

**GASTON COUNTY SCHOOLS  
INVITATION FOR LETTER OF INTEREST  
FOR INSPECTION SERVICES**

Submit letter of interest to Paul Nault  
Monday, March 13, 2023.

The project includes the construction of a new approximately 165,000 total square foot Middle School and associated amenities including an indoor gym and an outdoor track, football field, softball and baseball fields. The School will be constructed using primarily masonry walls as well as structural steel framing and be supported on conventional shallow spread footings. Site work will include utility installation, SCM Wet Pond installation, and paving for associated parking and drive areas.

Providing the following special inspection services:

Verification of Soils:

1. Perform Dynamic Cone Penetrometer testing to verify materials below shallow foundations are adequate to support the design bearing capacity.
2. Perform classification and testing of compacted fill materials.

Excavation and Fill:

1. Observe conditions of excavation subgrades prior to foundation preparation or fill placement, including proof-rolling and other testing of subgrades, and suggest and observe corrective measures at problem areas.
2. Perform testing and observations during placement and compaction of the fill material to verify lift thickness, material type, and compaction efforts comply with the approved report. Modular Retaining Walls:
3. Perform appropriate laboratory testing on materials proposed for use as wall backfill in general accordance with project specifications. Testing may include:
  - (a) Grain Size Distribution, ASTM D-422
  - (b) Liquid and Plastic (Atterberg) Limits, ASTM D-4318
  - (c) Standard Proctor Moisture Density Relationships,
4. Observe conditions of excavation subgrades prior to foundation or leveling pad preparation, including proof-rolling and other testing of subgrades; and observe corrective measures at problem areas.
5. Test surface bearing of soils at footing subgrades and document whether the soil meets or exceeds design parameters through correlation of soil boring data, use of the Dynamic Cone Penetrometer, and reference to approved drawings.

6. Observe material type and placement of wall backfill to document compliance with project requirements. Perform in-place density tests as required by project specifications to document specified compaction levels are achieved.

Reinforced Concrete:

1. Observe placement of reinforcing steel for compliance with the project plans and specifications prior to the placement of concrete.
2. Observe the installation of bolts in concrete prior to and during placement of concrete.
3. Observe the installation of post-installed anchors in hardened concrete.
4. Observe formwork for shape, location, and dimensions of concrete members being formed.
5. Document the use of the required design concrete mix.
6. Perform physical property tests including slump, air content, and concrete temperature at the time fresh concrete is sampled.
7. Observe concrete placement for proper application techniques.
8. Document that the Contractor has provided proper storage and curing facilities for the first 24 hours after casting of cylinders.

Structural Steel Fabricators:

1.
  - a)
- 2.

Structural Masonry:

1. As masonry construction begins, the following shall be observed for compliance:
  - Location of reinforcement and connectors.
2. We will observe:
  - a. Size and location of structural elements.
    - Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.
    - Specified size, grade and type of reinforcement.
    - Protection of masonry during cold weather (temperature below 40 degrees Fahrenheit) or hot weather (temperature above 90 degrees Fahrenheit).

3. Prior to grouting, the following shall be observed to document compliance:

- a. Grout space is clean.

Placement of reinforcement and connectors and pre-stressing tendons and anchorage.

Proportions of site-prepared grout and pre-stressing grout for bonded tendons.

Grout placement shall be observed to document compliance with code and construction document provisions.

Preparation of required grout specimens, mortar specimens and/or prisms shall be observed.

Welding:

1. Structural Steel and Precast Concrete Connections:

Observe complete and partial penetration groove welds.

Observe multi-pass fillet welds.

Observe single pass fillet welds  $> 5/16"$ .

Observe single pass fillet welds  $< 5/16"$ .

Observe floor and deck welds.

2. Reinforcing Steel:

a. Observe weld ability of reinforcing steel other than ASTM A 706.

b. Reinforcing steel resisting flexural and axial force in intermediate and special moment frames and boundary elements of special reinforced concrete shear walls and shear reinforcement.

3. Shear Reinforcement:

a. Visually observe shear studs for full weld flash at connection point.

b. Perform bend testing of shear studs in accordance with project documents and specifications, but not less than 5% of studs.

High Strength Bolting and Steel Frame:

1. Material documentation of high strength bolts, nuts and washers:

Observe identification markings to conform to ASTM standards specified in the approved construction documents.

2. Observe required manufacturer's certificate of compliance.

a. Observation of high strength bolting:

Observe bearing type connections.

Observe snug tight connections for faying surface interaction and bolt tightening.

Observe pre-tensioned connections for faying surface interaction and pretensioning methods (turn of nut, tension controlled, etc.)

e. Observe slip-critical connections for faying surface preparation, faying surface interaction and pre-tensioning methods (turn of nut, tension controlled, etc.)

3. Material documentation of structural steel: a. Observe identification markings to conform to ASTM standards specified in the approved construction documents.

a. Observe manufacturer's certified mill test reports.

Observe steel frame joint details for compliance with approved construction documents in regards to details such as bracing and stiffening, member locations, and application of joint details at each connection.

#### Sprayed Fire Resistant Materials:

1. Observe that member surface conditions have been prepared in general accordance with the approved fire-resistance design and the approved manufacturer's written instructions prior to application of the sprayed fire-resistant mater47 Tm0 g0 G[ate)10(r)-3(42.00-1 0 0 1B14r)-3( )-4( )6( )-4(

Minority, Women, Small Business Enterprise Information

MINORITY, WOMEN, SMALL BUSINESS ENTERPRISE (M/W/SBE)

Utilization Form

For: Purchases of Goods and Services

