brown nine-inch by nine-inch floor tile with black mastic.

- A. Preparation
 - 1. Locate and isolate all electrical and mechanical systems within and adjacent to the work area. Verify with Owner that all non-essential electrical and mechanical equipment has been de-energized.
 - 2. Shut down and lock out all non-essential air handling systems supplying air to, from or through work area.
 - 3. Warning signs shall be displayed at all entrances and approaches to the regulated area. Warning signs shall comply with the requirements of OSHA 29 CFR 1926.1101 (k) (1) (ii). The contractor is responsible for ensuring that all building occupants and non-English speaking employees are able to comprehend the warning signs. When necessary the contractor

will display signs in foreign languages, pictographs, and graphics. Signs such as these will be in addition to warning signs in English.

4. Seal with plastic sheeting and tape all penetrations to work area, including, but not limited to, **pipe penetrations, ducts, grills, diffusers**, etc. Adequately seal and waterproof all electrical lines, junction boxes, and control wiring that will remain active and live.
5. Construct critical barriers to demarcate the regulated area. Critical barriers shall be constructed in manner that will permit them to retain their integrity throughout the project, and to prevent the migration of asbestos dust from the regulated area. The regulated area will include the entire building.
6. Construct lockable, worker and equipment/disposal decontamination units in accordance with EPA and OSHA guidelines and regulations. A three-stage decontamination unit shall be present at the entrance to each work area. Provide both hot and cold water for personnel shower. Trap and filter all wastewater using a progressive stage filter system.
7. Place work area under negative air pressure utilizing HEPA filtration systems. Maintain negative air pressure in work area continuously from the start of asbestos removal until successful completion of final clearance air testing. The exhaust of all negative air machines shall be discharged to the outside of the building. Maintain a minimum of 0.02 inches of water negative air pressure and four complete air changes per hour of the work area. When determining the number of negative air units, assume the actual efficiency of the machine is 80 percent of the rated capacity. The Contractor shall supply properly functioning, calibrated manometer for each work area, plus an additional manometer in the event of operational failure of a manometer in use. Manometers shall be equipped to produce a continuous reading strip chart recording and shall remain in operation at all times regulated area is under negative air pressure.
8. Extend the polyethylene wall barrier from the floor to four-feet in height along all walls where asbestos removal activities will occur.
9. Assure that all penetrations in the deck and walls observed are immediately sealed.

10. If the negative air pressure differential indicates a reduction in pressure below the required level, then stop activities that disturb ACM, investigate cause of pressure drop, and implement corrective procedures to re-establish proper pressure differential.
11. In addition to the above requirements, two spare HEPA filtration air movement machines will be kept for each work area for use in the event of equipment failure, filter changes, and other maintenance.
12. Provide temporary power, lighting, and heating/cooling (when necessary) to work area. Install ground fault interrupters on all temporary circuits.
13. Prior to the start of any asbestos abatement activity a contractor's project logbook will be established. This logbook will serve as a vehicle for maintaining all the records associated with the project. The logbook will be used to record accidents, unusual events or occurrences (such as failure of the negative air system or containment barriers) personnel and area air sampling results, notes concerning any deviation from standard work practices, daily sign-in/sign-out of employees and authorized visitors, and a day-by-day account of the work progress. The logbook will also record emergency telephone numbers inside the front cover. The logbook will be hard bound and shall be signed each day by the resident Consultant and the project supervisor.
14. Notify Consultant for observation and approval of work area prior to beginning removal. No removal work shall begin before receiving written approval from the Owner's representative.

B. Asbestos Removal, Clean-up and Clearance Testing

1. Remove and dispose of all asbestos-containing materials (ACM) and/or materials determined to be asbestos contaminated in accordance with all applicable OSHA regulations.
2. Spray ACM until saturated with amended water using an airless sprayer. Apply water throughout removal process to maintain wet condition.

3. Do not permit ACM to fall more than 15-feet.
4. Continuously bag all ACM debris. Do not allow ACM to accumulate or to dry out. All asbestos materials shall be adequately wet before being placed into bags. Twist the neck of the bags, bend bag at twist, and seal with wraps of duct tape the loop created (goose-necking).
5. Clean exterior of waste bags and place at load out station for final surface decontamination prior to removal from work area.
6. All ACM debris shall be double bagged in properly labeled bags and disposed of in an appropriate landfill. For asbestos waste to be stored at the site, a steel, fully enclosed, lockable storage unit shall be supplied and paid for by the Contractor. Posting of the storage unit shall be in compliance with applicable federal, state and local regulations. The storage unit shall be locked at all times except during actual loading activities.
7. Wet clean and HEPA vacuum all surfaces until work area is free of all visible debris.
8. Clean and remove from work area all equipment (if not required for further use), materials, impermeable containers, etc.
9. Notify Consultant for visual observation and approval to determine completeness.
10. Notify Consultant to perform Final Clearance Observation and Air Testing via PCM.
11. **Re-clean at Contractor's expense work areas that do not comply with standard of cleaning for final clearance. Re-clean and Re-sample at Contractor's expense, work areas which do not meet specified final clearance air levels.**
12. Upon notification of successful completion of final clearance air testing, dismantle and remove remaining plastic sheeting, decontamination chamber, and any other materials not previously removed.
13. Notify Consultant for work area observation and approval to determine completeness of “tear down/demobilization” activities.

4.2 Roofing Materials Removal

Roofing material removal procedures for the proper removal and disposal of asbestos-containing roof flashing

A. Preparation

1. Establish a regulated area by installing a rope barrier at a minimum of 10-feet from the edge of the work area, including on the ground level adjacent to the ACM to be removed.
2. Warning signs will be posted along the perimeter at five foot intervals.
3. Seal all penetrations or openings to the building faces, 10-feet from the perimeter of the Work Area with plastic sheeting and duct tape.
4. Remove all movable items from within the regulated area and store them outside the area.
5. Construct worker and equipment disposal wash station adjacent to work area.
6. All personnel entering these work areas shall wear, at a minimum, half-face negative pressure respirators with the appropriate filters and shall be double-suited.
7. Install drop cloths inside the regulated area consisting of one layer of six-mil thick plastic sheeting.
8. Notify Consultant for observation and approval of work area prior to beginning removal. No removal work shall begin before receiving written approval from the Owner's representative.

B. Asbestos Removal, Clean-up and Clearance Testing

1. The surface of the asbestos-containing materials (ACM) must be kept wet at all times during removal. Spray the material with amended water. Wet the materials sufficiently to saturate them to the substrate without excessive dripping.
2. Cut ACM with hand tools. Do not use power tools unless approved by local Air Pollution Control Authority.

3. Carefully remove the ACM. Immediately wet dry areas that become exposed as the material is removed.
4. Discontinue ACM removal and cleaning operations and immediately secure Work Area, and notify Consultant and Owner should any of the following conditions develop:
 - Wind velocities or gusts in Work Area exceed 15 miles per hour.
5. Upon removal, immediately place the ACM in six-mil thick plastic bags. Bags must be sealed so as to provide an air tight seal. All bags or items wrapped in plastic sheeting must be labeled in accordance with OSHA and EPA requirements.
6. Wet clean and HEPA vacuum all surfaces within the regulated area.
7. Notify GLE representative for visual observation and approval to determine completeness.
8. Upon GLE representative's approval remove warning signs and barricades.

5.0 AIR MONITORING

- A. Personnel air monitoring as required by OSHA is the responsibility of the Contractor.
- B. Baseline air samples for analysis by Phase Contrast Microscopy (PCM) will be collected under normal building conditions prior to the disturbance of ACM. GLE will collect baseline samples prior to the Contractor beginning work.
- C. GLE will collect ambient area samples from both inside and outside the negative pressure enclosure (as a minimum, at the negative air unit discharge, entrance to the decontamination unit and at the entrance to the bag-out area) during removal activities. GLE will collect additional samples inside and outside the work area, as necessary during the performance of abatement activities, to evaluate airborne particulate levels. These work in progress samples will be analyzed by PCM, unless TEM analysis is requested by the Owner.
- D. Final clearance air sampling will be performed by Phase Contrast Microscopy (PCM) in general accordance with NIOSH Method 7400 with clearance criteria of all samples below 0.01 fibers per cubic centimeter.

- E. Collection of the final air clearance samples may be performed using aggressive methods.
- F. Additional sampling, as the result of failure of final air clearance testing, will be conducted by the Consultant at the sole expense of the Contractor.

6.0 HAZARDOUS MATERIAL REMOVAL

These methods and guidelines are for removal of hazardous materials identified in Section 3.1.C of this Work Plan.

- A. PCB-Containing Light Ballasts
 - 1. PCB containing light ballasts will be removed intact and placed into protective containers for transport to an approved disposal facility.
- B. Fluorescent and Mercury-Containing Light Bulbs
 - 1. Fluorescent and Mercury-containing light bulbs will be removed intact and placed into protective containers for transport to an approved disposal facility. Broken fluorescent and Mercury-containing light bulb debris will be cleaned by trained personnel donning proper PPE. The broken fluorescent and Mercury-containing light bulb debris will be placed into protective containers for transport to an approved disposal facility.
- C. Freon/Refrigerant-Containing HVAC units
 - 1. Freon/refrigerant will be removed by an EPA certified technician for the handling of refrigerant.
 - 2. Freon/refrigerant will be removed and captured in accordance to section 608 of the clean air act and final regulations, 58 FR 28660, 59 FR 55912 and 68 FR 43786. The Freon/refrigerant will then be prepared for transport to an approved disposal facility.
- D. EXIT Sign Batteries
 - 1. Batteries will be removed intact and transported to an approved disposal facility.
- E. Fire Extinguishers
 - 1. Fire extinguishers will be removed and transported to an approved disposal facility.

F. Oil Filled Equipment

1. Oil will be removed from the equipment and placed into protective disposal containers and transported to an approved disposal facility.

7.0 CONTRACTOR SUBMITTALS

A. Prior to mobilization, the Contractor shall furnish GLE with the following information:

1. The Contractor's asbestos abatement license for the State of Georgia.
2. The notification (NESHAP) and other applicable variances and permits submitted to applicable governing authorities. Submittal of such information is the responsibility of the Contractor.
3. SDS information for all proposed chemicals to be utilized for the project.
4. Training documentation demonstrating that on-site personnel involved with Asbestos Materials abatement have been properly trained.

B. Upon mobilization, the Contractor shall furnish GLE with the following information for each worker for review. Upon arrival of new workers, the following information will be required prior to allowing workers on site:

1. Worker training certifications and/or licenses. A minimum of one properly certified asbestos and HAZWOPER trained supervisor, employed directly by the Contractor, shall be on site at all times during abatement activities.
2. Recent physicals with a physician certifying personnel wearing respirators have been cleared to do so.
3. Respirator fit-test documentation.

C. Following scheduled asbestos abatement and hazardous material removal activities, the following items shall be submitted to GLE. Without these items, the final payment request will not be processed.

1. Any revisions to the notification
2. Waste Manifests
3. Daily Logs
4. Work Area Sign In/Out Logs
5. Supervisor/Worker Training Certificates
6. Fit-Test Documentation

7. Physician Medical Opinions
8. Results of OSHA Compliance Monitoring

END OF WORK PLAN

ATTACHMENT 03
Specifications

SECTION 32 13 13
CONCRETE PAVING

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes Concrete Paving Including the Following:

1. Driveways.
2. Roadways.
3. Parking lots.
4. Curbs and gutters.
5. Walks.
6. Unit Paver Base.

- B. Extent of cement concrete pavement is indicated on Drawings.

- C. All areas of pavement shall receive water repellent coating, unless otherwise indicated.

- D. Related Requirements:

1. Section 033000 "Cast-in-Place Concrete" for general building applications of concrete.
2. Section 321316 "Decorative Concrete Paving" for stamped concrete other than stamped detectable warnings.
3. Section 321373 "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within concrete paving and in joints between concrete paving and asphalt paving or adjacent construction.
4. Section 321713 "Parking Bumpers."
5. Section 321723 "Pavement Markings."
6. Section 321726 "Tactile Warning Surfacing" for detectable warning tiles mats .
7. Section 321729 "Manufactured Traffic-Calming Devices."

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.

- B. W/C Ratio: The ratio by weight of water to cementitious materials.

SECTION 32 13 13
CONCRETE PAVING

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified .
- B. Material Certificates: For the following, from manufacturer:
1. Cementitious materials.
 2. Admixtures.
 3. Curing compounds.
 4. Applied finish materials.
 5. Joint fillers.

1.6 QUALITY ASSURANCE

- A. Industry Reference Standards: Refer to Division 01 Reference Section.
1. Georgia Department of Transportation Standard Specifications Construction of Roads and Bridges (GADOT), current edition.
 2. Concrete Reinforcing Steel Institute (CRSI): Manual of Standard Practice, current edition.
 3. American Association of State Highway and Transportation Officials (AASHTO): M 2448-91(00) Specification for Ready-Mixed White and Yellow Traffic Paints.
- B. Installer Qualifications: Engage a firm specializing in cement concrete pavement installation. Installer shall have successfully completed at least twenty (20) pavement installation projects of the same materials, design and of similar size and scope or work to that indicated for this Project and whose Work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C94/C94M requirements for production facilities and equipment.
1. Manufactured certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities".
- D. Testing Agency Qualifications: An independent agency qualified according to ASTM C1077 and ASTM E329 for testing indicated, as documented according to ASTM E548.
1. Personnel conducting field tests shall be qualified as ACI Concrete Field-Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
- E. ACI Publications: Comply with ACI 301, "Specifications for Structural Concrete," unless modified by requirements in the Contract Documents.
- F. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

SECTION 32 13 13
CONCRETE PAVING

- G. Field Construction Mockups: Prior to installing concrete pavement, furnish and install a 100 square foot sample of pavement indicated with proposed materials, and workmanship to be expected in completed work. Build mockup to comply with the following requirements: using materials, joints, edges, and finish, as indicated for final unit of Work.
1. Locate mockup on site in location indicated; or if not indicated as directed by Landscape Architect.
 2. Obtain Landscape Architect's acceptance of qualities of sample before start of final unit of Work.
 3. Replace unsatisfactory Work; as directed, until acceptance of Landscape Architect.
 4. Maintain approved mockup during construction in undisturbed condition as a standard for judging completed Work. Do not alter, move, or destroy mockup until Work is completed. The approved sample in undisturbed condition at Date of Substantial Completion may become part of completed Work.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

1.8 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
- C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

SECTION 32 13 13
CONCRETE PAVING

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
1. Portland Cement: ASTM C150/C150M, gray white portland cement Type I .
 2. Fly Ash: ASTM C618, Class C or Class F.
- B. Normal-Weight Aggregates: ASTM C33/C33M, Class 1N , uniformly graded. Provide aggregates from a single source.
1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Air-Entraining Admixture: ASTM C260/C260M.
- D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
- E. Water: Potable and complying with ASTM C94/C94M.

2.4 CURING MATERIALS

- A. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- B. Water: Potable.

SECTION 32 13 13
CONCRETE PAVING

- C. Absorptive Cover: AASHTO M182, Class 22, burlap cloth made from jute or kenaf, weighing approximately 9 oz/sq. yd. (305 g/sq. m) dry.
- D. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- E. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
- F. Clear Waterborne Membrane-Forming Curing Compound: ASTM C309, Type 1, Class B.

2.5 RELATED MATERIALS

- A. Joint Fillers: ASTM D1751, asphalt-saturated cellulosic fiber ASTM D1752, cork or self-expanding cork or ASTM D8139, semirigid, closed-cell polypropylene foam in preformed strips.
- B. Rock Salt: Sodium chloride crystals, kiln dried, coarse gradation with 100 percent passing 3/8-inch sieve and 85 percent retained on a No. 8 sieve.

2.6 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
 - 2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that comply with or exceed requirements.
- B. Cementitious Materials: Use fly ash, pozzolan, slag cement, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
 - 1. Fly Ash or Pozzolan: 25 percent.
 - 2. Combined Fly Ash or Pozzolan, and Slag Cement: 50 percent, with fly ash or pozzolan not exceeding 25 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 - 1. Air Content, 1-1/2-inch Nominal Maximum Aggregate Size: 2-1/2 percent plus or minus 1-1/2 percent.
 - 2. Air Content, 1-inch Nominal Maximum Aggregate Size: 3 percent plus or minus 1-1/2 percent.
 - 3. Air Content, 3/4-inch Nominal Maximum Aggregate Size: 3-1/2 percent plus or minus 1-1/2 percent.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

**SECTION 32 13 13
CONCRETE PAVING**

- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use water-reducing admixture in concrete as required for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Concrete Mixtures: Normal-weight concrete.
 - 1. Compressive Strength (28 Days): 3000 psi .
 - 2. Maximum W/C Ratio at Point of Placement: 0.50 .
 - 3. Slump Limit: 5 inches , plus or minus 1 inch.

2.7 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M. Furnish batch certificates for each batch discharged and used in the Work.
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.
 - 1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
 - 2. Proof-roll with a pneumatic-tired and loaded, 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch according to requirements in Section 312000 "Earth Moving."
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

SECTION 32 13 13
CONCRETE PAVING

3.4 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
 2. Provide tie bars at sides of paving strips where indicated.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
 2. Extend joint fillers full width and depth of joint.
 3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.
 - a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.
 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
 - a. Tolerance: Ensure that sawed joints are within 3 inches either way from centers of dowels.

SECTION 32 13 13
CONCRETE PAVING

3.5 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation and items to be embedded or cast-in.
- B. Remove snow, ice, or frost from subbase surface before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating joint devices.
- H. Screed paving surface with a straightedge and strike off.
- I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.
- K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
 - 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

3.6 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

SECTION 32 13 13
CONCRETE PAVING

1. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.7 SPECIAL FINISHES

- A. Seeded Exposed-Aggregate Finish: Immediately after initial floating, spread a single layer of aggregate uniformly on paving surface. Tamp aggregate into plastic concrete and float finish to entirely embed aggregate with mortar cover of 1/16 inch.
 1. Spray-apply chemical surface retarder to paving according to manufacturer's written instructions.
 2. Cover paving surface with plastic sheeting, sealing laps with tape, and remove sheeting when ready to continue finishing operations.
 3. Without dislodging aggregate, remove mortar concealing the aggregate by lightly brushing surface with a stiff, nylon-bristle broom. Do not expose more than one-third of the average diameter of the aggregate and not more than one-half of the diameter of the smallest aggregate.
 4. Fine-spray surface with water and brush. Repeat cycle of water flushing and brushing until cement film is removed from aggregate surfaces to depth required.
- B. Slip-Resistive Aggregate Finish: Before final floating, spread slip-resistive aggregate finish on paving surface according to manufacturer's written instructions and as follows:
 1. Uniformly spread 25 lb/100 sq. ft. of dampened, slip-resistive aggregate over paving surface in two applications. Tamp aggregate flush with surface using a steel trowel, but do not force below surface.
 2. Uniformly distribute approximately two-thirds of slip-resistive aggregate over paving surface with mechanical spreader, allow to absorb moisture, and embed by power floating. Follow power floating with a second slip-resistive aggregate application, uniformly distributing remainder of material at right angles to first application to ensure uniform coverage, and embed by power floating.
 3. Cure concrete with curing compound recommended by slip-resistive aggregate manufacturer. Apply curing compound immediately after final finishing.
 4. After curing, lightly work surface with a steel-wire brush or abrasive stone and water to expose nonslip aggregate.
- C. Rock-Salt Finish: After initial floating , uniformly spread rock salt over paving surface at the rate of 5 lb/100 sq. ft..
 1. Embed rock salt into plastic concrete with roller .
 2. Cover paving surface with 1-mil- thick polyethylene sheet and remove sheet when concrete has hardened and seven-day curing period has elapsed.
 3. After seven-day curing period, saturate concrete with water and broom-sweep surface to dissolve remaining rock salt, thereby leaving pits and holes.
- D. Pigmented Mineral Dry-Shake Hardener Finish: After initial floating, apply dry-shake materials to paving surface according to manufacturer's written instructions and as follows:
 1. Uniformly spread dry-shake hardener at a rate of 100 lb/100 sq. ft. unless greater amount is recommended by manufacturer to match paving color required.

SECTION 32 13 13
CONCRETE PAVING

2. Uniformly distribute approximately two-thirds of dry-shake hardener over the concrete surface with mechanical spreader; allow hardener to absorb moisture and embed it by power floating. Follow power floating with a second application of pigmented mineral dry-shake hardener, uniformly distributing remainder of material at right angles to first application to ensure uniform color, and embed hardener by final power floating.
3. After final power floating, apply a hand-troweled finish followed by a broom finish.
4. Cure concrete with curing compound recommended by dry-shake hardener manufacturer. Apply curing compound immediately after final finishing.

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing moisture-retaining-cover curing compound or a combination of these as follows:
 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears occurring during installation or curing period, using cover material and waterproof tape.
 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.

3.9 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 1. Elevation: 3/4 inch.
 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 3. Surface: Gap below 10-foot- long; unlevelled straightedge not to exceed 1/2 inch.
 4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.

SECTION 32 13 13
CONCRETE PAVING

5. Lateral Alignment and Spacing of Dowels: 1 inch.
6. Vertical Alignment of Dowels: 1/4 inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing and inspecting of composite samples of fresh concrete obtained according to ASTM C172/C172M shall be performed according to the following requirements:
 1. Testing Frequency: Obtain at least one composite sample for each 5000 sq. ft. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 2. Slump: ASTM C143/C143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 3. Air Content: ASTM C231/C231M, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 4. Concrete Temperature: ASTM C1064/C1064M; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
 5. Compression Test Specimens: ASTM C31/C31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 6. Compressive-Strength Tests: ASTM C39/C39M; test one specimen at seven days and two specimens at 28 days.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have

***SECTION 32 13 13
CONCRETE PAVING***

not been met, as directed by Architect.

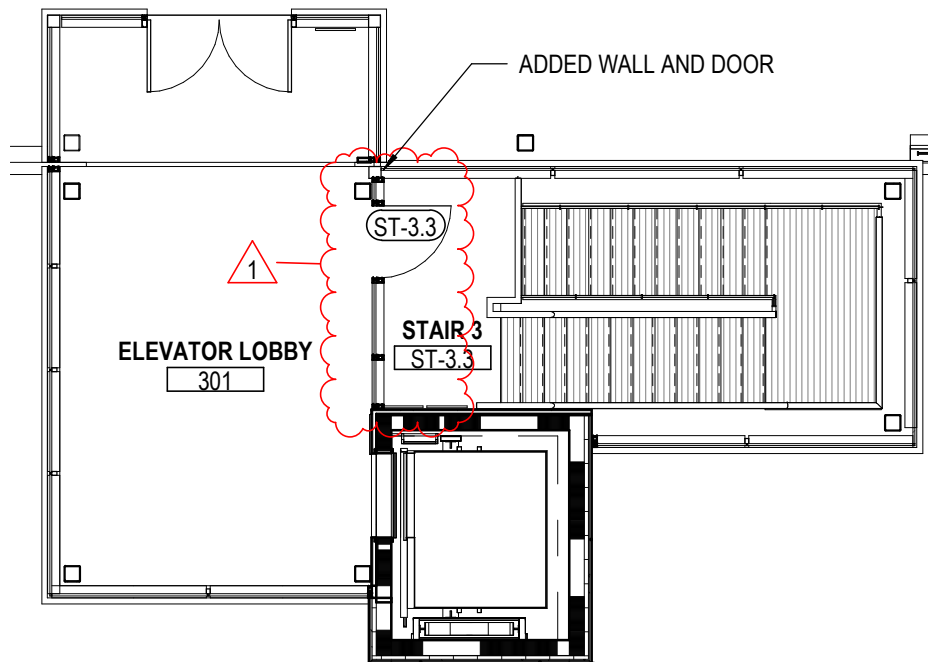
- G. Concrete paving will be considered defective if it does not pass tests and inspections.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- I. Prepare test and inspection reports.

3.11 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

ATTACHMENT 04
Drawings



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1201 W PEACHTREE STREET
SUITE 750
ATLANTA, GA 30309

PHONE: (470) 480-7590

ROOSEVELT HALL
ATLANTA HOUSING

660 Atlanta Student Movement Boulevard
Atlanta, GA 30314

ISSUED WITH
ADDENDUM 2-
PERMIT REVISIONS

SHEET REVISED
A601

SKETCH NUMBER

SK01-A601

PROJ #
18489.01

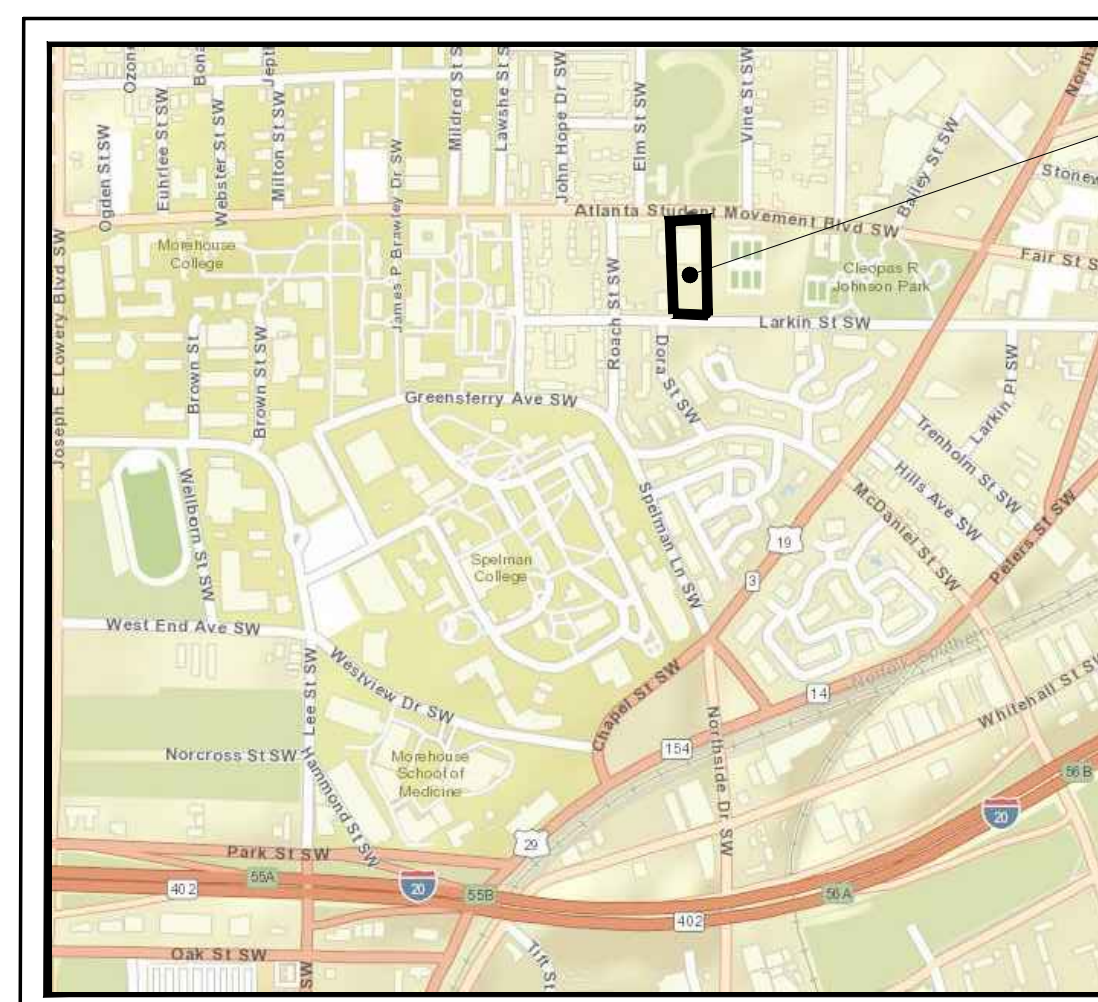
DRAWN BY
CH

DATE
05/08/20

ISSUED FOR CONSTRUCTION PLANS FOR ADAPTIVE REUSE MIXED-USE DEVELOPMENT ROOSEVELT HALL

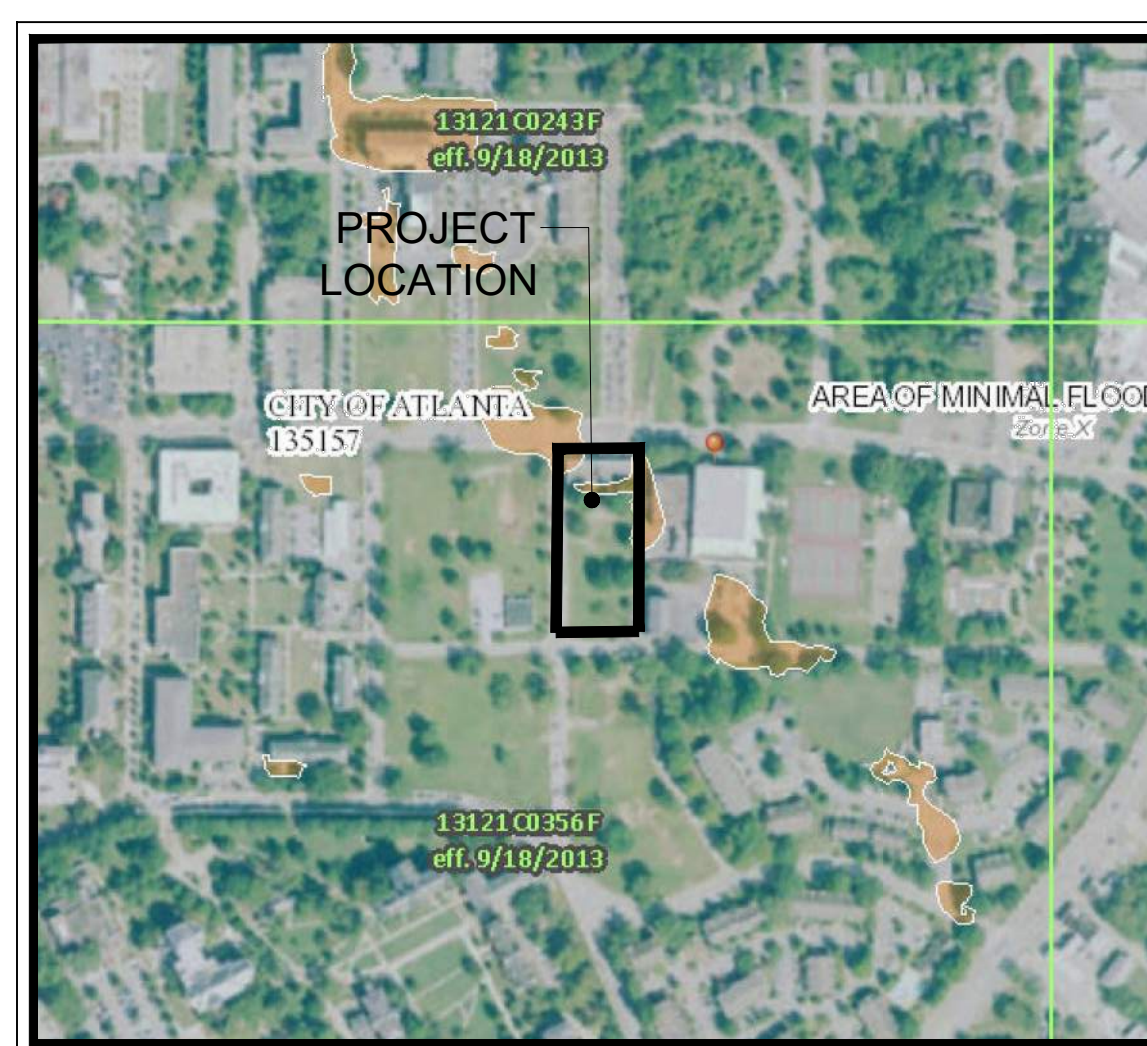
Prepared for
ATLANTA HOUSING AUTHORITY

668 ATLANTA STUDENT
MOVEMENT BOULEVARD
ATLANTA, GA 30314
PARCEL: 14 0109 LL0135
FULTON COUNTY
Zoning: MRC-3-C

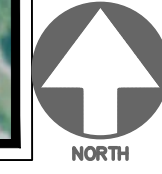


PROJECT
LOCATION

LOCATION MAP
NOT TO SCALE



FLOOD-MAP
N.T.S.



FLOOD HAZARD NOTE
THIS PROPERTY DOES NOT LIE WITHIN A 100 YR FLOOD HAZARD ZONE AS
DEFINED BY THE F.E.M.A FLOOD INSURANCE RATE MAP OF CITY OF ATLANTA
PANEL NUMBER 1312C0243F DATED 09-16-2018

STORMWATER MANAGEMENT:
DETENTION & WATER QUALITY FOR THE PROJECT SITE WILL BE PROVIDED
THROUGH A STORMWATER PIPING NETWORK ROUTED TO AN UNDERGROUND
BASIN. A COPY OF THE REPORT IS INCLUDED WITH THIS SUBMITTAL.

STATE WATERS NOTES:
NO DISTURBANCE IS PROPOSED TO STATE WATERS. ALL STATE
WATERS ON OR WITHIN 200 FEET OF PROPERTY HAVE BEEN SHOWN
ACCORDING TO THE RESEARCH DEPICTED ON THE FEMA F.I.R.M.
PANEL 1312C0243F DATED SEPTEMBER 18th, 2013 AND THE USGS
NATIONAL MAP.

GENERAL STATEMENTS

- Scope of Work to include interior building renovations (by others) and land development. The existing structure will have a new 546 S.F. building addition. Water quality improvements will include removal of outdated retention structure, installation of underground retention pipes and replacement of existing drainage pipe. Land development activities will include walkways, landscape plantings and parking lot installation.
- Total Square Foot of Structures will be 97575 S.F.
Existing 9211 S.F.
New Addition 546 S.F.
- Number of Stories of Existing Structure Will Not Change, and is to remain at 2.
- Property Shall Be In Compliance with Georgia Accessibility Code (120-3-20A).
- Existing Structure and New Building Addition Shall Comply With Table 602 For Closeness Of Exterior Walls to Property Line Since Shell Of Structure Is Not Being Altered.

GENERAL NOTES

- DESCRIPTION: THE PROPOSED RENOVATION OF ROOSEVELT HALL, DISTURBING ± 52,520 SF (1.2057 ACRES), IS BORDERED ON THE NORTH BY ATLANTA STUDENT MOVEMENT BLVD, ON THE EAST BY CLARK COLLEGE AND VISION MINISTRIES HOLINESS CHURCH, ON THE SOUTH BY LARKIN STREET AND ON THE WEST BY ROACH ST. THE PROJECT IS LOCATED IN LAND LOT 169, 14TH DISTRICT, CITY OF ATLANTA, FULTON COUNTY, GEORGIA. PROPOSED CONSTRUCTION WILL INCLUDE DEMOLITION OF EXISTING PAVEMENT, RENOVATION OF ROOSEVELT BUILDING, CONSTRUCTION OF PARKING AREAS, AND STORMWATER FACILITIES.
- NAME, ADDRESS, AND PHONE NUMBER OF THE PROPERTY OWNER:
ATLANTA HOUSING AUTHORITY
230 JOHN WESLEY DONNERS AVE. NE,
ATLANTA, GA 30303-2421
CONTACT: MR. JOHN SKACH, AIA, AICP
PHONE: (404) 857-7580
- NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT PERSON RESPONSIBLE FOR EROSION CONTROL EMERGENCIES:
Wm. James Talley Jr.
PHONE: 404-917-7291
- ENGINEER/DESIGNER:
LOWE ENGINEERS, LLC
990 HAMMOND DRIVE, SUITE 900
ATLANTA, GEORGIA 30328
PHONE: (770) 857-8440
FAX: (770) 857-8401
CONTACT: JERRY OBERHOLTZER
- SITE LOCATION:
668 ATLANTA STUDENT MOVEMENT BLVD,
ATLANTA, GA 30314
PARCEL ID: 14 0109 LL013
ZONING INFORMATION: MRC-3-C, MIXED RESIDENTIAL COMMERCIAL
SITE AREA: ± 30 ACRES
DISTURBED AREA: ± 52,520 SF (1.2057 ACRES)
- BY GRAPHIC PLOTTING ONLY, A PORTION OF THIS SITE IS WITHIN THE LIMITS OF A 0.2% ANNUAL CHANCE FLOOD HAZARD AREA AS PER F.I.R.M. FOR FULTON COUNTY, GEORGIA, COMMUNITY PANEL NO. 1312C0243F. THE PANEL BEARS AN EFFECTIVE DATE OF SEPTEMBER, 18th, 2013.
- SOIL INFORMATION:
Jb - URBAN LAND

Sheet Index

SHEET NUMBER	SHEET TITLE
C0.01	COVER
C0.02	ZONING CONDITIONS
C1.00	EXISTING CONDITIONS PLAN
C2.00	DEMOLITION PLAN
C3.00	SITE PLAN
C4.00	GRADING & UTILITY PLAN
C4.10	GRADING & UTILITY PLAN
C4.20	STORM & SANITARY PROFILES
C5.00	EROSION CONTROL PLAN - PHASE 1
C5.01	EROSION CONTROL PLAN - PHASE 2
C5.02	EROSION CONTROL PLAN - PHASE 3
C9.00	EROSION & SEDIMENTATION NOTES
C9.01	EROSION & SEDIMENTATION NOTES
C9.02	EROSION & SEDIMENTATION NOTES
C9.03	EROSION & SEDIMENTATION NOTES
C9.04	EROSION & SEDIMENTATION NOTES
C10.00	EROSION & SEDIMENTATION DETAILS
C10.01	EROSION & SEDIMENTATION DETAILS
C10.02	EROSION & SEDIMENTATION DETAILS
C11.00	CONSTRUCTION DETAILS
C11.01	CONSTRUCTION DETAILS
C11.02	CONSTRUCTION DETAILS
C11.03	CONSTRUCTION DETAILS
C11.04	CONSTRUCTION DETAILS
C11.05	CONSTRUCTION DETAILS
C11.06	CONSTRUCTION DETAILS

PROJECT CONTACT INFORMATION:

ENGINEER:
LOWE ENGINEERS
990 HAMMOND DR. ~ SUITE 900
ATLANTA, GEORGIA 30328
CONTACT: GERALD OBERHOLTZER, P.E.
PHONE: (770) 857-8400

SURVEYOR:
LOWE ENGINEERS
990 HAMMOND DR. ~ SUITE 900
ATLANTA, GEORGIA 30328
CONTACT: TIM WORLEY, P.L.S.
PHONE: (770) 857-8400

LOWE ENGINEERS
Gerald F. Oberholtzer, P.E.
Level II Certified Design Professional
CERTIFICATION NUMBER: 000002177
ISSUED: 11/09/2018 EXPIRES: 11/09/2022

24 HOUR CONTACT:
404-817-7291
james.talley@lowe-engineers.com



LOWE ENGINEERS 990 HAMMOND DRIVE SUITE 900
ATLANTA, GA 30328
TEL.: 770-857-8400
FAX: 770-857-8401

#	DATE	CHANGE DESCRIPTION
1	08/07/2020	ADDENDUM 2 - PERMIT REVISIONS

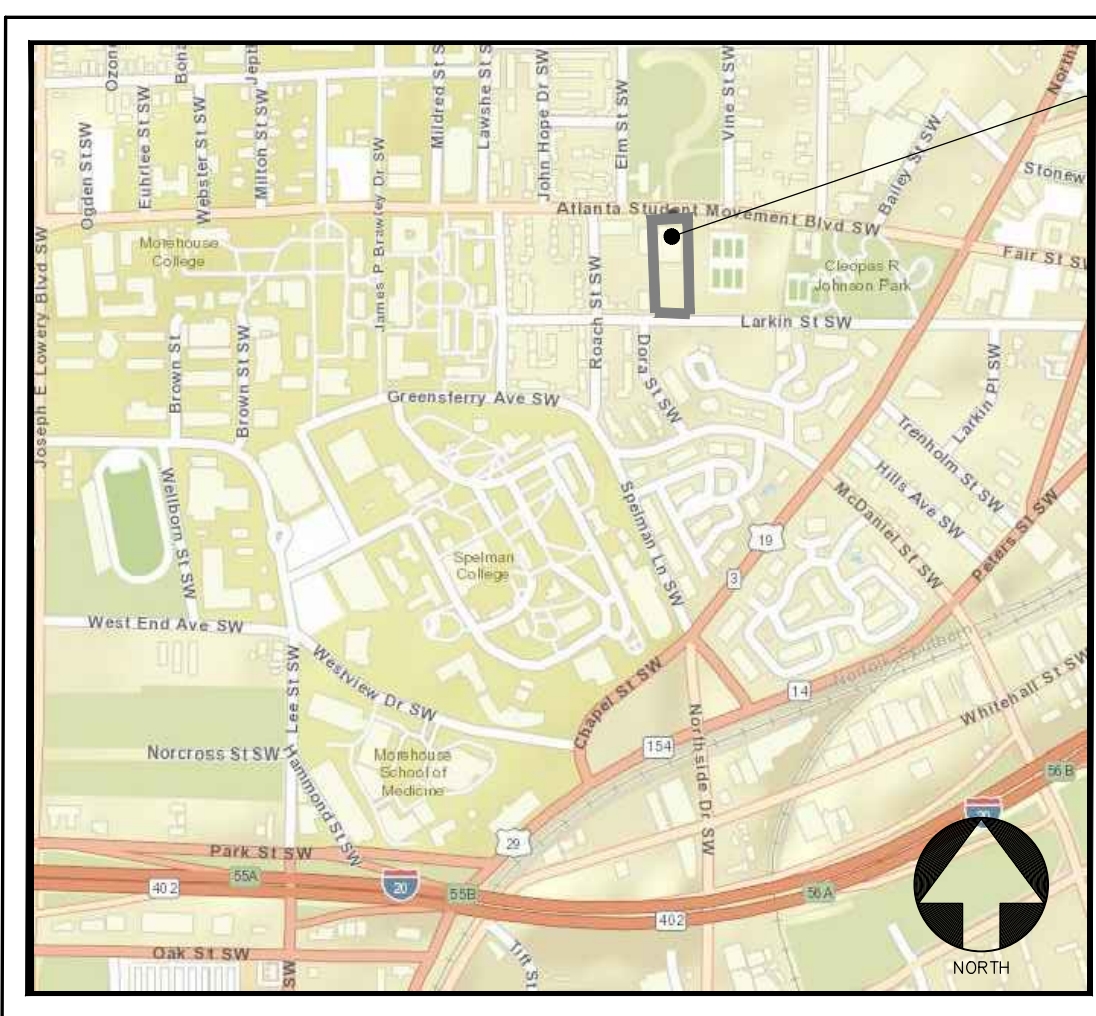
ATLANTA HOUSING
Roosevelt Hall
660 Atlanta Student Movement Boulevard
Atlanta, GA 30314
FOR
ATLANTA HOUSING

MOODY-NOLAN
1201 W PEACHTREE STREET
SUITE 750
ATLANTA, GA 30309
PHONE: (470) 480-7590

COVER

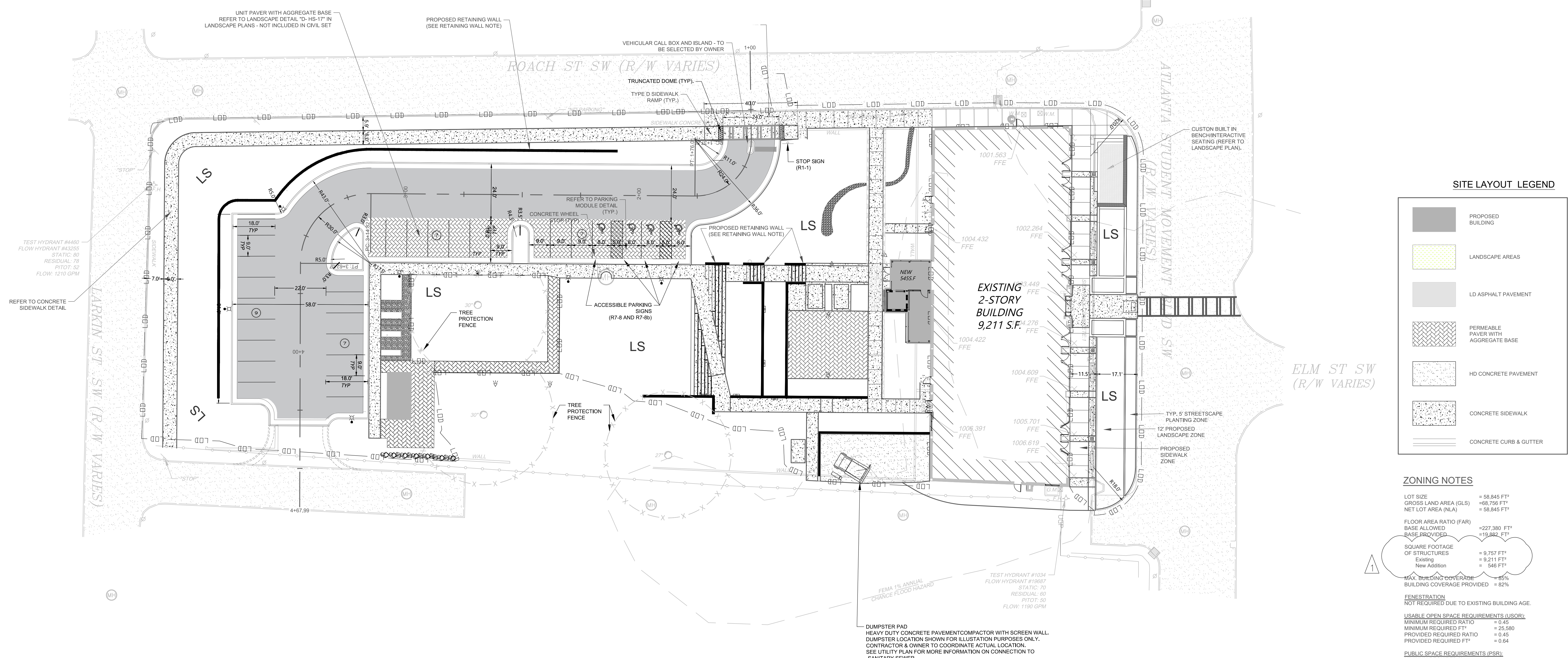
05/08/2020
DRAWN BY: JRB CHECKED BY: GFO
Proj. # 18489.01
C0.01
ISSUED FOR CONSTRUCTION



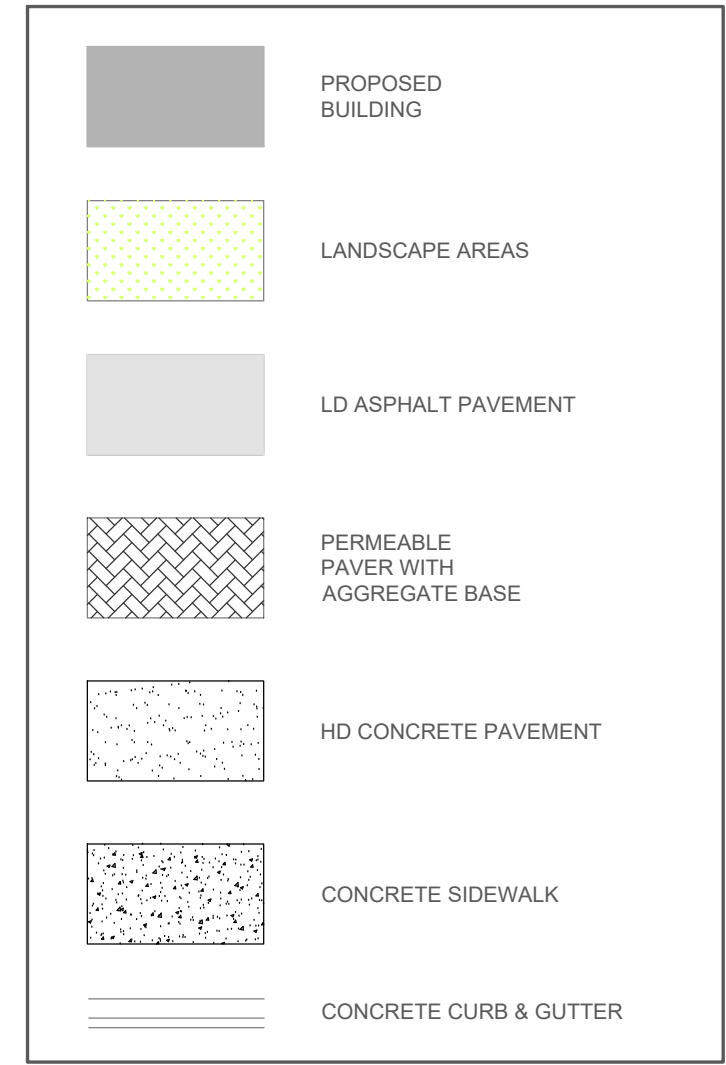


LOCATION MAP
NOT TO SCALE

PROJECT LOCATION



SITE LAYOUT LEGEND



ZONING NOTES

LOT SIZE = 58,845 FT²
GROSS LAND AREA (GLS) = 68,756 FT²
NET LOT AREA (NLA) = 58,845 FT²
FLOOR AREA RATIO (FAR) = 227,380 FT²
BASE ALLOWED = 19,882 FT²
SQUARE FOOTAGE OF STRUCTURES:
Existing = 9,757 FT²
New Addition = 9,211 FT²
Total = 18,968 FT²
MAX. TRUCK COVERED = 85%
BUILDING COVERAGE PROVIDED = 62%
FENESTRATION NOT REQUIRED DUE TO EXISTING BUILDING AGE.
USABLE OPEN SPACE REQUIREMENTS (USOR):
MINIMUM REQUIRED RATIO = 0.45
MINIMUM REQUIRED FT² = 25,580
PROVIDED RATIO = 0.45
PROVIDED REQUIRED FT² = 0.64
PUBLIC SPACE REQUIREMENTS (PSR):
MINIMUM REQUIRED % = 30
MINIMUM REQUIRED FT² = 11,389
PROVIDED % = 63
PROVIDED REQUIRED FT² = 36,175
PARKING AND LOADING REQUIREMENTS NOT REQUIRED DUE TO EXISTING BUILDING AGE.
TOTAL PARKING SPACES = 30
BICYCLE PARKING SPACES PROVIDED = 2

CURB NOTE:

AT ALL POINTS ALONG THE PUBLIC RIGHT OF WAY WHERE THE EXISTING CURB HEIGHT IS LESS THAN 5 INCHES HIGH, THE EXISTING CURB SHALL BE REMOVED AND REPLACED OR RESET TO MINIMUM CITY OF ATLANTA REQUIREMENTS AND THE SIDEWALK REPLACED.

RETAINING WALL NOTE:

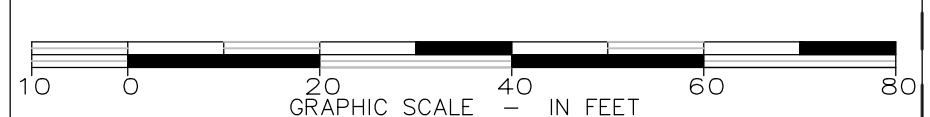
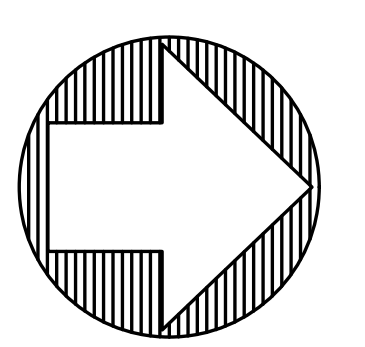
FOR MORE INFORMATION ON RETAINING WALLS, REFER TO LANDSCAPE PLANS, NOT INCLUDED IN THE CIVIL SET. REFER TO DETAILS A AND B ON HS-12 WALLS TO BE PERMITTED BY OTHERS AND SHALL HAVE ADEQUATE FALL PROTECTION THAT SHOULD BE SELECTED BY THE OWNER.

GENERAL NOTES

- 1. DESCRIPTION: THE PROPOSED RENOVATION OF ROOSEVELT HALL, DISTURBING 4,52,020 SF (1.2057 ACRES), IS BORDERED ON THE NORTH BY ATLANTA STUDENT MOVEMENT BLVD, ON THE EAST BY CLARK COLLEGE AND VISION MINISTERS HOLINESS CHURCH, ON THE SOUTH BY LARKIN STREET AND ON THE WEST BY ROACH ST. THE PROJECT IS LOCATED IN LAND LOT 109, 14TH DISTRICT, CITY OF ATLANTA, FULTON COUNTY, GEORGIA. PROPOSED CONSTRUCTION WILL INCLUDE DEMOLITION OF EXISTING PAVEMENT, RENOVATION OF ROOSEVELT BUILDING, CONSTRUCTION OF PARKING AREAS, AND STORMWATER FACILITIES.
- 2. NAME, ADDRESS, AND PHONE NUMBER OF THE PROPERTY OWNER: ATLANTA HOUSING AUTHORITY, 230 JOHN WESLEY DOBBS AVE. NE, ATLANTA, GA 30303-2421, CONTACT: MR. JOHN SKACH, AIA, AICP, PHONE: (404) 857-7880.
- 3. NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT PERSON RESPONSIBLE FOR EROSION CONTROL EMERGENCIES: Wm. James Talley Jr., PHONE: 404-817-7291.
- 4. ENGINEER/DESIGNER: LOWE ENGINEERS, LLC, 990 HAMMOND DRIVE, SUITE 900, ATLANTA, GEORGIA 30328, PHONE: (770) 857-8400, FAX: (770) 857-8401, CONTACT: JERRY OBERHOLTZER, PE.
- 5. SITE LOCATION: 660 ATLANTA STUDENT MOVEMENT BLVD., ATLANTA, GA 30314. PROJECT IS LOCATED IN LAND LOT 109, 14TH DISTRICT, CITY OF ATLANTA, FULTON COUNTY, GEORGIA. PARCEL ID: 14 0109 L013. ZONING INFORMATION: MRC-3-C, MIXED RESIDENTIAL COMMERCIAL. SITE AREA: 11.30 ACRES. DISTURBED AREA: 42,520 SF (1.2057 ACRES).
- 6. BY GRAPHIC PLOTTING ONLY, A PORTION OF THIS SITE IS WITHIN THE LIMITS OF A 0.25% ANNUAL CHANCE FLOOD HAZARD AREA AS PER F.I.R.M. FOR FULTON COUNTY, GEORGIA, COMMUNITY PANEL NO. 131010249. THE PANEL BEARS AN EFFECTIVE DATE OF SEPTEMBER, 19th, 2013.
- 7. SOIL INFORMATION: U - URBAN LAND.

SITE NOTES

- 1. INSTALL JOINTS WHERE SHOWN. ALIGN ON WALLS, BUILDINGS, RAIL, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
- 2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
- 3. ALL CURBS ARE DIMENSIONED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 4. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES MAY NOT BE SHOWN ON DRAWINGS.
- 5. ALL PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- 6. ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC, UNLESS OTHERWISE NOTED.
- 7. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH GOOTS STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS.
- 8. CONTRACTOR SHALL NOTIFY LOWE ENGINEERS WITHIN 24 HOURS OF ANY LAYOUT DISCREPANCY PRIOR TO PROCEEDING WITH WORK. ALL ADDITIONAL COSTS, INCLUDING BUT NOT LIMITED TO REMEDIAL CONSTRUCTION, ADDITIONAL SITE VISITS, OR ENGINEERING SERVICES AND FEES, ETC. INCURRED DUE TO FAILURE TO FOLLOW THIS PROCEDURE WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



LOWE ENGINEERS 990 HAMMOND DRIVE SUITE 900 ATLANTA, GA 30328 TEL: 770-857-8400 FAX: 770-857-8401

#	DATE	CHANGE DESCRIPTION
1	08/07/2020	ADDENDUM 2 - PERMIT REVISIONS

ATLANTA HOUSING
1201 W PEACHTREE STREET SUITE 750 ATLANTA, GA 30309
PHONE: (470) 480-7590

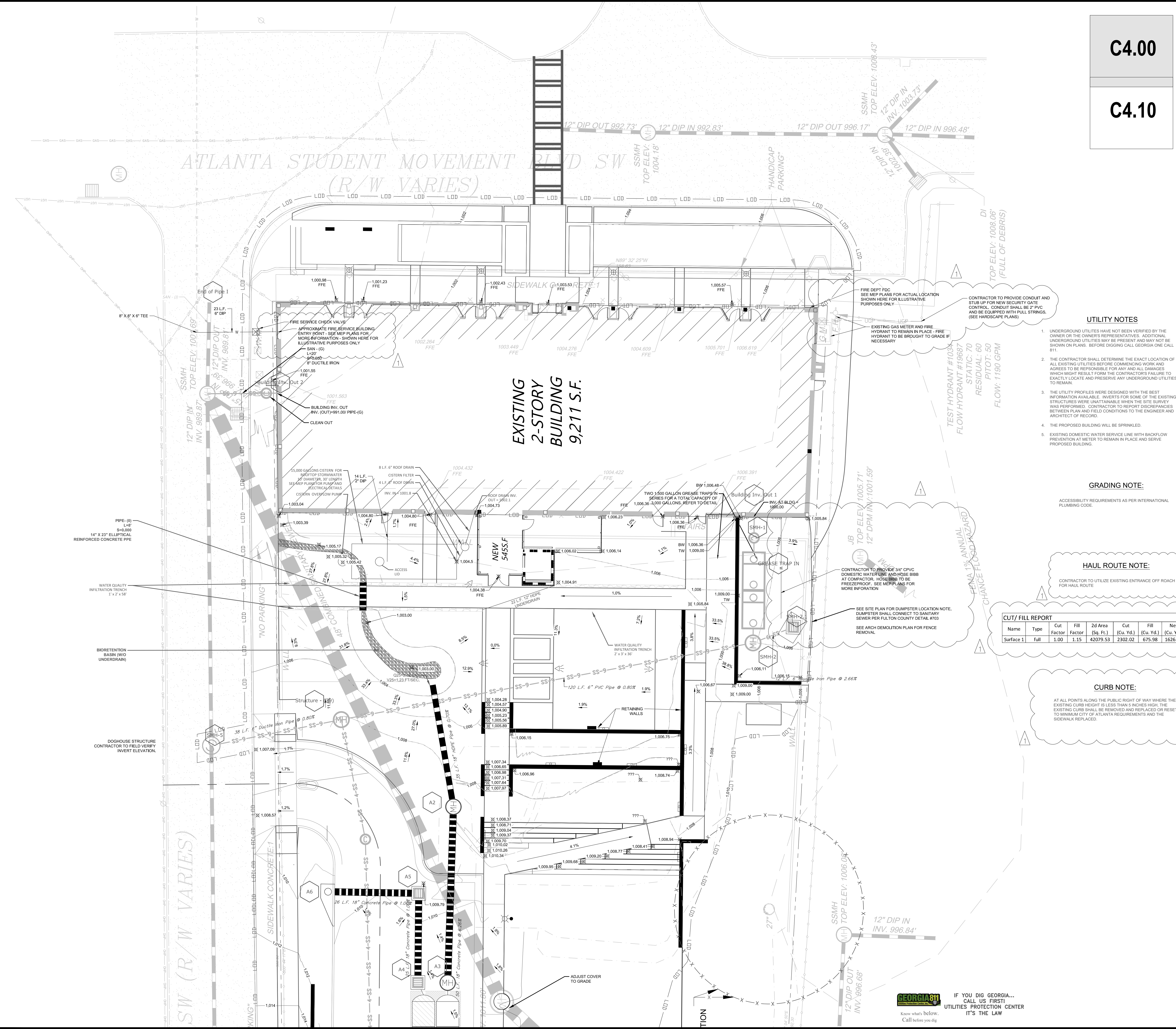
SITE PLAN

05-08-2020
DRAWN BY: JRB CHECKED BY: GFO
Proj. # 18489.01
C3.00
ISSUED FOR CONSTRUCTION



IF YOU DIG GEORGIA... CALL US FIRST! UTILITIES PROTECTION CENTER IT'S THE LAW





C4.00
C4.10

24 HOUR CONTACT:
404-817-7291
james.lauby@atastata.com



GENERAL NOTES

- 1. DESCRIPTION: THE PROPOSED ADAPTIVE REUSE MIXED USE DEVELOPMENT ROOSEVELT HALL, DISTURBING 4,250 SF (1,207 ACRES), IS BORDERED ON THE NORTH BY ATLANTA STUDENT UNIV. BLD., ON THE EAST BY PROPERTIES OWNED BY CLARK COLLEGE AND VISION MINISTRIES HOLINESS CHURCH INC., LARVIN STREET SW ON THE SOUTH, AND ON THE WEST BY ROACH ST SW. THE PROJECT IS LOCATED IN LAND LOT 109, 14TH DISTRICT, CITY OF ATLANTA, FULTON COUNTY, GEORGIA. PROPOSED CONSTRUCTION WILL INCLUDE DEMOLITION OF EXISTING PAVEMENT AND UTILITIES, RECONSTRUCTION OF AN EXISTING BUILDING, AND THE CONSTRUCTION OF STORMWATER FACILITIES.
- 2. NAME, ADDRESS, AND PHONE NUMBER OF THE PROPERTY OWNER: ATLANTA HOUSING AUTHORITY, 230 JOHN WESLEY DOBBS AVE. NE, ATLANTA, GA 30303-2421, CONTACT: MR. MR. JOHN SKACH, AIA, AACP, PHONE: (404) 857-7880
- 3. NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT PERSON RESPONSIBLE FOR EROSION CONTROL EMERGENCIES: Mr. James Taber, #, PHONE: 404-817-7291
- 4. ENGINEER/DESIGNER: LOWE ENGINEERS, LLC, 900 HAMMOND DRIVE, SUITE 900, ATLANTA, GEORGIA 30328, PHONE: (770) 857-8400, PHONE: (770) 857-8401, CONTACT: GREG SCOTCHIE, PE
- 5. SITE LOCATION: 660 ATLANTA STUDENT MOVEMENT BLVD, ATLANTA, GA 30314, PROJECT IS LOCATED IN LAND LOT 109, 14TH DISTRICT, CITY OF ATLANTA, FULTON COUNTY, GEORGIA, PARCEL ID: 14 0109 L013, ZONING INFORMATION: MRC-3-C, MIXED RESIDENTIAL COMMERCIAL, SITE AREA: 11.30 ACRES, DISTURBED AREA: 52,520 SF (1,207 ACRES)
- 6. BY GRAPHIC PLOTTING ONLY, A PORTION OF THIS SITE IS WITHIN THE LIMITS OF A 1% ANNUAL CHANCE FLOOD HAZARD AREA AS PER FIRM FOR FULTON COUNTY, GEORGIA, COMMUNITY PANEL NO. 131210243F. THE PANEL BEARS AN EFFECTIVE DATE OF SEPTEMBER, 19TH, 2013.
- 7. SOIL INFORMATION: UB - URBAN LAND

UTILITY NOTES

- 1. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER OR THE OWNER'S REPRESENTATIVES. ADDITIONAL UNDERGROUND UTILITIES MAY BE PRESENT AND MAY NOT BE SHOWN ON PLANS. BEFORE DIGGING CALL GEORGIA 811.
- 2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.
- 3. THE UTILITY PROFILES WERE DESIGNED WITH THE BEST INFORMATION AVAILABLE. INVERTS FOR SOME OF THE EXISTING STRUCTURES WERE UNAVAILABLE WHEN THE SITE SURVEY WAS PERFORMED. CONTRACTOR TO REPORT DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS TO THE ENGINEER AND ARCHITECT OF RECORD.
- 4. THE PROPOSED BUILDING WILL BE SPRINKLED.
- 5. EXISTING DOMESTIC WATER SERVICE LINE WITH BACKFLOW PREVENTION AT METER TO REMAIN IN PLACE AND SERVE PROPOSED BUILDING.

GRADING & DRAINAGE NOTES

- 1. NO EARTHWORK SHALL BE PERMITTED UNTIL ISSUANCE OF A GRADING/LAND DISTURBANCE PERMIT FROM THE CITY OF ATLANTA. ALL EXCESS MATERIAL TO BE REMOVED FROM SITE OR STOCKPILED IN APPROVED LOCATION.
- 2. ALL FILL AND OUT SLOPES SHALL BE 2:1 OR FLATTER UNLESS OTHERWISE NOTED ON THE PLANS.
- 3. NO GRADED SLOPE SHALL EXCEED 2H: 1V
- 4. EROSION CONTROL MATTING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3:1
- 5. CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING GRADING ACTIVITIES.
- 6. ALL SPOTS ELEVATION ARE TO FACE OF CURB (I.E. OUTER ELEVATION).
- 7. EARTHWORK QUANTITIES

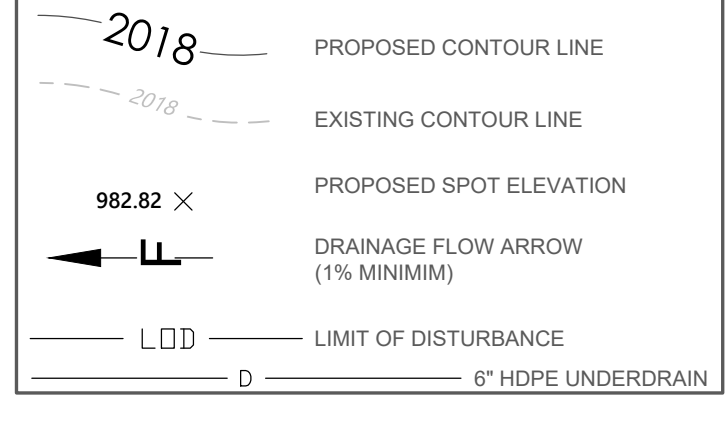
CUT FACTOR FILL FACTOR CUT (CU. YD.) FILL (CU. YD.) NET (CU. YD.)

1.00	1.25	1,238	1,780	542
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GRADING NOTE:

ACCESSIBILITY REQUIREMENTS AS PER INTERNATIONAL PLUMBING CODE.

GRADING LEGEND



HAUL ROUTE NOTE:

CONTRACTOR TO UTILIZE EXISTING ENTRANCE OFF ROACH ST FOR HAUL ROUTE.

CUT/FILL REPORT

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Surface 1	full	1.00	1.15	42079.53	2302.02	675.98	1626.04

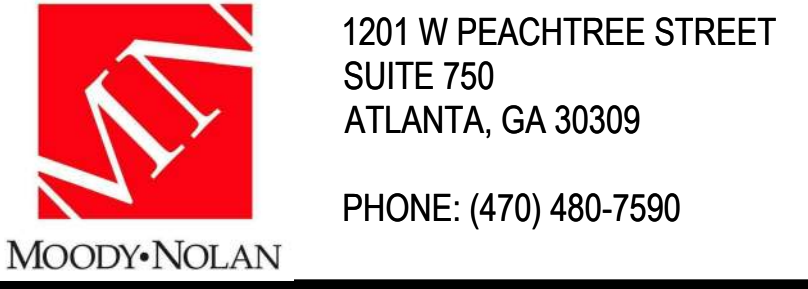
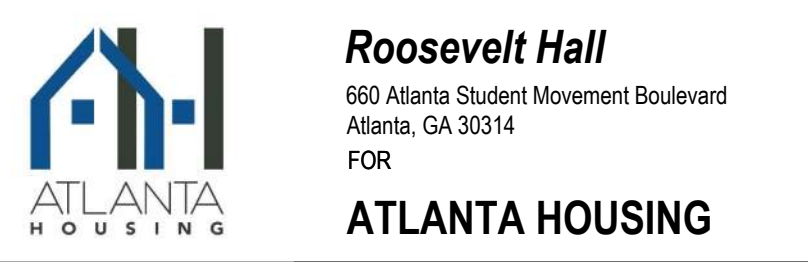
CURB NOTE:

AT ALL POINTS ALONG THE PUBLIC RIGHT OF WAY WHERE THE EXISTING CURB HEIGHT IS LESS THAN 6 INCHES HIGH, THE EXISTING CURB SHALL BE REMOVED AND REPLACED OR RESET TO MINIMUM CITY OF ATLANTA REQUIREMENTS AND THE SIDEWALK REPLACED.



CHANGE DESCRIPTION

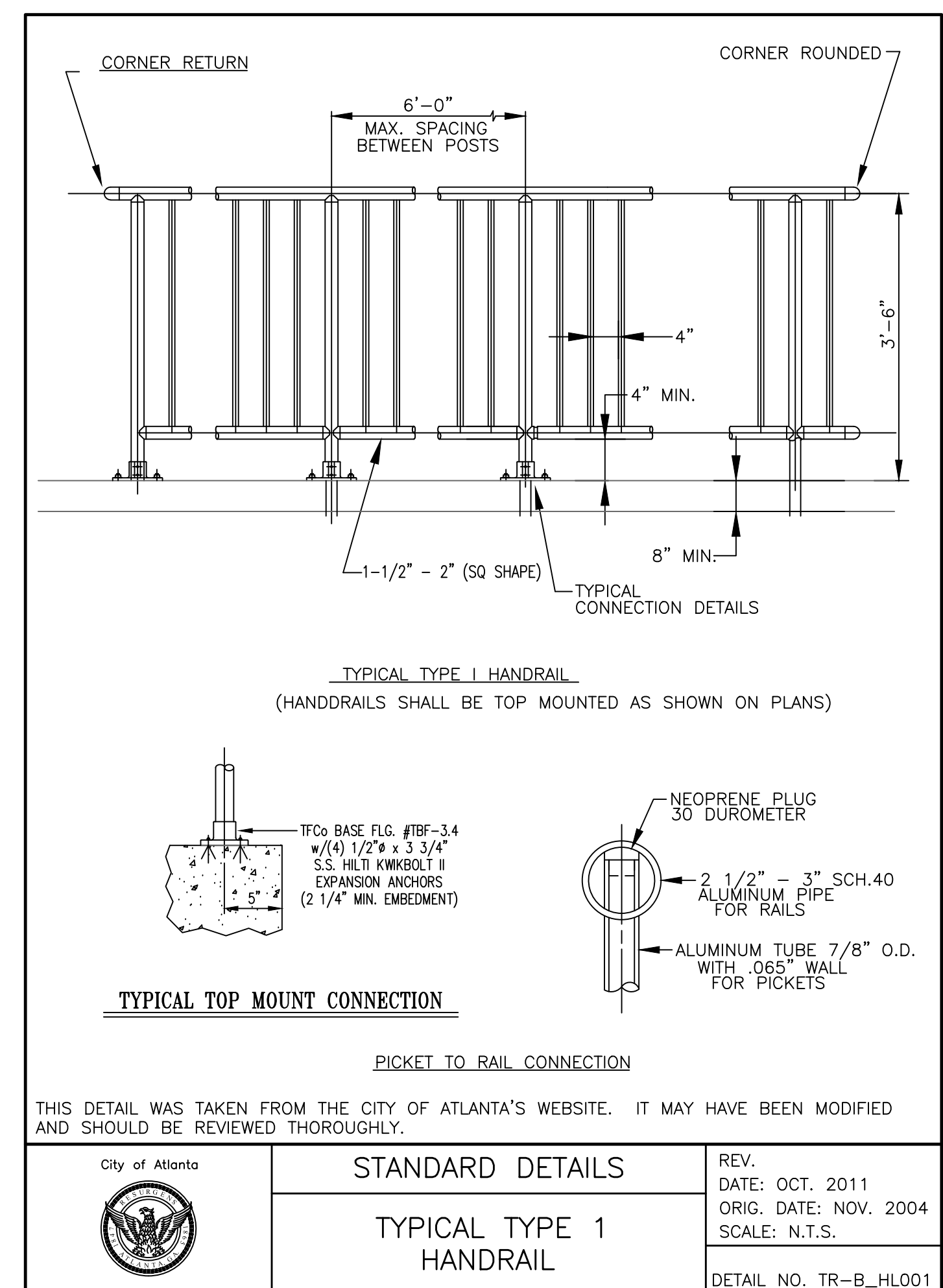
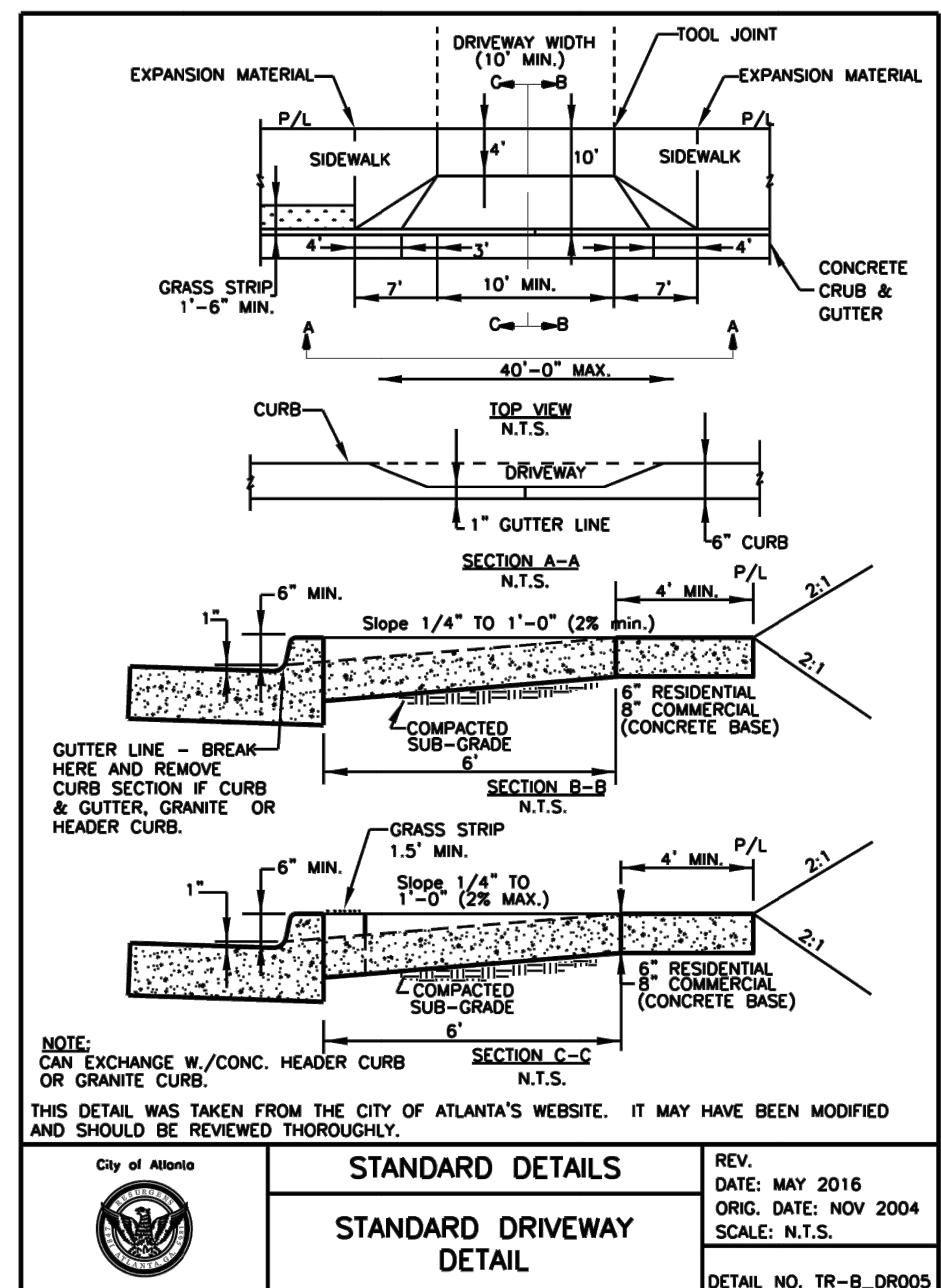
#	DATE	DESCRIPTION
1	08/07/2020	ADDENDUM 2 - PERMIT REVISIONS



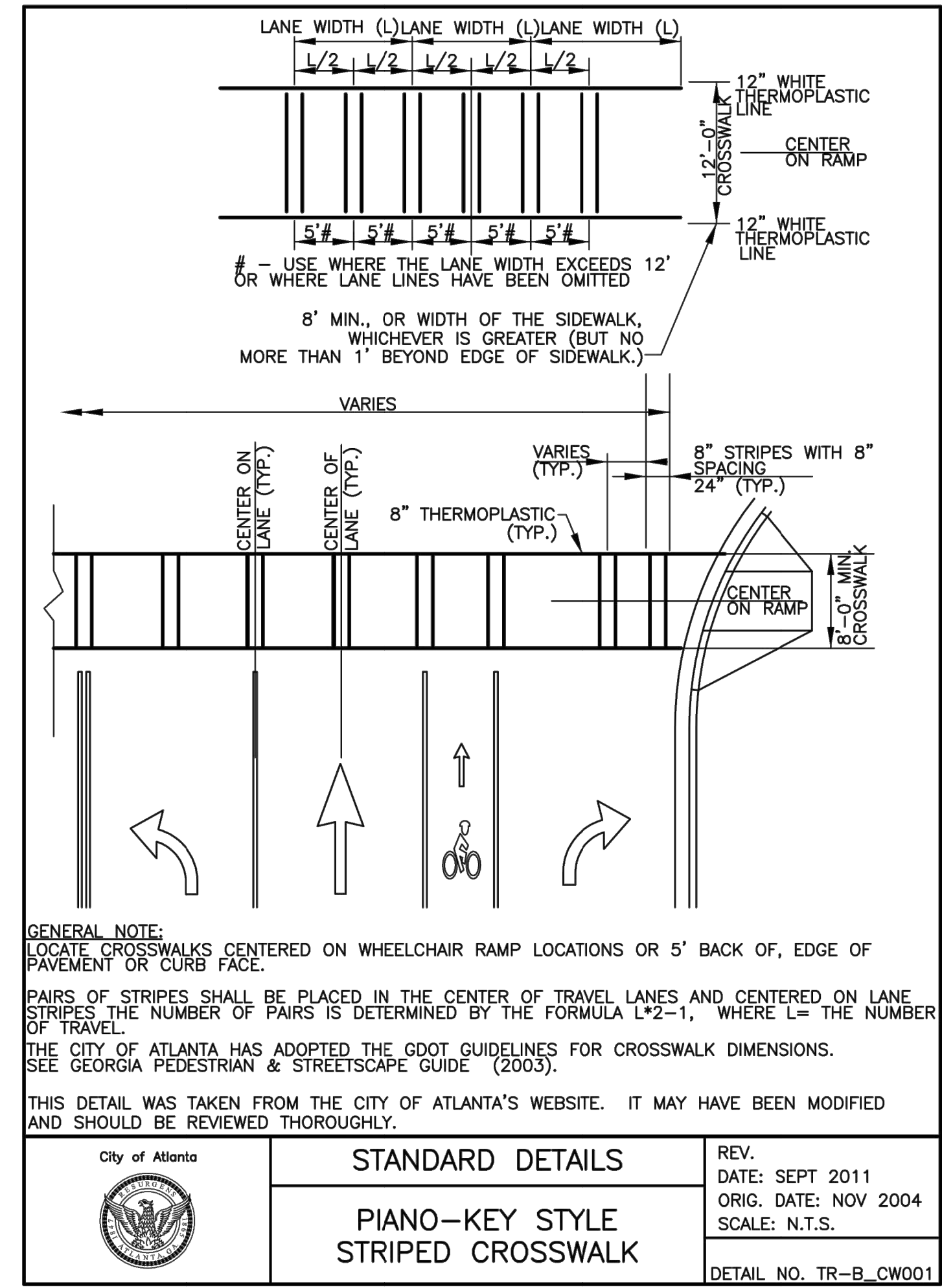
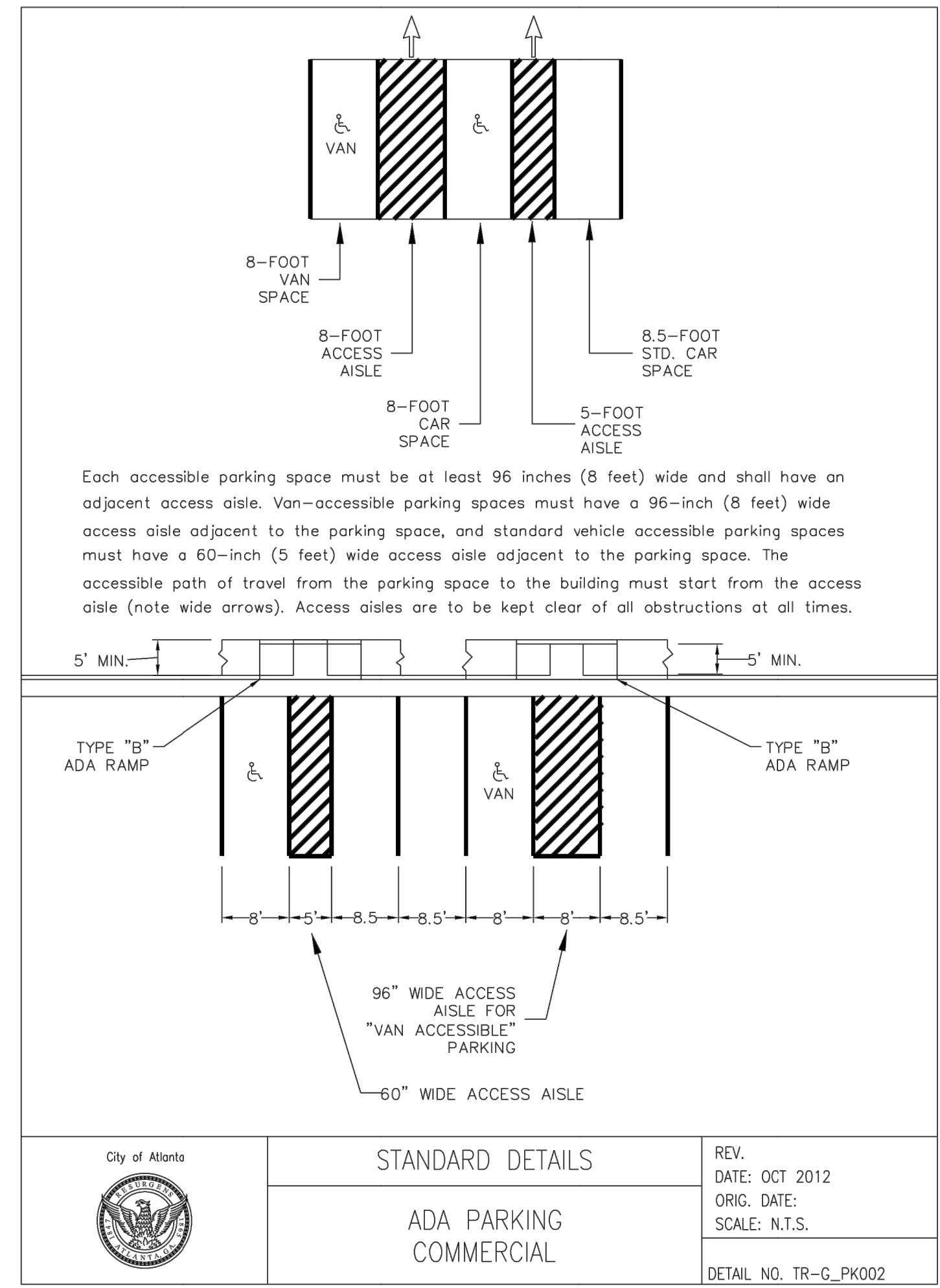
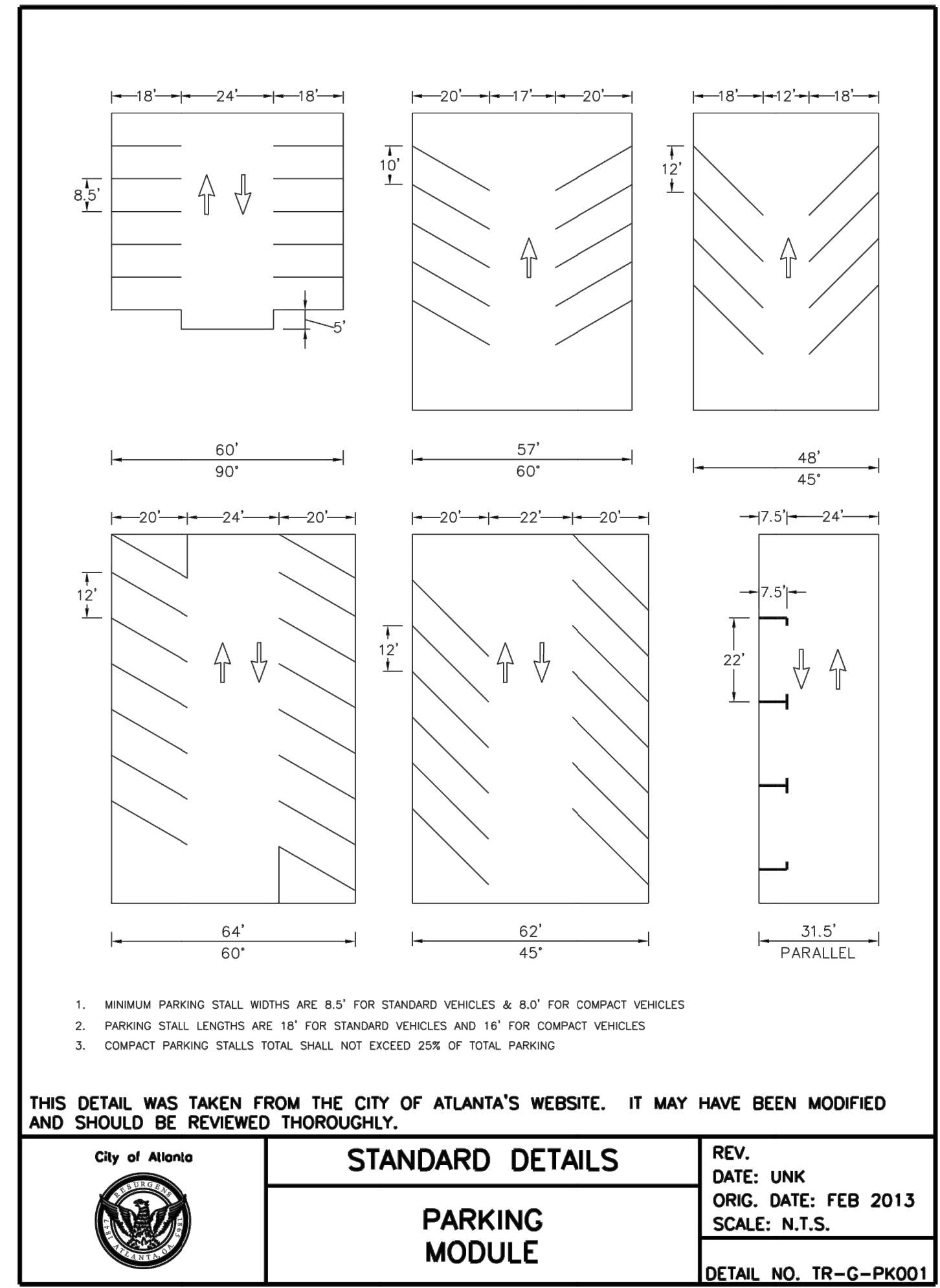
GRADING & UTILITY PLAN

05-08-2020
DRAWN BY: JRB CHECKED BY: GFO
Proj. # 18489.01
C4.00
SPECIAL ADMINISTRATIVE PERMIT (SAP)

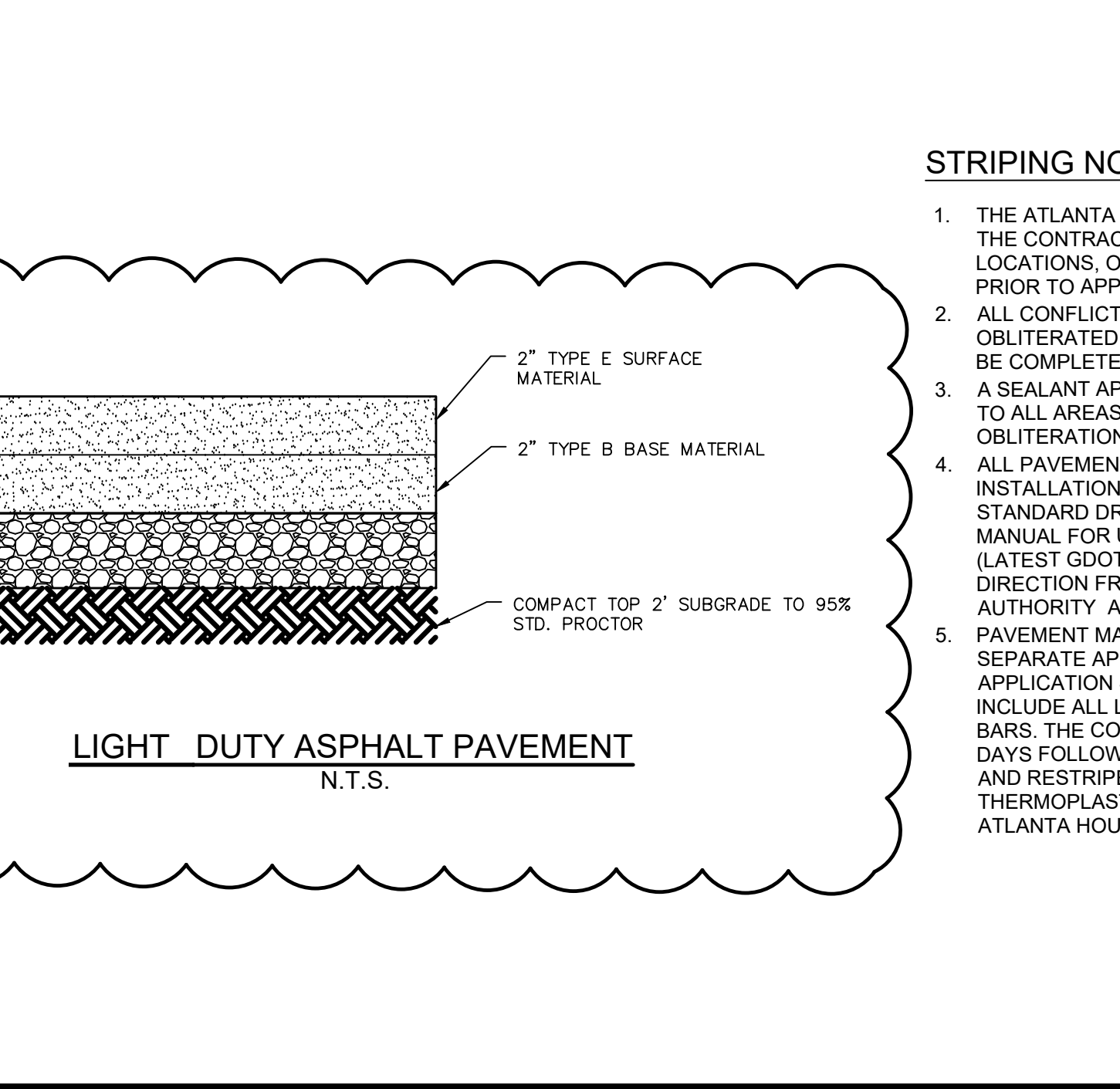
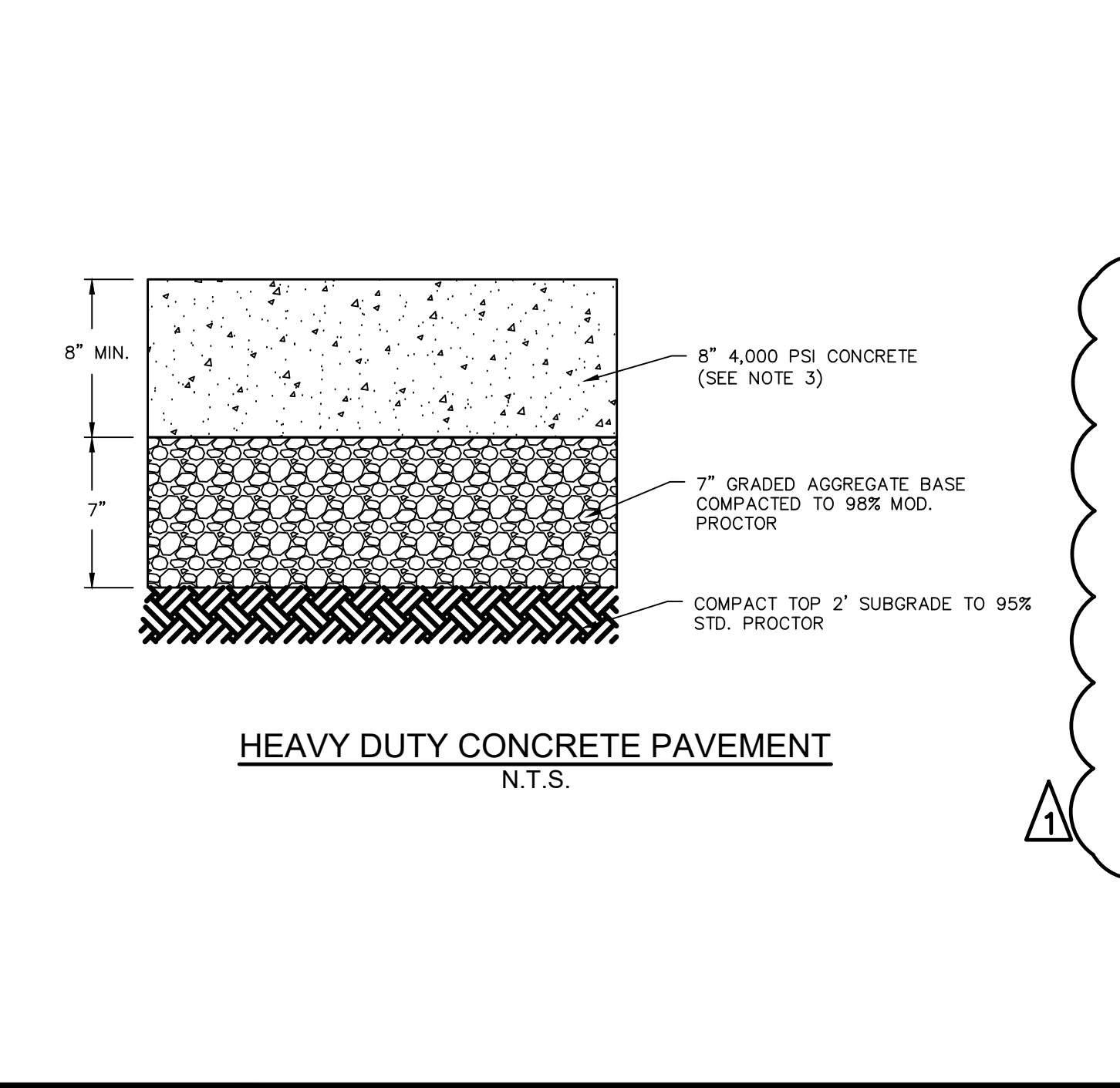




- GENERAL NOTES:**
- The locations of the existing utilities shown are approximate. The exact locations and sizes shall be determined in the field by the Contractor and the utility companies. The general locations of known utilities are shown or identified herein and reflect the owner's best records and on-site investigation. The owner and the design team make no expressed or implied guarantee of accuracy or that other utilities are not located in the construction vicinity.
 - Some of the utilities have been shown with the Existing Conditions as abandoned structures. The owner and the design team make no expressed or implied guarantee of accuracy of this information.
 - The Contractor shall provide all the necessary protective measures to safeguard the existing utilities from damage during the construction of this project. The Contractor shall furnish any special equipment required to work in the neighborhood of the utilities.
 - Prior to commencing work, the Contractor shall contact the utility owners to notify them of work in the area and request them to locate their respective utility. These notifications shall be given at least three business days prior to commencement of operations around the utility.
 - The Standards, Details, and Specifications as per the Georgia Department of Transportation, City of Atlanta Department of Water, City of Atlanta Department of Public Works, and City of Atlanta Bureau of Highway and Streets shall apply and be considered as part of the project documents. Referenced documents are available from the appropriate agency.
 - The Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Association of General Contractors of America, Inc. and the U.S. Department of Labor.
 - The Contractor shall coordinate the disconnection, abandonment, capping, sealing, and removal of the existing utilities. The Contractor shall notify the utility owners to schedule the shut-off.
 - Existing manhole covers, inlet covers, fire hydrants, and water valves noted to be abandoned or removed will remain property of the owner. Stack the items in sorted piles on wooden 4x4 supports. The storage location will be on site or adjacent to the site.
 - Storm sewer inlets constructed adjacent to the combined sewers shall have a trapped invert. Use the City of Atlanta Standard Trapped Type "B" Catch Basin detail for the invert information.
 - Sanitary sewers, storm sewers, and combined sewers delineated for demolition shall be removed from the project.
 - The Contractor shall be responsible for the dimensional layout surveying. The Contractor shall verify all control points and Temporary Benchmarks (TBM).
 - All road related dimensions are from the face of the curb.
 - The plumbing stub dimensions are for reference only, verify their location with the appropriate contractors.
 - Asphalt and concrete pavement and sidewalk repair for utility trenching shall have the trench compaction as per the specifications. The existing pavement shall be saw cut. The pavement section shall be equal to the existing pavement. The concrete pavement and sidewalks shall have the same finish and joint pattern.
 - The proposed elevations and spot elevations shown are finish grades. The finish grade shall be within +/-0.10 foot for landscaped areas and +/-0.05 for paved areas.
 - Proof roll all areas to receive any fill.
 - Areas that exhibit weak soil or otherwise unsuitable conditions shall be undercut to a firm level of soil followed by backfilling the undercut areas using an engineered fill.
 - Proof rolling shall be performed with a fully loaded 8 to 10 ton tandem dump truck with four passes. Areas that deflect more than 1 inch shall be stabilized or excavated to stiff soil. The proof rolling shall be approved by the Engineer.
 - Areas to be grassed or landscaped shall have a minimum of 4" of topsoil placed to establish the finish grade.
 - The site shall be kept clean and neat at all times.
 - The existing storm drains and pipe that are to remain on the project property shall be cleaned.
 - All asphalt paving shall be as per the Georgia Department of Transportation specifications.
 - Traffic signs and stripes shall be according to the GDOT and the City of Atlanta specifications. Atlanta Student Union Blvd stripes and markings shall be thermoplastic traffic stripe complying with GDOT specification Section 653. All other stripes and markings shall be paint complying with GDOT specification Section 652.
 - Where the proposed pavement abuts the existing pavement, the existing pavement shall be cut in a neat straight line through the pavement and base.
 - Water service is to be provided by the City of Atlanta Water Bureau. The water mains and fittings shall be installed as per the Bureau's standards.
 - These pressures shall be used in the testing of pressure lines: Water and Fire mains - working pressure = 125 psi. Water and Fire mains - design test pressure = 200 psi.
 - The water and fire mains shall be pressure tested and disinfected in accordance with AWWA standards and the Water Bureau requirements.
 - The Contractor shall coordinate the water meter and tap with the water utility. The Contractor shall pay all tapping and meter fees.
 - The water and fire mains shall have no less than 60-inches of cover.
 - All fittings, tees, and bends in the water and fire mains shall have thrust blocks as per the Water Bureau requirements.



- LEGEND:**
- A = ARC
 - ACEE = ARMY CORPS OF ENGINEERS
 - BWF = BARBED WIRE FENCE
 - CATV = CABLE TELEVISION RISER
 - CB = CHORD BEARING
 - CCR = CERTIFIED CORNER RECORDS
 - CCD = COMMUNITY DEVELOPMENT DISTRICT
 - CH = CHORD
 - CI = CURB INLET
 - CLF = CHAIN LINK FENCE
 - CMF = CORRUGATED METAL PIPE
 - CMF = CONCRETE MONUMENT FOUND CONC = CONCRETE
 - CL = CENTERLINE
 - D.E. = DRAINAGE EASEMENT
 - D.A.E. = DRAINAGE AND ACCESS EASEMENT
 - D.I.E. = DRAINAGE AND INGRESS/EGRESS EASEMENT
 - D.U. = DRAINAGE AND UTILITY EASEMENT
 - ELEV. = ELEVATION
 - EPHC = ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY
 - ESMT = EASEMENT
 - FCM = FOUND CONCRETE MONUMENT
 - FP = FOUND IRON PIPE
 - FPF = FOUND FOUND
 - FND = FOUND
 - FPK = FOUND PARKER-KALON NAIL
 - FN+D = FOUND NAIL & DIS
 - GA = GUY ANCHOR
 - HOA = HOMEOWNERS ASSOCIATION
 - HDPE = HIGH DENSITY POLYETHYLENE PIPE
 - ID = IDENTIFICATION
 - LB = LICENSED BUSINESS
 - LS = LANDSCAPE
 - LS = LICENSED SURVEYOR
 - REG = MATCH EXISTING GRADE
 - MH = MANHOLE
 - NRV = NON-RADIAL
 - NAVD = NORTH AMERICAN VERTICAL DATUM 1988
 - NGVD = NATIONAL GEODETIC VERTICAL DATUM 1929
 - NTS = NOT TO SCALE
 - O.R. = OFFICIAL RECORDS
 - PF = PLAT
 - PAPG = PER APPROVED GRADING PLAN
 - PB = PLAT BOOK
 - PI = POINT OF INTERSECTION
 - PC = POINT OF CURVATURE
 - PCP = POINT OF COMMENCEMENT
 - PCP = PERMANENT CONTROL POINT
 - PRC = POINT OF REVERSE CURVE
 - POB = POINT OF BEGINNING
 - POC = POINT OF COMMENCEMENT
 - PRM = PERMANENT REFERENCE MONUMENT
 - PLS = PROFESSIONAL LAND SURVEYOR
 - PSM = PROFESSIONAL SURVEYOR & MAPPER
 - PASP = PER APPROVED SIDEWALK PLAN
 - PL = PROPERTY LINE
 - PR = RADIAL
 - RAD = RADIUS
 - RCP = REINFORCED CONCRETE PIPE
 - REG = REGISTERED
 - R/W = RIGHT-OF-WAY
 - RS = SURVEY
 - SEC = SECTION
 - TWP = TOWNSHIP
 - RGE = RANGE
 - RS = ROK-PIR SET
 - SN+D = SET NAIL & DISK
 - SPK = SET PARKER-KALON NAIL
 - SWFWMD = SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
 - TBM = TEMPORARY BENCHMARK
 - TYP. = TYPICAL
 - UD&E = UTILITY AND DRAINAGE INGRESS/EGRESS EASEMENT
 - U.E. = UTILITY EASEMENT
 - W.C. = WITNESS CORNER
 - WC&L = WETLAND CONSERVATION EASEMENT LINE
 - WC&L = WETLAND CONSERVATION AREA SETBACK LINE
 - WF = WOOD FENCE
 - WLBE = WALL LANDSCAPE AND BUFFER EASEMENT



- STRIPING NOTES:**
- THE ATLANTA HOUSING AUTHORITY MAY REQUIRE THE CONTRACTOR TO ADJUST PAVEMENT MARKING LOCATIONS, OFF-SETS AND TYPES OF MARKINGS PRIOR TO APPLICATION.
 - ALL CONFLICTING PAVEMENT MARKINGS SHALL BE OBLITERATED BY MEANS OF WATER BLASTING TO BE COMPLETED BY THE CONTRACTOR.
 - A SEALANT APPROVED BY GDOT SHALL BE APPLIED TO ALL AREAS OF PAVEMENT MARKING OBLITERATION.
 - ALL PAVEMENT MARKING MATERIALS AND INSTALLATION SHALL CONFORM TO GDOT STANDARD DRAWINGS AND SPECIFICATIONS, THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (LATEST GDOT APPROVED EDITION), AND DIRECTION FROM THE ATLANTA HOUSING AUTHORITY AT THE TIME OF APPLICATION.
 - PAVEMENT MARKINGS SHALL REQUIRE TWO SEPARATE APPLICATIONS. THE INITIAL APPLICATION SHALL BE ENTIRELY IN PAINT TO INCLUDE ALL LANE LINES, CROSS-WALKS AND STOP BARS. THE CONTRACTOR SHALL RETURN 30-45 DAYS FOLLOWING THE INITIAL PAINT INSTALLATION AND RESTRIPE THE ENTIRE PROJECT IN THERMOPLASTIC OR AS DIRECTED BY THE ATLANTA HOUSING AUTHORITY.
- SIGNING PLAN NOTES:**
- THE ATLANTA HOUSING AUTHORITY MAY REQUIRE THE CONTRACTOR TO ADJUST SIGNING LOCATIONS, OFF-SETS AND TYPES OF MARKINGS AT THE TIME OF APPLICATION.
 - ALL SIGNING MATERIALS AND INSTALLATION SHALL CONFORM TO GDOT STANDARD DRAWINGS AND SPECIFICATIONS, THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (LATEST GDOT APPROVED EDITION), AND DIRECTION FROM THE ATLANTA HOUSING AUTHORITY AT THE TIME OF APPLICATION.
 - PAVEMENT MARKINGS SHALL REQUIRE TWO SEPARATE APPLICATIONS. THE INITIAL APPLICATION SHALL BE ENTIRELY IN PAINT TO INCLUDE ALL LANE LINES, CROSS-WALKS AND STOP BARS. THE CONTRACTOR SHALL RETURN 30-45 DAYS FOLLOWING THE INITIAL PAINT INSTALLATION AND RESTRIPE THE ENTIRE PROJECT IN THERMOPLASTIC OR AS DIRECTED BY THE ATLANTA HOUSING AUTHORITY.
 - ALL SIGNS AND SIGN POSTS SHALL BE INSTALLED PER GDOT STANDARDS AND SPECIFICATIONS.
 - FINAL ACCEPTANCE OF ALL SIGNINGS SHALL BE PROVIDED BY THE ATLANTA HOUSING AUTHORITY.

24 HOUR CONTACT:
 MR. Wm. James Talley Jr.
 PHONE: 404-817-7291

LOWE ENGINEERS 990 HAMMOND DRIVE SUITE 900 ATLANTA, GA 30328 TEL: 770-857-8400 FAX: 770-857-8401

#	DATE	CHANGE DESCRIPTION
1	08/07/2020	ADDENDUM 2 - PERMIT REVISIONS

Roosevelt Hall
 685 Adams Student Movement Boulevard
 Atlanta, GA 30314
 FOR
ATLANTA HOUSING

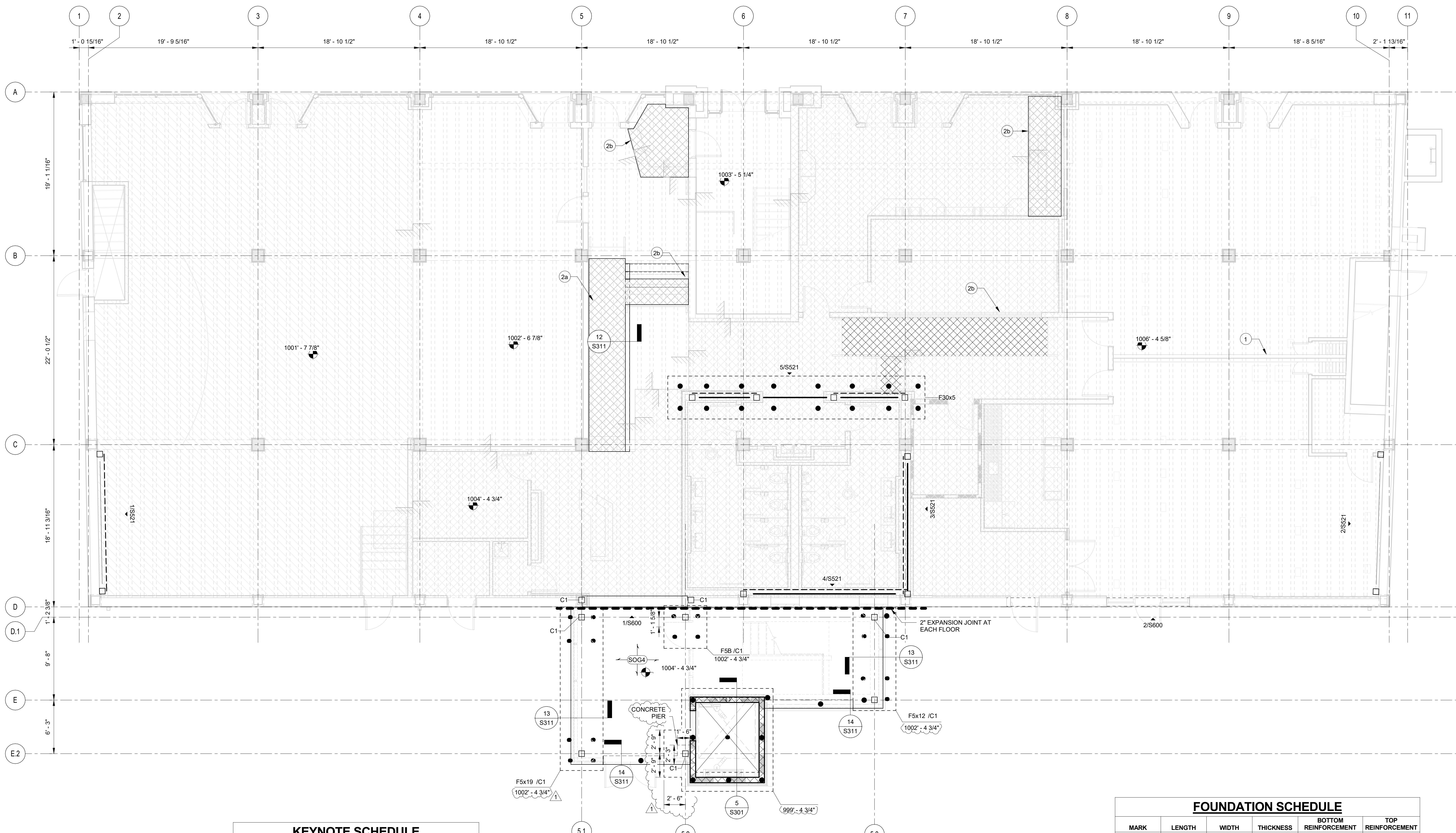
1201 W PEACHTREE STREET SUITE 750 ATLANTA, GA 30309
 PHONE: (470) 480-7590

MOODY-NOLAN

CONSTRUCTION DETAILS

05-08-2020
 DRAWN BY: JRB CHECKED BY: GFO
 Proj. # 18489.01
C11.00
 ISSUED FOR CONSTRUCTION

GEORGIA REGISTERED PROFESSIONAL ENGINEER
 No. 15311
 JOHN C. O'BRIEN



NOTE	CONTENT
1	SEE 4/S502 AND 6/S502 FOR OPERABLE WALL SUPPORT DETAILS.
2a	SEE 12/S311 FOR BUILT UP FRAMING AT PLATFORM. EXISTING JOISTS UNDER NEW CFS OVERBUILT REINFORCED WITH FIBER REINFORCED POLYMER PER FRP PROVIDER REQUIREMENTS BASED ON ADDITIONAL NEGATIVE MOMENT OF 2.5 K'FT AND ADDITIONAL POSITIVE MOMENT OF 3 K'FT.
2b	SEE 12/S311 FOR BUILT UP FRAMING AT BUILT UP PLATFORM
3	NEW FOUNDATIONS TO MATCH ELEVATION OF EXISTING FOUNDATIONS
4	NEW RECONFIGURED STAIR DESIGN PER SPEC CRITERIA.
5	NEW OPENING AT SLAB FOR STAIRS. SAWCUT EXISTING SLAB AND JOISTS BETWEEN GIRDERS. ADD NEW STEEL BEAM UNDER NEW CFS WALLS.
6	EXISTING CONCRETE BEAMS TO REINFORCED FOR LOSS IN CONTINUITY. PROVIDE WRAP IN FIBER REINFORCED POLYMER PER FRP PROVIDER BASED ON ADDITIONAL POSITIVE MOMENT OF 8 K'FT @ EA BEAM.
7	SEE 6/S503 FOR SCREENWALL FRAMING
8	NEW HSS8X8X3/8 COLUMN TO POST UP FROM EXISTING ROOF. SEE DETAIL 13/S502 FOR CONNECTION INFORMATION.
9	APPROXIMATE DRAIN LOCATION. DRAIN LOCATION CORRESPONDS TO LOW POINT IN SLOPING SLAB. SEE ARCHITECTURAL DRAWINGS FOR SLAB SLOPE.
10	NEW OPENINGS IN EXISTING CONCRETE SHEAR WALL. MAXIMUM ALLOWABLE OPENING = 8'-0" IN WIDTH. COORDINATE WITH MEP REQUIREMENTS. SEE DETAIL 11/S301 FOR REQUIRED FRAMING AT NEW OPENING.
11	EXISTING SLAB INFILL FOR OPENINGS LESS THAN 2'-0" SEE DETAIL 15/S502. FOR OPENINGS LARGER THAN 2'-0" SEE DETAILS 10 & 11/S502.

LEVEL 1.0 FRAMING PLAN
SCALE: 3/16" = 1'-0"

- FOUNDATION PLAN NOTES:**
- 4" CONCRETE SLAB-ON-GROUND REINFORCED W/ WWR 8x8xW2.1xW2.1 @ 1'-1/2" BELOW T/SLAB OVER 6" CRUSHED STONE BASE (SEE ARCH FOR VAPOR RETARDER LOCATIONS).
T/SLAB = SEE CIVIL REF T/SLAB @ 0'-0"
 - BASE PLATE MARK - SEE 11/S301
 - COLUMN MARK (SEE SCHEDULE ON THIS SHEET)
 - FOUNDATION MARK (SEE SCHEDULE ON THIS SHEET) FH / CH / BP#
 - TOP OF FOOTING ELEVATION - #'-#"
 - SUBMIT PROPOSED SLAB-ON-GROUND CONSTRUCTION OR CONTRACTION JOINT LOCATIONS. SEE SCHEMATIC CJ PLAN (1/S311)
 - FOR TRENCHES ADJACENT TO FOUNDATIONS - SEE 1/S301 FOR PIPING PASSING UNDER WALL FOUNDATIONS - SEE 2/S301 PIPING PASSING UNDER FOOTING SHALL BE PLACED AND INSPECTED BEFORE FOUNDATIONS ARE PREPARED.
 - GENERAL CONTRACTOR SHALL COORDINATE PLUMBING AND UTILITIES LOCATIONS WITH FOUNDATIONS AS NEEDED. ADDITIONALLY GC SHALL COORDINATE FOUNDATION ELEVATIONS WITH PLUMBING AND UTILITIES AS NEEDED. FORWARD ANY FOUNDATION LOCATION CHANGE REQUESTS TO STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
 - DENOTES STEP IN FOUNDATION - SEE 3/S301

- SEE ARCHITECTURAL DRAWINGS FOR:
 - ALL SLOPED SLAB AREAS (MAINTAIN SLAB THICKNESS NOTED ON PLAN AS A MINIMUM IN ALL AREAS).
 - ALL DEPRESSED SLAB AND/OR RAISED SLAB AREAS (MAINTAIN SLAB THICKNESS NOTED ON PLAN AS A MINIMUM IN ALL AREAS).
 - ALL DIMENSIONS NOT SHOWN, VERIFY ALL DIMENSIONS SHOWN IN STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES OR DIMENSIONS NOT SHOWN ON ARCHITECTURAL DRAWINGS FOR CLARIFICATION.
- INSTALL THICKENED SLAB UNDER STAIR STRINGER - SEE 10/S311
- INSTALL REINFORCING AT CONCRETE WALL CORNERS AND INTERSECTIONS - SEE 9/S301
- INSTALL REINFORCING AT OPENINGS IN CONCRETE WALLS - SEE 10/S301
- FOR CONSTRUCTION AND CONTRACTION JOINT REQUIREMENTS FOR CONCRETE WALLS - SEE 9/S301
- WCJ DENOTES CMU WALL CONTROL JOINT - SEE 2/S001
- DENOTES STEP IN TOP OF SLAB.
- DENOTES 8" LOAD BEARING CMU WALL REINFORCED WITH #5 @ 32" OC. SEE SHEET 5001 FOR GENERAL DETAILING AND REQUIRED REINFORCING.
- DENOTES HELICAL PIER. ASSUMED COMPRESSION CAPACITY = 60 KIP.

FOUNDATION SCHEDULE					
MARK	LENGTH	WIDTH	THICKNESS	BOTTOM REINFORCEMENT	TOP REINFORCEMENT
F5B	5'-0"	5'-0"	1'-2"	(5) - #6 EACH WAY	(5) - #6 EACH EAY
F5x12	12'-0"	5'-0"	2'-0"	(5) - #6 LONG, (12) - #6 SHORT	(5) - #6 LONG, (12) - #6 SHORT
F5x19	19'-0"	5'-0"	2'-0"	(5) - #6 LONG, (19) - #6 SHORT	(5) - #6 LONG, (19) - #6 SHORT
F30x5	30'-0"	5'-0"	2'-0"	(5) - #6 LONG, (19) - #6 SHORT	(5) - #6 LONG, (19) - #6 SHORT

COLUMN SCHEDULE	
MARK	SIZE
C1	HSS8X8X3/8

PES STRUCTURAL ENGINEERS
ADDRESS: 1852 Century Place NE, Suite 201, Atlanta, Georgia 30345
PHONE: 770.457.5923 FAX: 770.457.9999 WEB: www.pesengineers.com
PES PROJECT NUMBER: 0219206
PES GEORGIA COA NUMBER: PEF000799
EXPIRATION DATE: 06/30/2020

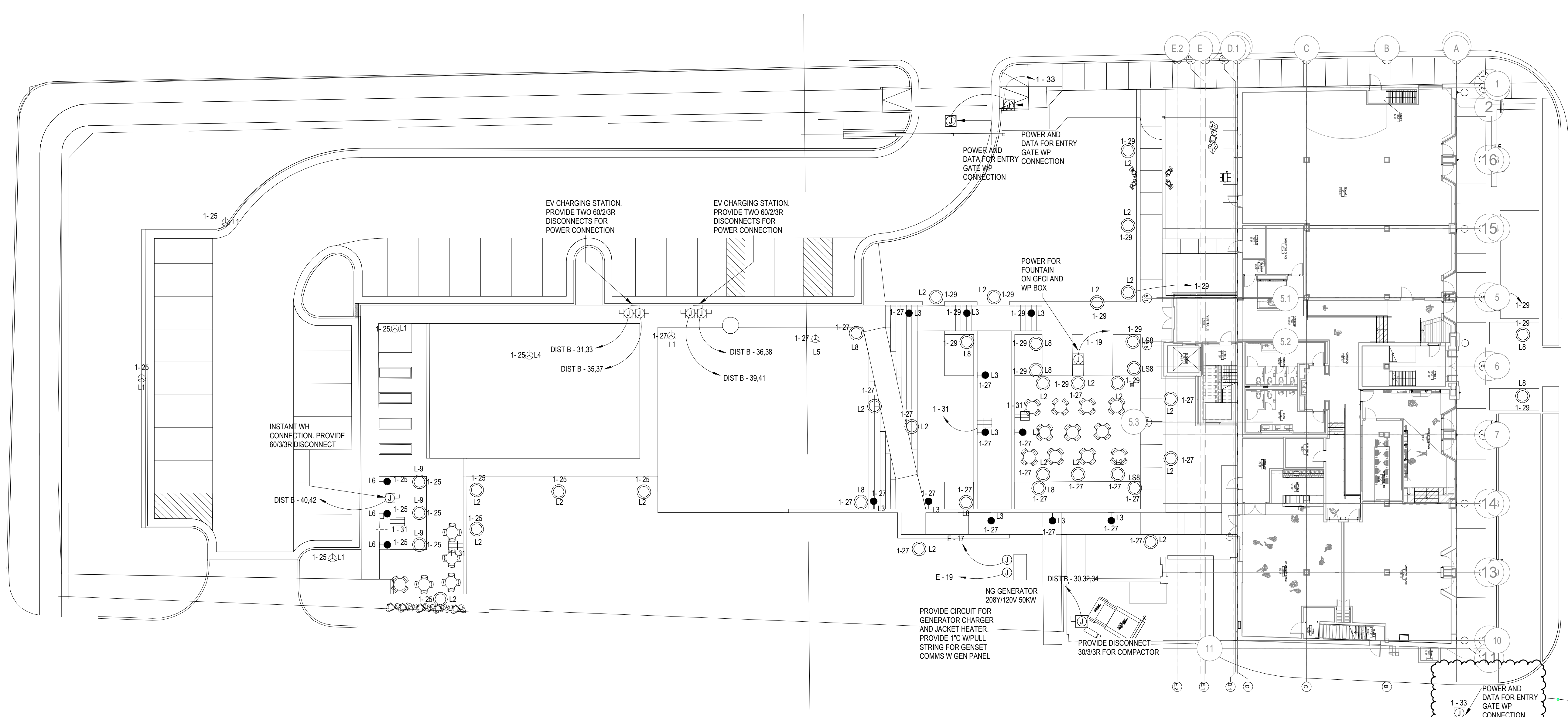
ATLANTA HOUSING
ROOSEVELT HALL
660 Atlanta Student Movement Boulevard
Atlanta, GA 30314
FOR
ATLANTA HOUSING
1201 W PEACHTREE STREET
SUITE 750
ATLANTA, GA 30309
PHONE: (470) 480-7590
MOODY-NOLAN

DRAWING TITLE:
LEVEL 01 FRAMING PLAN

05-08-2020	DRAWN BY: MLB	CHECKED BY: CAF
Proj. # 18489.01		
S101		
ISSUED FOR CONSTRUCTION		

SITE LIGHTING NOTES:

1. REFER TO LIGHTING CONSULTANT DRAWINGS FOR LUMINAIRE TYPES, LAYOUT AND CONTROL REQUIREMENTS.
2. LIGHTING SHALL SATISFY ASHRAE 2013 CONTROL REQUIREMENTS SHOWN IN CONTROL MATRIX (SHEET E-002).
3. COORDINATE ALL UNDERGROUND LIGHTING RUN WITH CIVIL PLANS AND WATER AND GAS UTILITIES FOR MINIMUM CLEARANCES AND EASEMENTS.
4. ALL UNDERGROUND SHALL BE IN CONDUIT WITH MINIMUM 18" BURIAL DEPTH. PROVIDE PULLBOXES / HANDHOLES AS REQUIRED.
5. CONDUITS PASSING UNDER DRIVEWAYS AND HEAVY VEHICULAR TRAFFIC WAYS SHALL BE REINFORCED IN CONCRETE.
6. POLE MOUNTED LUMINAIRES SHALL BE FULL CUTOFF.
7. EXTERIOR BUILDING MOUNTED LIGHTING SHOWN ON E201



1 SITE PLAN - ELECTRICAL
Scale: 1/16" = 1'-0"

#	DATE	CHANGE DESCRIPTION
1	08-07-2020	ADDENDUM 2 - PERMIT REVISIONS

ROOSEVELT HALL
660 Atlanta Student Movement Boulevard
Atlanta, GA 30314
FOR
ATLANTA HOUSING

1201 W PEACHTREE STREET
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ATLANTA, GA 30309
PHONE: (470) 480-7590

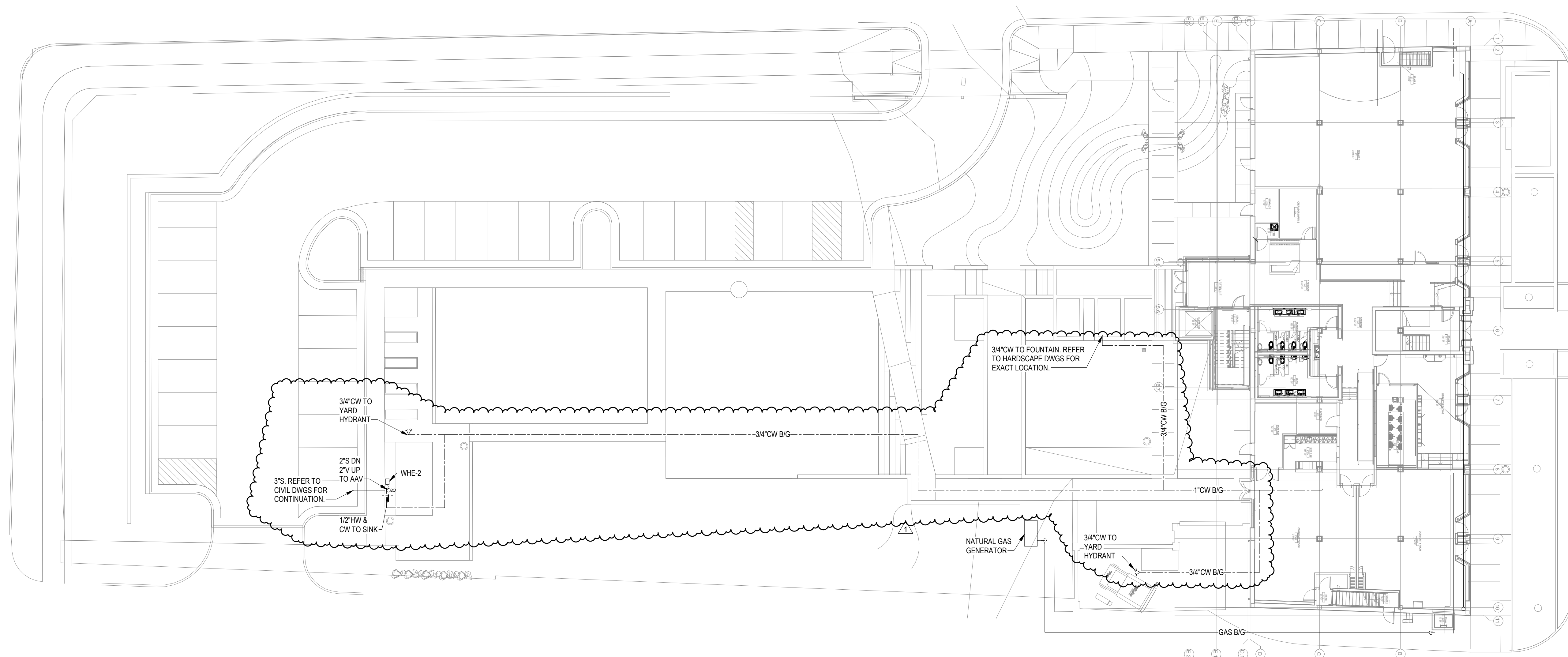
MOODY-NOLAN

DRAWING TITLE:
SITE PLAN

05-08-2020
DRAWN BY: Author CHECKED BY: Checker
Proj. # 1910636
E010
ISSUED FOR CONSTRUCTION

JSE Jordan & Skala Engineers
4275 Shackelford Road, Suite 200 • Norcross, GA 30093
p. 770.447.5541 • f. 770.448.0262
Project Number: Proj. # 1910636 Drawn By: Author Checked By: Checker





1 SITE PLAN - PLUMBING
Scale: 1/16" = 1'-0"

#	DATE	CHANGE DESCRIPTION
1	08-07-2020	ADDENDUM 2 - PERMIT REVISIONS

ROOSEVELT HALL
660 Atlanta Student Movement Boulevard
Atlanta, GA 30314
FOR
ATLANTA HOUSING

1201 W PEACHTREE STREET
SUITE 750
ATLANTA, GA 30309
PHONE: (470) 480-7590

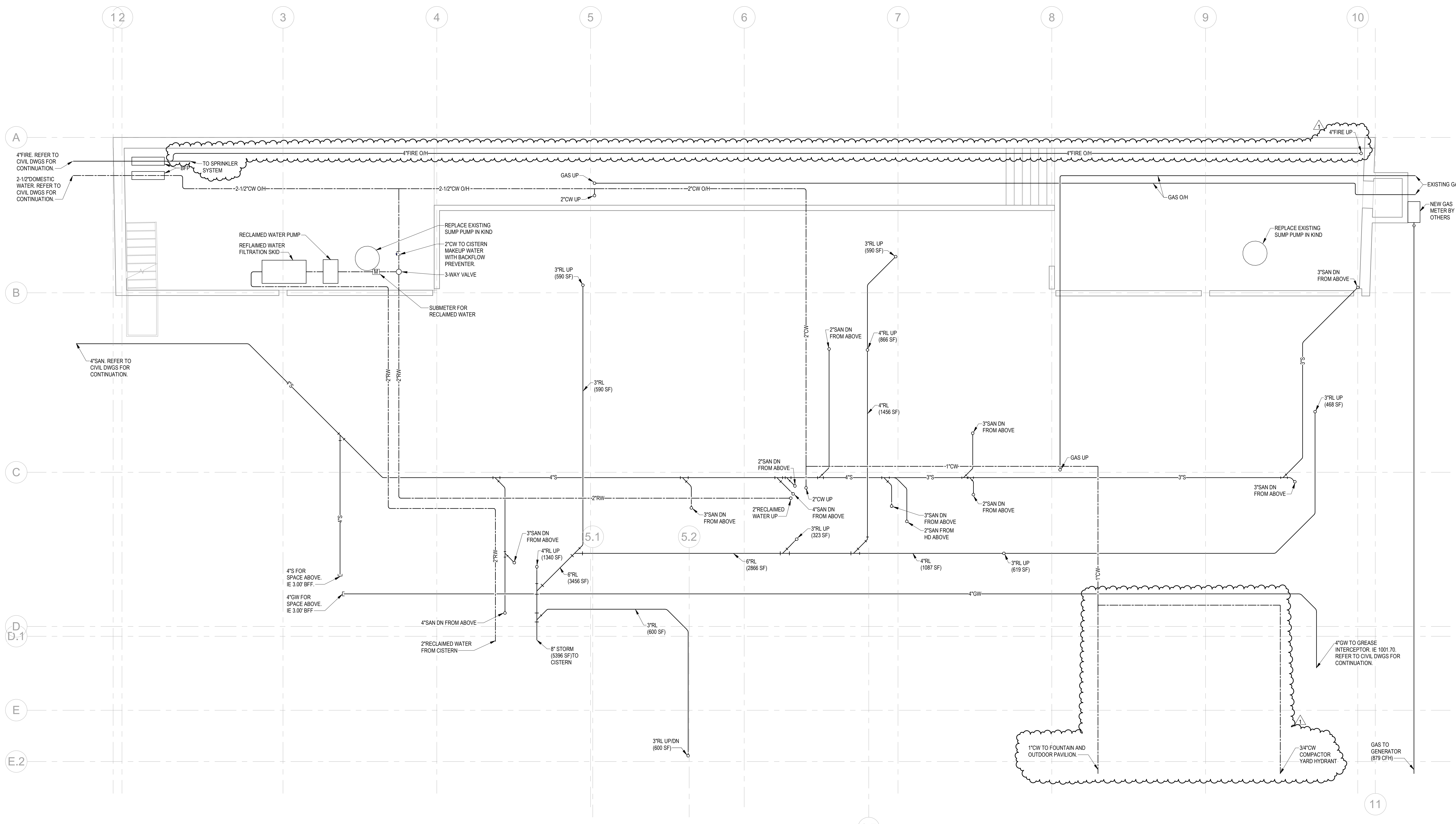
MOODY-NOLAN

DRAWING TITLE:
SITE PLAN

JSE Jordan & Skala Engineers
4275 Shackleford Road, Suite 200 • Norcross, GA 30093
p. 770.447.5547 • f. 770.448.0262
Project Number: Proj. # 1910636 Drawn By: Author Checked By: Checker

05-08-2020
DRAWN BY: Author CHECKED BY: Checker
Proj. # 1910636
P010
ISSUED FOR CONSTRUCTION

5/2/20



1 LEVEL 00 - FLOOR PLAN - PLUMBING
Scale: 3/16" = 1'-0"

DOMESTIC WATER PRESSURE BOOSTER SYSTEM																
EQUIP NO.	SERVICE LOCATION	NO OF PUMPS	GPM/FA PUMP	SYSTEM PRESSURE VALUES			MOTOR DATA AND VALUES			CONTROL PANEL			DESIGN BASIS MODEL			
				TDH (ft)	SUCTION (PSI)	BOOST (PSI)	SET (PSI)	HPM	HP	KW FIVE	VOLTAGE	PHASE		FULL LOAD	MAX SCCE	
1		1	40	260.53	0.87	69.52	69.39	3.450	5	1122.751	460	3-Phase	34.8	100KVA	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	QUANTUMFLO GENUS. SUPPLY QWS_3094 (1500M)

- NET BOOST PRESSURE IS CALCULATED BY SYSTEM SET PRESSURE MINUS SUCTION PRESSURE LESS SYSTEM LOSSES OF 5 PSI
- SYSTEM SUBMITTALS SHALL INCLUDE CERTIFICATE NUMBER FOR NEMA 1 CERTIFICATION, UL508A AND QCC3 3RD PARTY COMPLIANCE.
- SYSTEM CONTROLS MUST COMPLY WITH AND PROVIDE FOR EITHER CONTROL LOGIC OR REMOTE SENSING IN ACCORDANCE WITH ANSI/ASHRAE STANDARD 90.1 ENERGY STANDARD.
- PROVIDE 5-YEAR WARRANTY ON COMPLETE SYSTEM AND INCLUDE WARRANTY CERTIFICATE WITH DETAILS IN SUBMITTALS.
- SYSTEM SHALL BE PRE-SET FOR SYSTEM SITE CONDITIONS BY SIMULATING SUCTION PRESSURE. BYPASS IS FOR ONLY TESTING IS NOT ACCEPTABLE.
- THE INDUSTRIAL CONTROL SHALL BE IN COMPLIANCE WITH CURRENT NEC, SECTION 430 HAVING A MAXIMUM 30% AVAILABLE FAULT CURRENT.
- SIZE RATINGS MUST BE INCLUSIVE OF ALL COMPONENTS WITHIN THE ENCLOSURE WITHOUT THE NEED TO PROVIDE ADDITIONAL SYSTEM PROTECTION.
- EQUAL SYSTEMS MUST SHOW MATHEMATICAL ANALYSIS PROVING THAT THE ALTERNATE SUPPLIER MEETS OR EXCEEDS THE IN CAPACITY LISTED.
- PROVIDE THE FOLLOWING OPTIONS, NONE REQUIRED.
- REPRESENTATIVE: GEORGIA WATER TANKS PHONE: (404) 991-0404
- BASED ON CALQ(FOR) PROJECT NUMBER: 15063 TITLED: ROOSEVELT HALL RAHWAFLE - BOOSTER

RECLAIMED OR RAINWATER HARVESTING SYSTEM SKID PACKAGE													
EQUIP. NO.	SERVICE LOCATION	SYSTEM CONFIGURATION	FILTERED PARTICULATE	UV/ DOSAGE	CISTERN LEVEL	ALTERNATE MAKE-UP	CONTROL PANEL					NOTES	
							VOLTAGE	CYCLES	PHASE	FLA	MAX. SCRR		REMARKS
		Above Grade Cistern Pump-Through	30 MICRON	30 mi	Up to 18ft	2"	N/A	N/A	N/A	N/A	N/A	1, 2, 3, 4, 5, 6, 7, 8	QUANTUMFLO

- SYSTEM SUBMITTALS SHALL INCLUDE CERTIFICATE NUMBER FOR, UL508A AND 3RD PARTY COMPLIANCE.
- PROVIDE 18-MONTH WARRANTY ON COMPLETE SYSTEM SKID AND INCLUDE WARRANTY CERTIFICATE WITH DETAILS IN SUBMITTALS.
- SYSTEM SHALL BE FACTORY TESTED FOR CORRECT OPERABILITY AND PRESSURE.
- THERE IS NO CONTROL PANEL WITH THIS SYSTEM. SEE BOOSTER PUMP SCHEDULE FOR DETAILS.
- FOR THE JUDO FILTER, AND UV STERILIZER THREE 115VAC WALL SOCKETS WILL BE REQUIRED FOR THESE DEVICES.
- STANDARD MONITORING PROTOCOL WILL INCLUDE BACNET OR MODBUS, DISCREET COMMUNICATIONS AS STANDARD.
- REPRESENTATIVE: GEORGIA WATER TANKS PHONE: (404) 991-0404
- BASED ON CALQ(FOR) PROJECT NUMBER: 15063 TITLED: ROOSEVELT HALL

#	DATE	CHANGE DESCRIPTION
1	08-07-2020	ADDENDUM 2 - PERMIT REVISIONS

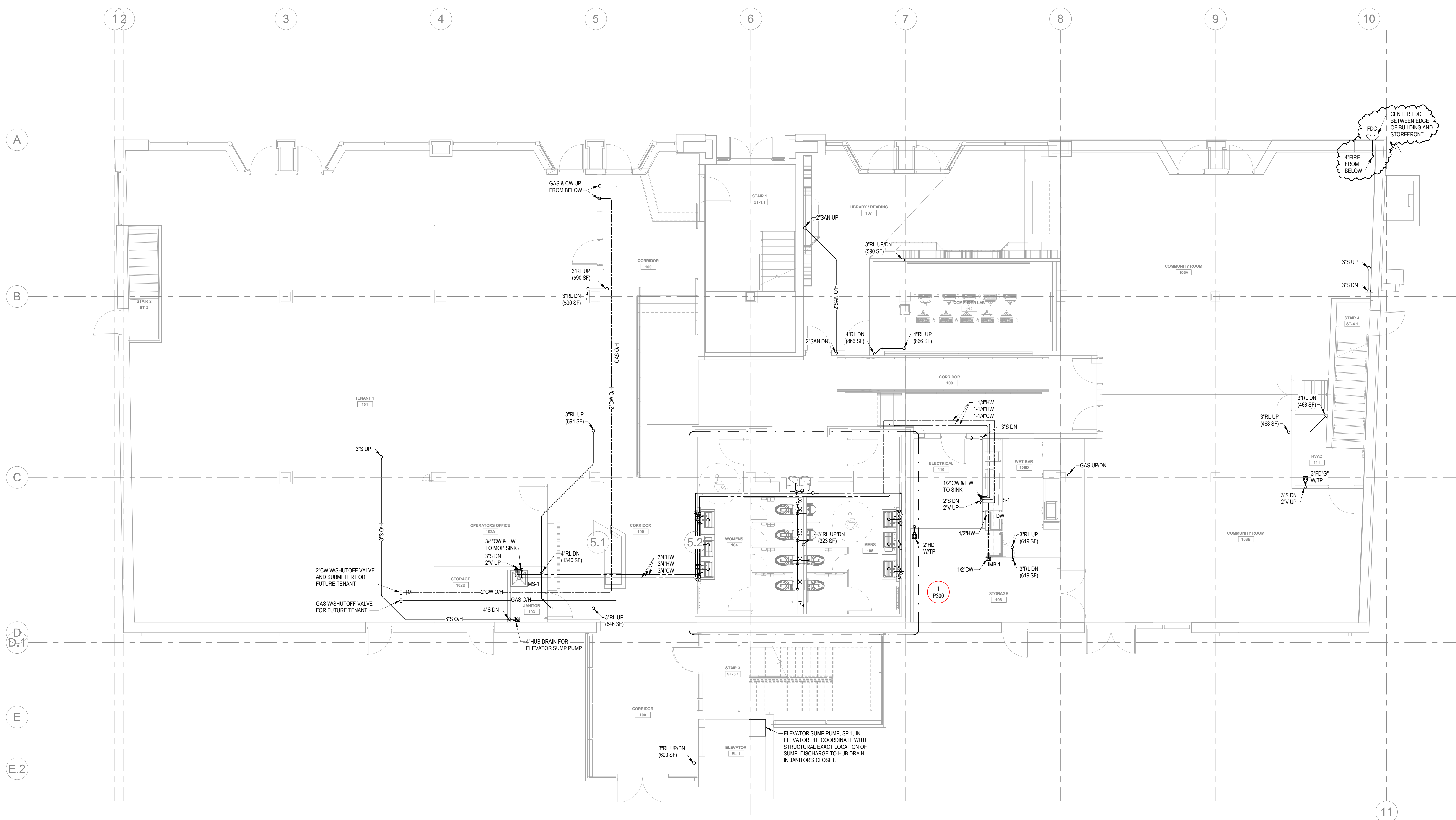
ROOSEVELT HALL
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Atlanta, GA 30314
FOR
ATLANTA HOUSING

1201 W PEACHTREE STREET
SUITE 750
ATLANTA, GA 30309
PHONE: (470) 480-7590

DRAWING TITLE:
LEVEL 00 - FLOOR PLAN - PLUMBING

05-08-2020
DRAWN BY: JH CHECKED BY: EE
Proj. # 1910636
P100
ISSUED FOR CONSTRUCTION

JSE Jordan & Skala Engineers
4275 Shackleford Road, Suite 200 • Norcross, GA 30093
p. 770.447.5541 • f. 770.448.0262
Project Number: Proj. # 1910636 Drawn By: JH Checked By: EE



1 LEVEL 01 - FLOOR PLAN - PLUMBING
 Scale: 3/16" = 1'-0"
 0 4 8 16

#	DATE	CHANGE DESCRIPTION
1	08-07-2020	ADDENDUM 2 - PERMIT REVISIONS

ROOSEVELT HALL
 660 Atlanta Student Movement Boulevard
 Atlanta, GA 30314

FOR
ATLANTA HOUSING

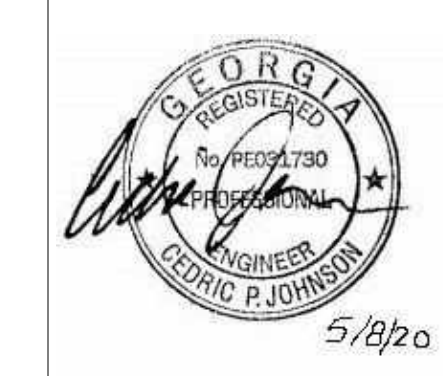
1201 W PEACHTREE STREET
 SUITE 750
 ATLANTA, GA 30309
 PHONE: (470) 480-7590

MOODY-NOLAN

DRAWING TITLE:
LEVEL 01 - FLOOR PLAN - PLUMBING

05-08-2020
 DRAWN BY: JH CHECKED BY: EE
 Proj. # 1910636
P101
 ISSUED FOR CONSTRUCTION

JSE Jordan & Skala Engineers
 4275 Shackleford Road, Suite 200 • Norcross, GA 30093
 p. 770.447.5541 • f. 770.448.0262
 Project Number: Proj. # 1910636 Drawn By: JH Checked By: EE



"General Decision Number: GA20200134 01/31/2020

Roosevelt Hall Renovations
Pre-Bid Date 07/27/2020

Superseded General Decision Number: GA20190134

State: Georgia

Construction Type: Building

County: Fulton County in Georgia.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/31/2020

ASBE0048-001 04/01/2019

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 28.12	16.26

ASBE0048-002 04/01/2019

	Rates	Fringes
FIRESTOPPER.....	\$ 28.12	16.26

BOIL0026-001 03/01/2018

	Rates	Fringes
BOILERMAKER.....	\$ 28.97	22.39

CARP0225-001 07/01/2016

	Rates	Fringes
CARPENTER (Drywall Finishing,		

Drywall Hanging, and Metal Stud Installation).....\$ 23.40 6.80

* ELEV0032-001 01/01/2020

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 42.72	35.245

PAID HOLIDAYS:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

 ENGI0926-001 07/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR: Backhoe/Excavator, Bobcat/Skid Loader/Skid Steer, Bulldozer, Forklift, and Loader.....	\$ 23.24	10.43
Crane.....	\$ 30.63	10.88
Oiler.....	\$ 22.35	11.08

 PAIN1940-001 10/01/2017

	Rates	Fringes
GLAZIER.....	\$ 22.35	9.81

FOOTNOTE: Paid holidays: Thanksgiving Day, Christmas Day, New Year's Day, National Memorial Day, July 4th and Labor Day; if the employee works the day before and the day after the holiday.

 PLUM0072-023 08/01/2018

	Rates	Fringes
PLUMBER.....	\$ 28.48	15.91

 PLUM0072-024 08/01/2018

	Rates	Fringes
PIPEFITTER (Including Installation of HVAC Pipe, HVAC Unit, & HVAC Electrical /Temperature Controls).....	\$ 28.48	15.91

 SHEE0085-001 07/01/2017

	Rates	Fringes
SHEET METAL WORKER (Including HVAC Duct Installation;		

Excluding Metal Roof
Installation).....\$ 31.54 13.58

SUGA2012-053 08/11/2012

	Rates	Fringes
ACOUSTICAL CEILING MECHANIC.....	\$ 15.00	0.00
ALARM INSTALLER.....	\$ 18.49	3.88
BRICKLAYER.....	\$ 16.00	0.00
CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Finishing/Taping, Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 17.86	3.62
CEMENT MASON/CONCRETE FINISHER...	\$ 15.08	3.36
ELECTRICIAN (Low Voltage Wiring and Installation of Sound and Communication Systems).....	\$ 22.44	5.42
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms and Sound and Communication Systems.....	\$ 22.78	5.27
FLOOR LAYER (Carpet, Vinyl and Resilient Flooring).....	\$ 20.00	0.00
FORM WORKER.....	\$ 12.20	0.49
INSULATOR (Batt, Blown and Foam).....	\$ 17.67	0.14
IRONWORKER, REINFORCING.....	\$ 20.48	8.41
IRONWORKER, STRUCTURAL.....	\$ 20.00	0.35
LABORER: Common or General.....	\$ 11.39	0.00
LABORER: Flagger.....	\$ 13.44	0.00
LABORER: Landscape.....	\$ 12.19	0.00
LABORER: Mason Tender - Brick...	\$ 9.00	0.00
LABORER: Pipelayer.....	\$ 12.00	0.23
OPERATOR: Asphalt Spreader.....	\$ 16.53	0.00
OPERATOR: Grader/Blade.....	\$ 17.52	0.00
OPERATOR: Roller.....	\$ 14.49	0.00
OPERATOR: Screed.....	\$ 14.17	0.00
PAINTER: Brush, Roller and Spray.....	\$ 16.00	1.62

ROOFER, Excludes Installation of Metal Roofs.....	\$ 10.49	0.64
SHEET METAL WORKER (Metal Roofs Installation).....	\$ 21.75	0.00
SPRINKLER FITTER (Fire Sprinklers).....	\$ 22.69	12.30
TILE FINISHER.....	\$ 10.36	0.00
TILE SETTER.....	\$ 20.00	0.00
TRUCK DRIVER: Dump Truck.....	\$ 16.05	2.92
TRUCK DRIVER: Lowboy Truck.....	\$ 17.41	0.00

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

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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

Survey Rate Identifiers

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

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

=====
END OF GENERAL DECISION"

ATTENDANCE SHEET

PROJECT Roosevelt Hall - Atlanta Housing

DATE August 5, 2020

PROJECT NO. R18489.01

TIME 10:00am-12:00pm

PHASE Pre-Bid Walk Through #3

LOCATION 600 Student Movement Boulevard

NAME	SIGNATURE	COMPANY	EMAIL
1 Anthony Charleston		Charleston BS	Mestra 1965 @ comcast.net
2 Jonathan Ervin		Green Circle	jervin@greencircle.com
3 Stan Crozier		AT	529348@att.com
4 JEFF SAJANE		MASSEY DIXIE	JEFF@MDIXIE.COM
5 Dale Maloney		DAKIN AK	dale.maloney@dakinapplied.com
6 Darius Gnthn		Dependable Solution	dependable_solution@gmail.com
7 Blake Vaughn		GE6	Blake@geenvironmentalgroup.com
8 Robin Hetzel		ECT	rhetzel@envconinc.com
9 RONNIE HERMAN		AEI	RHAPPLE@DRLOM.NET
10 Don Hodges		MSI	dhodges@midsweststeel.net
11 PATRICK JOHNSON		MSI	PJOHNSON@MIDSWESTSTEEL.NET
12 FRANK FRANCIS		MSI	francis@midsweststeel.net
13 Deen Shareef		ARS Mech	ds_hareef@arsmechanical.com
14 Carlos Soto		Wiring Solution	info@yourwiringolutions.com
15 Sadeet Nichols		ARS Mech	snichols@arsmechanical.com
16			
17			
18			





THE HOUSING AUTHORITY OF THE CITY OF ATLANTA, GEORGIA
ADDENDA ACKNOWLEDGEMENT FORM

SOLICITATION #	IFB-2020-0159
SOLICITATION TITLE	Roosevelt Hall Renovations

The undersigned hereby acknowledges the following Addendum to the above noted solicitation. The undersigned hereby further acknowledges that its proposal response includes allowances for all of the amended provisions and requirements of the Scope of Work / Specifications, solicitation document and Addenda associated with the above noted solicitation and each has been taken into consideration.

**FAILURE TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM
MAY SUBJECT YOUR FIRM TO DISQUALIFICATION**

ADDENDUM # 1	ISSUANCE DATE -	7/31/2020-----
ADDENDUM # 2	ISSUANCE DATE -	8/7/2020-----
ADDENDUM #	ISSUANCE DATE -	-----
ADDENDUM #	ISSUANCE DATE -	-----
ADDENDUM #	ISSUANCE DATE -	-----

DATE	
COMPANY PROVIDING OFFER	
NAME/TITLE OF PERSON PROVIDING OFFER	
COMPANY ADDRESS	
COMPANY PHONE NUMBER	
COMPANY FAX NUMBER	
PERSON PROVIDING OFFER E-MAIL ADDRESS	
SIGNATURE OF PERSON PROVIDING OFFER	

Upon completion of this document, please email to ifb@atlantahousing.org