



ADDENDUM NO. 5:

Date: March 28, 2017
 Project: The EDGE Business Resource Center
 Owner: The City of Tuscaloosa
 Owner's Project No: A16-1320 (Previously City #A14-1210)
 Architect: Ward Scott Architecture, Inc.

This Addendum forms a part of the Contract Documents and modifies the original Bid Documents dated July 30, 2015, as noted below.

Acknowledge receipt of this Addendum in the location provided on the Bid Proposal Form.

1.1 GENERAL

A. N/A

1.2 SPECIFICATIONS AND DRAWINGS

A. Specifications:

1. Refer to Front End Documents
 - a. Davis-Bacon Wage Rates are located after the List of Certified Surety Companies and before the EDA Contracting Guidelines. Wage Rates are attached to this addendum for reference.
 - 1) Wage rates for Fire Sprinkler Fitters shall utilize 'Plumber' classification for bidding purposes.
2. Refer to Trade Package Summaries of Work
 - a. EDGE – 01 Site Work Trade Package will be responsible for exterior concrete pavement, curb and gutter, valley gutter, sidewalks, standup curb, permanent post mounted signs, truncated domes and parking stops per the unit price schedule. This trade package is responsible for the Sitework Unit Price Schedule in its entirety.
 - b. EDGE – 02 General Trade Package will no longer be responsible for these items. Revise Scope of work Item #24 as follows:

24. This Trade Contractor is responsible for concrete for interior slabs-on-grade, interior slabs on metal deck, foundations, footings, piers, beams, below grade block fill and reinforcing steel, housekeeping pads, ~~sidewalks, concrete paving, curb and gutter, concrete formed inlets, valley gutter, patios, door stoops~~ **and all** reinforcing, reinforcing accessories, excavation spoil removal from site, backfill, fine grading, saw cutting/control joints, paving joint sealants, curing, porous under slab fill, termite pretreat, vapor barriers, exterior utility pads, dowels, stone base under all concrete, recesses, and finishing as required **associated with the concrete included in this scope**.

 - 1) This requirement supersedes Addendum 3 Paragraph 1.2.A.1.b. regarding crushed aggregate base. All base shall be included at concrete included with the respective package.
3. Refer to Landscaping Unit Price Schedule.
 - a. For clarification, there shall be no separate line item for pine bark mulching. Mulch shall be included in the unit price for each plant item.
4. Refer to Specification Section 023119 Decorative Metal Fencing and Gates. Add the following to Paragraph 2.2 Decorative Steel Fences:
 - I. Acceptable Basis-of-Design Products:
 1. Factory preassembled fence panels and posts by Ameristar Fence or equal conforming to the requirements of the plans and specifications.
 2. Shop- and field-assembled fencing by steel supplier conforming to the requirements of the plans and specifications.

5. Insert the attached Specification Section 084223 Structural-Sealant-Glazed Aluminum Curtain Wall in the project manual. This specification shall apply to openings SF2A and SF2B.
- B. Drawings:
1. Refer to Sheet L-2 Landscaping Details:
 - a. Revise Planting Schedule item for 'Empire' Zoysia Sod to 7,155 sy to match Unit Price Schedule.
 2. Refer to Sheet A002 Opening Schedule & Elevations
 - a. Replace this sheet with the attached revised sheet. Revise vertical members of curtain wall to 2" nominal bypassing steel bridging at locations indicated as 6" nominal.
 3. Replace Sheet A101 in its entirety. All masonry control joints are located on the revised sheet.
 4. See attached Supplemental Drawing SD-5 for structural member penetration at Frame Elevations SF2A and SF2B.
 5. Refer to Elevation Sheets A201 and A202. Precast joints are noted for general aesthetic purposes. Specified dry-cast cast stone shall be provided and joints shall be adjusted to accommodate general limits of material.
 6. Refer to Sheet E301. Installation of STI Series 44 EZ-Path units with extension modules as required are acceptable at expansion joints.
 7. Refer to Addendum 4, Paragraph 1.2.B.5.b. and Sheet TD101. Each floor box should have one (1) 1" conduit home run to 'I.T. 134' for future data cabling by others. All floor boxes with A/V requirements as indicated on Sheet TD102 shall have one (1) 1 1/4" conduit home run to 'A/V 105' for future A/V cabling by others. Only two (2) floor boxes may be combined per home run.
 8. Refer to Sheets TD-101, TD102, and TD-301. Regarding 'City Walk Project QB/Vault requirements, there are two (2) QB Vaults shown on Drawings TD-101 and TD102 and just one (1) on Drawing TD-301. It shall be the responsibility of the Electrical Contractor to provide and install One (1) 4'x6'x4' Vault. The Vault shown inside the Property Line shall be included in the contract under the Electrical/ DataCom Contractors scope. The second vault outside the property line will be installed under a separate contract.

1.3 ATTACHED TO ADDENDUM

- A. Davis-Bacon Wage Rates
- B. Supplemental Sheet SD-5
- C. Revised Sheet A002 Opening Schedule and Elevations.
- D. Revised Sheet A101 Floor Plan
- E. Specification Section 084223 Structural-Sealant Glazed Curtain Walls

END OF ADDENDUM

ELECTRICIAN.....	\$ 18.83	0.00
IRONWORKER, REINFORCING.....	\$ 8.00	0.00
LABORER: Common/General, Including Landscaping.....	\$ 9.00	0.00
LABORER: Pipelayer.....	\$ 9.15	1.18
OPERATOR: Backhoe.....	\$ 15.03	4.35
OPERATOR: Bulldozer.....	\$ 14.89	2.47
OPERATOR: Excavator.....	\$ 16.00	0.00
OPERATOR: Grader/Blade.....	\$ 13.83	0.00
PAINTER: Brush, Roller and Spray.....	\$ 12.85	0.00
PIPEFITTER.....	\$ 8.00	0.00
PLUMBER.....	\$ 14.28	0.00
ROOFER, Includes Built Up, Polyurethane Foam, Metal, Shake & Shingle, and Single Ply Roofs.....	\$ 11.79	0.00
SHEET METAL WORKER.....	\$ 13.00	0.00
TILE SETTER.....	\$ 13.00	0.72
TRUCK DRIVER.....	\$ 12.29	1.53

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

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

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISION



General Decision Number: AL170002 01/06/2017 AL2

Superseded General Decision Number: AL20160002

State: Alabama

Construction Type: Highway

Counties: Blount, Calhoun, Etowah, Shelby, St Clair and Tuscaloosa Counties in Alabama.

The Edge - Parking lot

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, bulding structures in rest areas projects, and railroad construction; bascule, suspension & spandrel arch bridges desgned for commercial navigation; bridges involving marine construction; other major bridges)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 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 \$10.20 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 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/06/2017

* SUAL2011-001 01/04/2011

	Rates	Fringes
Carpenter.....	\$ 13.88	
Concrete finisher.....	\$ 13.26	
Electrician.....	\$ 19.73	
Laborers:		
Asphalt Raker.....	\$ 11.23	
Concrete Laborer.....	\$ 10.84	
Grade Checker.....	\$ 12.58	
Guardrail Erector.....	\$ 12.47	
Pipe Layer.....	\$ 12.58	
Side Rail/Form Setter.....	\$ 11.97	
Traffic Control Specialist..	\$ 11.27	
Unskilled.....	\$ 9.84	
Power equipment operators:		
Aggregate Spreader.....	\$ 14.17	
Asphalt Distributor.....	\$ 14.27	
Asphalt Paver.....	\$ 11.85	
Asphalt Spreader.....	\$ 13.65	
Backhoe, Clamshell, Dragline, and Shovel.....	\$ 15.87	
Broom (Sweeper).....	\$ 11.68	

WJGed van 2/13/17

Bulldozer.....	\$ 14.73
Crane & Derrick.....	\$ 20.63
Front End Loader.....	\$ 13.38
Mechanic.....	\$ 17.54
Milling Machine.....	\$ 12.31
Motor Grader and Motor	
Patrol.....	\$ 16.10
Oiler/Greaseman.....	\$ 13.33
Roller (Self-Propelled).....	\$ 12.38
Scraper.....	\$ 13.00
Striping Machine.....	\$ 15.20
Track Hoe/Excavator.....	\$ 14.64
Tractor and Loader (farm	
rubber tired).....	\$ 11.40
Tractor/Loader (all other	
work).....	\$ 11.22

Truck drivers:

Multi-Rear Axle.....	\$ 12.25
Single Rear Axle.....	\$ 11.54

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END OF GENERAL DECISION



SECTION 084423 – STRUCTURAL-SEALANT-GLAZED CURTAIN WALLS

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 glazed aluminum curtain walls.

1.3 PREINSTALLATION MEETINGS

- A. Pre-installation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For glazed aluminum curtain walls. Include plans, elevations, sections, full-size details, and attachments to other work.
 - 1. Include details of provisions for assembly expansion and contraction and for draining moisture occurring within the assembly to the exterior.
 - 2. Include full-size isometric details of each vertical-to-horizontal intersection of glazed aluminum curtain walls, showing the following:
 - a. Joinery, including concealed welds.
 - b. Anchorage.
 - c. Expansion provisions.
 - d. Glazing.
 - e. Flashing and drainage.
 - 3. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.
- C. Samples for Initial Selection: For units with factory-applied color finishes.
- D. Fabrication Sample: Of each vertical-to-horizontal intersection of assemblies, made from 12-inch (300-mm) lengths of full-size components and showing details of the following:
 - 1. Joinery, including concealed welds.
 - 2. Anchorage.
 - 3. Expansion provisions.
 - 4. Glazing.
 - 5. Flashing and drainage.
- E. Delegated-Design Submittal: For glazed aluminum curtain walls indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Preconstruction Laboratory Mockup Testing Submittals:
 - 1. Testing Program: Developed specifically for Project.
 - 2. Test Reports: Prepared by a qualified preconstruction testing agency for each mockup test.
 - 3. Record Drawings: As-built drawings of preconstruction laboratory mockups showing changes made during preconstruction laboratory mockup testing.
- B. Qualification Data: For Installer.
- C. Energy Performance Certificates: For glazed aluminum curtain walls, accessories, and components from manufacturer.
 - 1. Basis for Certification: NFRC-certified energy performance values for each glazed aluminum curtain wall.
- D. Product Test Reports: For glazed aluminum curtain walls, for tests performed by a qualified testing agency.

- E. Sample Warranties: For special warranties.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For glazed aluminum curtain walls to include in maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.
 - 1. Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

1.8 MOCKUPS

- A. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Build mockup of typical wall area as shown on Drawings.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 WARRANTY

- A. Special Assembly Warranty: Installer agrees to repair or replace components of glazed aluminum curtain wall that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including, but not limited to, excessive deflection.
 - b. Noise or vibration created by wind and thermal and structural movements.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - d. Water penetration through fixed glazing and framing areas.
 - e. Failure of operating components.
 - 2. Warranty Period: 10 years from date of Substantial Completion.
- B. Special Finish Warranty: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01400 "Quality Requirements," to design glazed aluminum curtain walls.
- B. General Performance: Comply with performance requirements specified, as determined by testing of glazed aluminum curtain walls representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
 - 1. Glazed aluminum curtain walls shall withstand movements of supporting structure including, but not limited to, story drift, twist, column shortening, long-term creep, and deflection from uniformly distributed and concentrated live loads.
 - 2. Failure also includes the following:
 - a. Thermal stresses transferring to building structure.
 - b. Glass breakage.
 - c. Noise or vibration created by wind and thermal and structural movements.
 - d. Loosening or weakening of fasteners, attachments, and other components.

- e. Failure of operating units.
- C. Structural Loads:
 - 1. Wind Loads: As indicated on Structural Drawings.
 - 2. Other Design Loads: As indicated in Construction documents / Structural Drawings.
- D. Deflection of Framing Members: At design wind pressure, as follows:
 - 1. Deflection Parallel to Glazing Plane: Limited to amount not exceeding that which reduces glazing bite to less than 75 percent of design dimension and that which reduces edge clearance between framing members and glazing or other fixed components to less than 1/8 inch (3.2 mm).
 - a. Operable Units: Provide a minimum 1/16-inch (1.6-mm) clearance between framing members and operable units.
- E. Structural: Test according to ASTM E 330 as follows:
 - 1. When tested at positive and negative wind-load design pressures, assemblies do not evidence deflection exceeding specified limits.
 - 2. When tested at 150 percent of positive and negative wind-load design pressures, assemblies, including anchorage, do not evidence material failures, structural distress, or permanent deformation of main framing members exceeding 0.2 percent of span.
 - 3. Test Durations: As required by design wind velocity, but not less than 10 seconds.
- F. Air Infiltration: Test according to ASTM E 283 for infiltration as follows:
 - 1. Fixed Framing and Glass Area:
 - a. Maximum air leakage of 0.06 cfm/sq. ft. (0.30 L/s per sq. m) at a static-air-pressure differential of 6.24 lbf/sq. ft. (300 Pa).
- G. Water Penetration under Static Pressure: Test according to ASTM E 331 as follows:
 - 1. No evidence of water penetration through fixed glazing and framing areas when tested according to a minimum static-air-pressure differential of 20 percent of positive wind-load design pressure, but not less than 15 lbf/sq. ft. (720 Pa).
- H. Water Penetration under Dynamic Pressure: Test according to AAMA 501.1 as follows:
 - 1. No evidence of water penetration through fixed glazing and framing areas when tested at dynamic pressure equal to 20 percent of positive wind-load design pressure, but not less than 15 lbf/sq. ft. (720 Pa).
 - 2. Maximum Water Leakage: No uncontrolled water penetrating assemblies or water appearing on assemblies' normally exposed interior surfaces from sources other than condensation. Water leakage does not include water controlled by flashing and gutters, or water that is drained to exterior.
- I. Seismic Performance: Glazed aluminum curtain walls shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 - 1. Seismic Drift Causing Glass Fallout: Complying with criteria for passing based on building occupancy type when tested according to AAMA 501.6 at design displacement and 1.5 times the design displacement.
- J. Energy Performance: Certify and label energy performance according to NFRC as follows:
 - 1. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.57 Btu/sq. ft. x h x deg F (3.23 W/sq. m x K) as determined according to NFRC 100.
 - 2. Solar Heat Gain Coefficient: Fixed glazing and framing areas shall have a solar heat gain coefficient of no greater than 0.61 as determined according to NFRC 200.
 - 3. Condensation Resistance: Fixed glazing and framing areas shall have an NFRC-certified condensation resistance rating of no less than 35 as determined according to NFRC 500.
- K. Noise Reduction: Test according to ASTM E 90, with ratings determined by ASTM E 1332, as follows:
 - 1. Outdoor-Indoor Transmission Class: Minimum 26.
- L. Blast Resistance:
 - 1. Hazard Rating: per ASTM F 1642 for AHJ
 - 2. Performance Condition: per GSA-TS01 for AHJ
- M. Windborne-Debris Impact Resistance: Pass missile-impact and cyclic-pressure tests when tested according to ASTM E 1886 and testing information in ASTM E 1996 for FEMA Wind Zone 4.
 - 1. Large-Missile Test: For glazed openings located within 30 feet (9.1 m) of grade.
 - 2. Small-Missile Test: For glazed openings located more than 30 feet (9.1 m) above grade.
- N. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes:
 - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
 - 2. Thermal Cycling: No buckling; stress on glass; sealant failure; excess stress on framing, anchors, and fasteners; or reduction of performance when tested according to AAMA 501.5.
 - a. High Exterior Ambient-Air Temperature: That which produces an exterior metal-surface temperature of 180 deg F (82 deg C).

- b. Low Exterior Ambient-Air Temperature: 0 deg F (minus 18 deg C).

2.2 MANUFACTURERS

- A. Kawneer North America; an Alcoa company.
 1. Basis of Design:
 - a. Kawneer Curtain Wall: 1600 - Wall System 3
- B. Coral Industries, Inc
- C. Tubelite Inc.
- D. YKK AP America Inc.
- E. Source Limitations: Obtain all components of curtain wall system, including framing spandrel panels entrances and accessories, from single manufacturer.

2.3 FRAMING

- A. Framing Members: Manufacturer's extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads.
 1. Construction: Thermally broken.
 2. Glazing System: Retained mechanically with gaskets on four sides.
 3. Glazing Plane: Front.
 4. Finish: Clear anodic finish .
 5. Fabrication Method: Either factory- or field-fabricated system.
- B. Pressure Caps: Manufacturer's standard aluminum components that mechanically retain glazing.
 1. Include snap-on aluminum trim that conceals fasteners.
- C. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- D. Materials:
 1. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
 - a. Sheet and Plate: ASTM B 209 (ASTM B 209M).
 - b. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
 - c. Extruded Structural Pipe and Tubes: ASTM B 429/B 429M.
 - d. Structural Profiles: ASTM B 308/B 308M.
 2. Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM, and prepare surfaces according to applicable SSPC standard.
 - a. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
 - b. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
 - c. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

2.4 ENTRANCES

- A. Entrances: Comply with Section 084113 "Aluminum-Framed Entrances and Storefronts."

2.5 GLAZING

- A. Glazing: Comply with Section 088000 "Glazing."
- B. Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.
- C. Glazing Sealants: As recommended by manufacturer.
- D. Sealants used inside the weatherproofing system shall have a VOC content of 250 g/L or less.
- E. Weatherseal Sealants: ASTM C 920 for Type S; Grade NS; Class 25; Uses NT, G, A, and O; chemically curing silicone formulation that is compatible with structural sealant and other system components with which it comes in contact; recommended by structural-sealant, weatherseal-sealant, and structural-sealant-glazed curtain-wall manufacturers for this use.
 1. Color: Match structural sealant.

2.6 ACCESSORIES

- A. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
 2. Reinforce members as required to receive fastener threads.
 3. Use exposed fasteners with countersunk Phillips screw heads, finished to match framing system.
- B. Anchors: Three-way adjustable anchors with minimum adjustment of 1 inch (25.4 mm) that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.
1. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123/A 123M or ASTM A 153/A 153M requirements.
- C. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing compatible with adjacent materials.
- D. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos, formulated for 30-mil (0.762-mm) thickness per coat.

2.7 FABRICATION

- A. Form or extrude aluminum shapes before finishing.
- B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
- C. Fabricate components that, when assembled, have the following characteristics:
1. Profiles that are sharp, straight, and free of defects or deformations.
 2. Accurately fitted joints with ends coped or mitered.
 3. Physical and thermal isolation of glazing from framing members.
 4. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
 5. Provisions for field replacement of glazing from interior.
 6. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
- D. Fabricate components to resist water penetration as follows:
1. Internal guttering system or other means to drain water passing joints, condensation occurring within framing members, and moisture migrating within glazed aluminum curtain wall to exterior.
- E. Curtain-Wall Framing: Fabricate components for assembly using manufacturer's standard assembly method.
- F. Factory-Assembled Frame Units:
1. Rigidly secure nonmovement joints.
 2. Prepare surfaces that are in contact structural sealant according to sealant manufacturer's written instructions to ensure compatibility and adhesion.
 3. Preparation includes, but is not limited to, cleaning and priming surfaces.
 4. Seal joints watertight unless otherwise indicated.
 5. Install glazing to comply with requirements in Section 08800 "Glazing."
- G. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

2.8 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

2.9 SOURCE QUALITY CONTROL

- A. Structural Sealant: Perform quality-control procedures complying with ASTM C 1401 recommendations including, but not limited to, assembly material qualification procedures, sealant testing, and assembly fabrication reviews and checks.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare surfaces that will contact structural sealant according to sealant manufacturer's written instructions to ensure compatibility and adhesion. Preparation includes, but is not limited to, cleaning and priming surfaces.

3.3 INSTALLATION

- A. General:
 - 1. Comply with manufacturer's written instructions.
 - 2. Do not install damaged components.
 - 3. Fit joints to produce hairline joints free of burrs and distortion.
 - 4. Rigidly secure nonmovement joints.
 - 5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impeding movement of moving joints.
 - 6. Where welding is required, weld components in concealed locations to minimize distortion or discoloration of finish. Protect glazing surfaces from welding.
 - 7. Seal joints watertight unless otherwise indicated.
- B. Metal Protection:
 - 1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with primer, applying sealant or tape, or installing nonconductive spacers as recommended by manufacturer for this purpose.
 - 2. Where aluminum is in contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within glazed aluminum curtain wall to exterior.
- D. Install components plumb and true in alignment with established lines and grades.
- E. Install glazing as specified in Section 08800 "Glazing."
 - 1. Prepare surfaces that will contact structural sealant according to sealant manufacturer's written instructions to ensure compatibility and adhesion. Preparation includes, but is not limited to, cleaning and priming surfaces.

3.4 ERECTION TOLERANCES

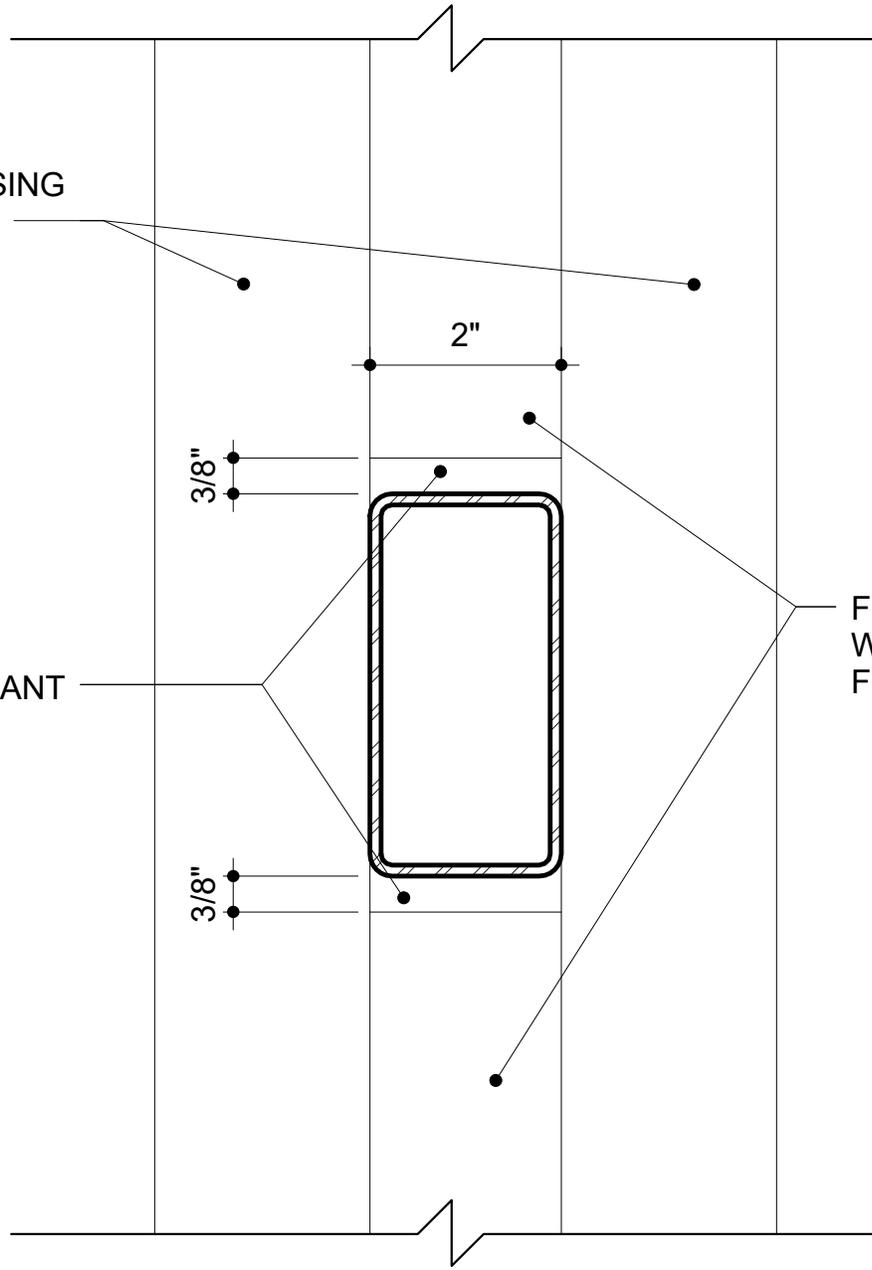
- A. Erection Tolerances: Install glazed aluminum curtain walls to comply with the following maximum tolerances:
 - 1. Plumb: 1/8 inch in 10 feet (3.2 mm in 3 m); 1/4 inch in 40 feet (6.35 mm in 12.2 m).
 - 2. Level: 1/8 inch in 20 feet (3.2 mm in 6 m); 1/4 inch in 40 feet (6.35 mm in 12.2 m).
 - 3. Alignment:
 - a. Where surfaces abut in line or are separated by reveal or protruding element up to 1/2 inch (12.7 mm) wide, limit offset from true alignment to 1/16 inch (1.6 mm).
 - b. Where surfaces are separated by reveal or protruding element from 1/2 to 1 inch (12.7 to 25.4 mm) wide, limit offset from true alignment to 1/8 inch (3.2 mm).
 - c. Where surfaces are separated by reveal or protruding element of 1 inch (25.4 mm) wide or more, limit offset from true alignment to 1/4 inch (6 mm).
 - 4. Location: Limit variation from plane to 1/8 inch in 12 feet (3.2 mm in 3.6 m); 1/2 inch (12.7 mm) over total length.

END OF SECTION 084423

CURTAIN WALL
VERTICAL
MEMBER BYPASSING
STEEL BRIDGING

FILL JOINT
WITH SEALANT

FILLER PANEL
W/ RECEIVER
FOR CAULK JOINT



1

CURTAIN WALL PENETRATION

SCALE: 6" = 1'-0"

JOB NO.: 13-073

DATE: 03/27/17

REVISIONS:

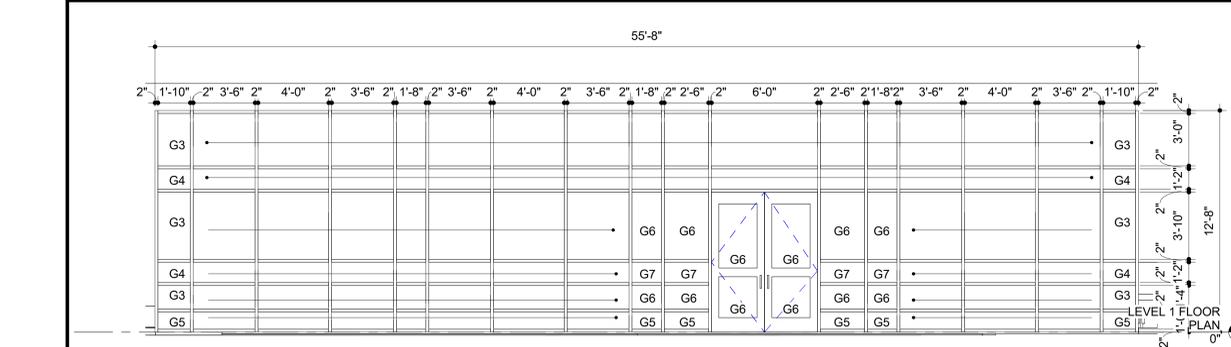
SD-5



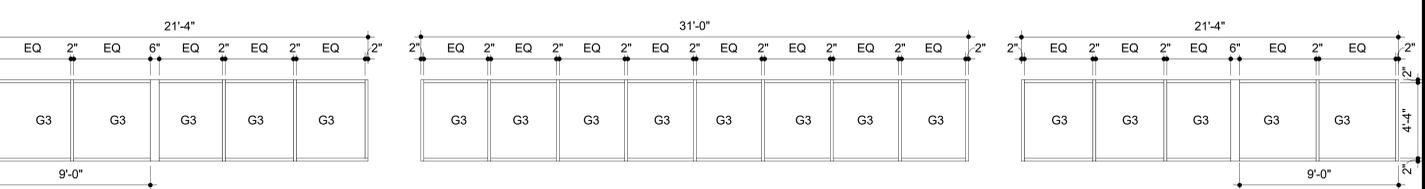
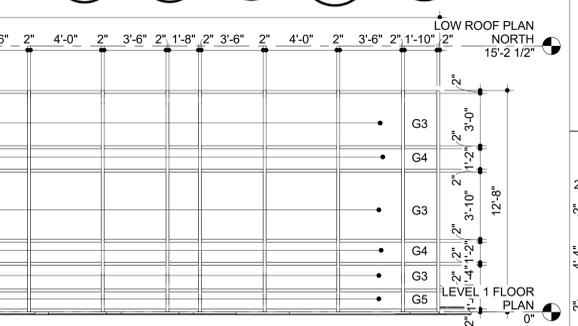
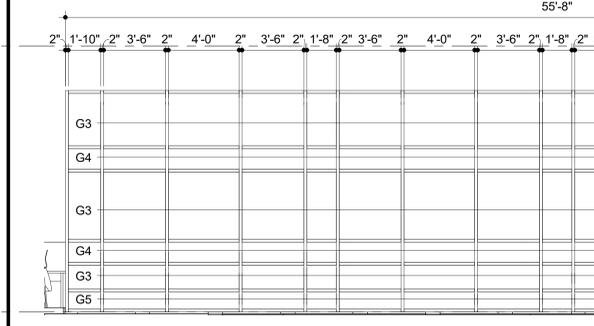
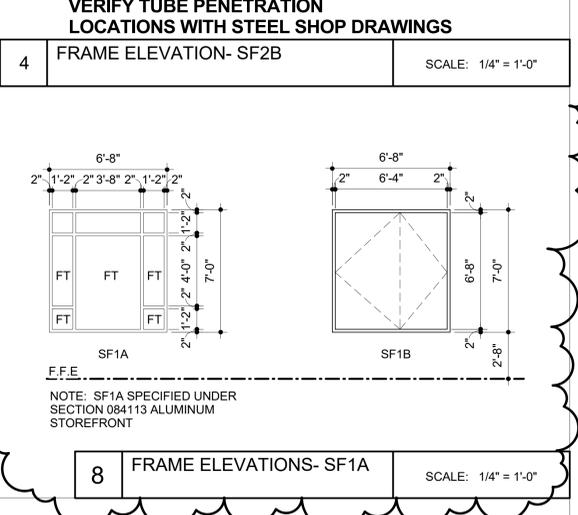
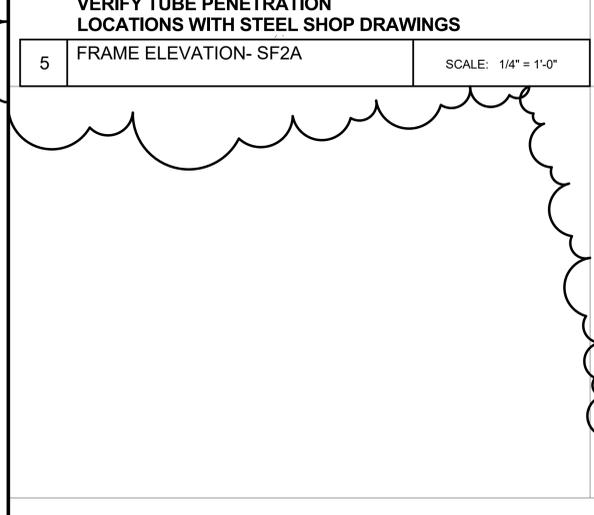
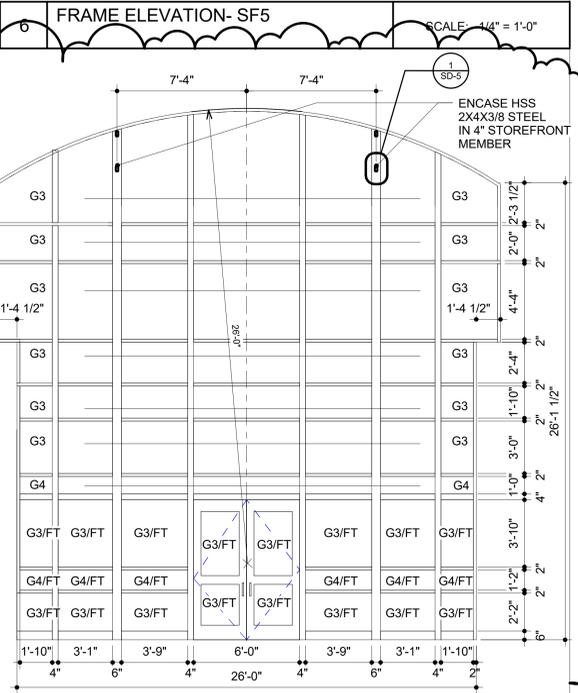
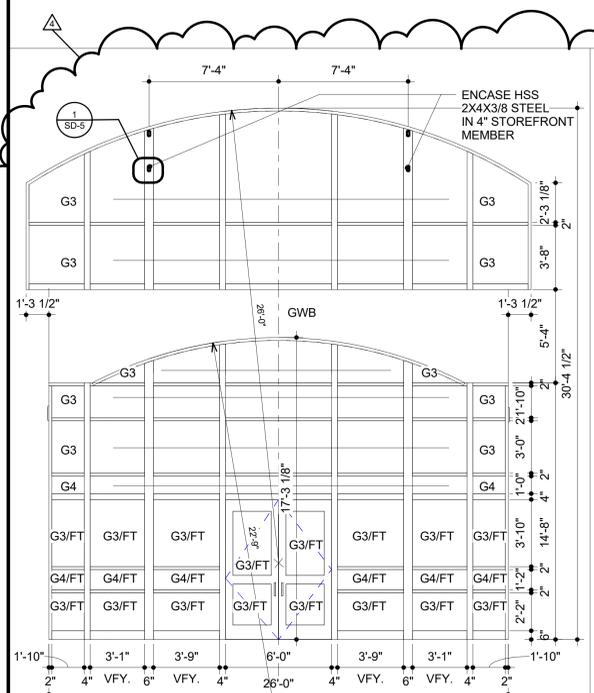
2715 Seventh Street
Tuscaloosa, AL 35401
www.ward-scott.com



THE EDGE BUSINESS
THE CITY OF TUSCALOOSA
2627 10TH AVENUE,
TUSCALOOSA, ALABAMA



DOOR NUMBER	FIRE RATING	DOOR		DOOR ELEV.	DOOR MATERIAL	DOOR GLAZING	FRAME		FRAME GLAZING	HARDWARE	SIGNAGE	COMMENTS
		WIDTH	HEIGHT				ELEV.	MATERIAL				
101A		3'-0"	7'-0"	D3	ALUM	G1	SF10	ALUM	G1	HW7	D	
101AA		3'-0"	7'-0"	D3	ALUM	G1	SF14	ALUM	G1	HW19	E	
101BA		3'-0"	7'-0"	D3	ALUM	G1	SF14	ALUM	G1	HW19	E	
101CA		3'-0"	7'-0"	D3	ALUM	G1	SF14	ALUM	G1	HW19	E	
101DA		3'-0"	7'-0"	D3	ALUM	G1	SF14	ALUM	G1	HW19	E	
101EA		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW22	C	
102A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW22	C	
103A		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW8	C	
103B		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW15	C	
104A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW20	C	
105A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW11	C	
106A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW10	C	
107A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW21	C	
108A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW12	C	
111A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
111B		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW23	--	
112A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
113A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
113B		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW23	--	
114A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
115A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
116A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
117A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
117B		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW23	--	
118A		3'-0"	7'-0"	D3	ALUM	G2	SF9	ALUM	SEE ELEVATION	HW23	D	
118B		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW23	--	
119A	2HR	8'-0"	7'-0"	D1	HM	--	F2	HM	--	HW6	F	2HR. / STORM SHELTER RATED
119B	2HR	8'-0"	7'-0"	D1	HM	--	F2	HM	--	HW6	F	2HR. / STORM SHELTER RATED
120A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW16	B	
121A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW20	C	
122A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW9	C	
123A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
123B		6'-8"	6'-10"									
124A		6'-8"	6'-10"									
124B		6'-8"	6'-10"									
125A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
125B		6'-8"	6'-10"									
126A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
126B		6'-8"	6'-10"									
127A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW16	B	
128A		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW13	C	
128B		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW14	C	
132A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW18	A	
133A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW18	A	
134A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW11	C	
135A		3'-0"	7'-0"	D3	ALUM	G2	F1	ALUM	SEE ELEVATION	HW13	C	
136A		3'-0"	7'-0"	D3	ALUM	G1	SF15	ALUM	SEE ELEVATION	HW17	C	
147A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
148A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
149A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
150A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
151A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
152A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW19	D	
153A		6'-0"	8'-0"	D3	ALUM	SEE ELEV	SF5	ALUM	FT	HW2	--	
156A		3'-0"	8'-0"	D3	ALUM	SEE ELEV	SF7	ALUM	FT	HW4	--	
198A		3'-0"	7'-0"	D1	WD	--	F1	HM	--	HW21	--	
199A		4'-0"	7'-0"	D1	HM	--	F2	HM	--	HW5	C	STORM SHELTER RATED
C102A		6'-0"	8'-0"	D3	ALUM	SEE ELEV	SF2A	ALUM	FT	HW1	--	
C102B		6'-0"	8'-0"	D3	ALUM	SEE ELEV	SF2B	ALUM	FT	HW2	--	
C103A		6'-0"	8'-0"	D3	ALUM	SEE ELEV	SF2A	ALUM	FT	HW1	--	
C103B		6'-0"	8'-0"	D3	ALUM	SEE ELEV	SF2B	ALUM	FT	HW2	--	
C107A		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW13	--	
C107B		3'-0"	7'-0"	D2	WD	G1	F1	HM	--	HW13	--	



GLAZING SCHEDULE	
G1:	1/4" CLEAR TEMPERED GLASS
G2:	1/4" FROSTED TEMPERED GLASS
G3:	1" INSULATED GLAZING UNIT WITH VISTA COOL TINTING
G4:	1" INSULATED GLAZING UNIT WITH SOLAR COOL TINTING
G5:	1" INSULATED ALUMINUM PANEL
G6:	NOT USED
G7:	NOT USED
FT:	FULLY TEMPERED

OPENING 126C OMITTED FROM PROJECT

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THE EDGE BUSINESS RESOURCE CENTER
 THE CITY OF TUSCALOOSA
 2627 10TH AVENUE,
 TUSCALOOSA, ALABAMA

CONSTRUCTION DOCUMENTS		
DATE:	7-30-15	
PROJ NO:	13-073	
REVISIONS		
#	DESC	DATE
1	ADDENDUM #1	2/8/17
3	ADDENDUM #3	3/21/17
4	ADDENDUM #4	3/27/17
5	ADDENDUM #5	

OPENING SCHEDULE & ELEVATIONS

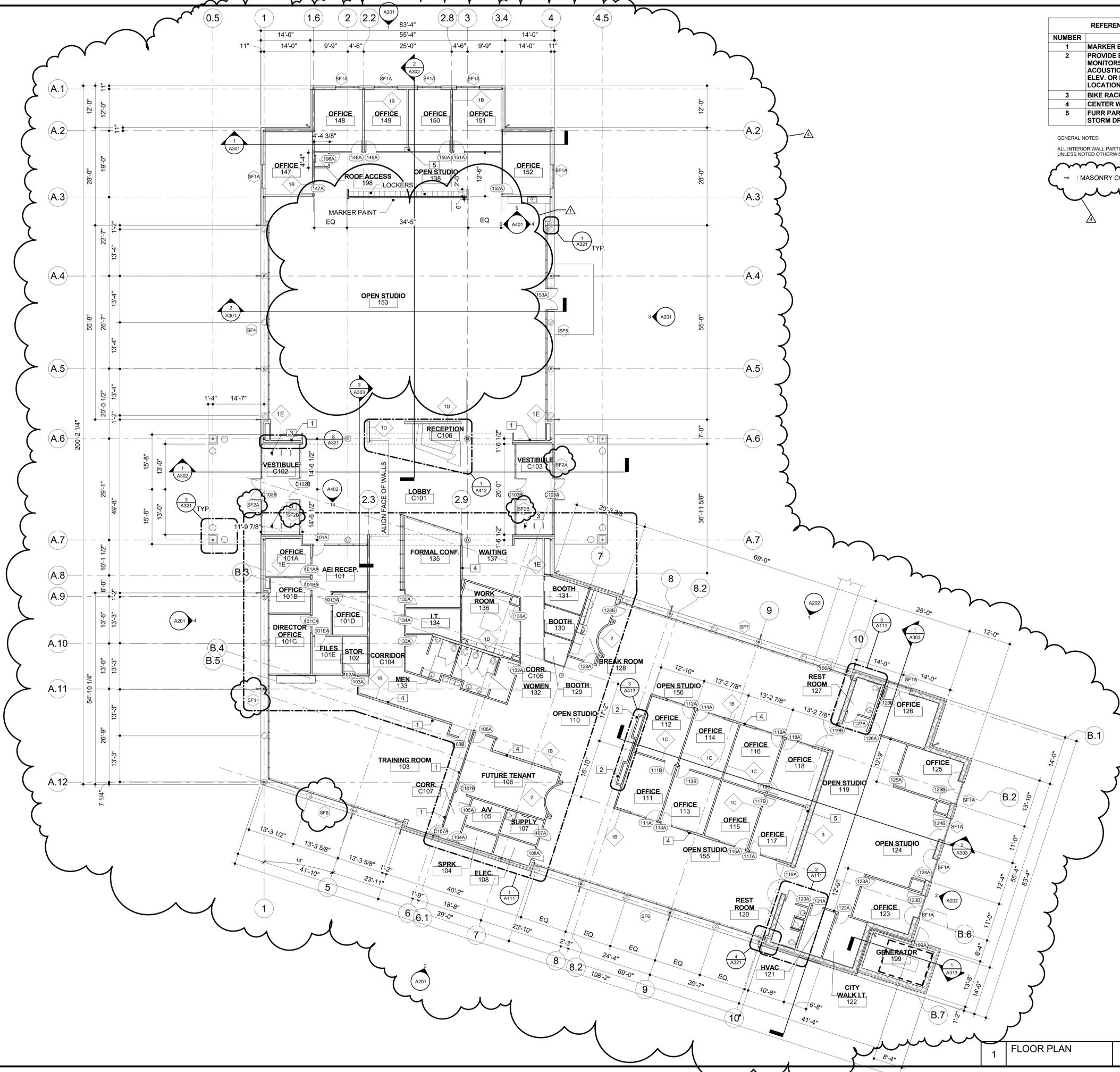
A002

REFERENCE NOTES	
NUMBER	NOTE
1	MARKER BOARD
2	PROVIDE BLOCKING FOR MONITORS, FURNITURE MOUNT, ACOUSTICAL PANELS, ETC. SEE ELEV. OR EQUIP. & FEATURE LOCATIONS
3	BIKE RACK
4	CENTER WALL ON COL. LINE
5	FURR PARTITION AROUND STORM DRAINS

GENERAL NOTES:
ALL INTERIOR WALL PARTITIONS TO BE CONSIDERED 1A UNLESS NOTED OTHERWISE.



REVISIONS		
#	DESC	DATE
1	ADDENDUM #1	2/8/17
3	ADDENDUM #4	3/21/17
4	ADDENDUM #5	3/27/17



1 FLOOR PLAN

SCALE: 3/32" = 1'-0"