

QUOTE NO: #551

**COUNTY OF HENRY, VIRGINIA**

PURCHASING DEPARTMENT  
P.O. BOX 7  
COLLINSVILLE, VA. 24078

TELEPHONE (276) 634-4670

FAX (276) 634-4535

<http://www.henrycountyva.gov>

FILL IN THE FOLLOWING INFORMATION

\* VENDOR COMPANY NAME -  
\* VENDOR ADDRESS -

**REQUEST FOR QUOTATION**  
THIS IS AN INQUIRY, NOT AN ORDER.  
PLEASE REPLY PROMPTLY.

PLEASE QUOTE PRICES ON ITEMS LISTED BELOW. INCLUDE ALL SHIPPING AND INSTALLATION CHARGES.

\*\*\*NOTE- HENRY COUNTY RESERVES THE RIGHT TO ACCEPT OR REJECT ALL QUOTES OR PARTS OF QUOTES, WAIVE INFORMALITIES AND REQUOTE.\*\*\*

**NIGP**  
MEMBER

TODAYS DATE		EASTERN STANDARD TIME AND DATE DUE		DELIVERY REQUIRED BY	
1/13/26		1/21/2026 at 12:00 P.M. (NOON)			
ITEM	QUANTITY			UNIT PRICE	SUBTOTAL
	1 EACH	BASSETT HIGH SCHOOL FOOTBALL FIELD SIGNAGE			
HENRY COUNTY PUBLIC SCHOOLS IS REQUESTING QUOTES FOR SIGNAGE AT THE BASSETT HIGH SCHOOL FOOTBALL FIELD.					
PLEASE SEE THE ATTACHED CONSTRUCTION DOCUMENTS					
PLEASE CONTACT KEITH SCOTT (HENRY COUNTY PUBLIC SCHOOLS FACILITIES MAINTENANCE DIRECTOR) AT (276) 666-2404 OR <a href="mailto:kascott@henry.k12.va.us">kascott@henry.k12.va.us</a> FOR DETAILED QUESTIONS					
PLEASE SUBMIT YOUR QUOTE AND THIS COVER PAGE WITH ANY SUPPORTING DOCUMENTS TO JULIE SHELTON					
EMAIL TO <a href="mailto:jbshelton@henrycountyva.gov">jbshelton@henrycountyva.gov</a>					
OR FAX TO 276-634-4535					
**DUE DATE IS 1/21/2026 at 12:00 P.M. (NOON)					
<b>TURNKEY PRICE PER SPECIFICATIONS</b>					
\$					

**SEND QUOTES VIA MAIL/FAX TO THE ATTENTION OF:**

QUOTES MUST BE RECEIVED BY DATE AND TIME LISTED ABOVE TO BE CONSIDERED. WE DO NOT ACCEPT LATE QUOTES.

IF THE COUNTY CLOSES ITS OFFICES DUE TO INCLEMENT WEATHER OR FOR OTHER REASONS, THE SCHEDULED QUOTE SUBMISSION DEADLINE

WILL BE EXTENDED TO THE NEXT OPEN BUSINESS DAY AT THE SAME TIME, UNLESS AN ADDENDUM IS DONE THAT STATES OTHERWISE.

**VENDOR: PLEASE COMPLETE THIS INFORMATION.**

1.) DELIVERY PROMISED \_\_\_\_\_

2.) TERMS \_\_\_\_\_

3.) DATE OF QUOTE \_\_\_\_\_

VENDOR SIGNATURE \_\_\_\_\_

4.) TELEPHONE # \_\_\_\_\_

PLEASE PRINT NAME AND TITLE \_\_\_\_\_

5.) FAX # \_\_\_\_\_



# STRUCTURAL NOTES:

LOAD CHART:	
<b>BUILDING CODE</b>	2018 VIRGINIA UNIFORM STATEWIDE BUILDING CODE PART I - VIRGINIA CONSTRUCTION CODE 2018 INTERNATIONAL BUILDING CODE ASCE 7-16
<b>RISK CATEGORY</b>	2018 IBC TABLE 1604.5 FOR REFERENCE ONLY
<b>SNOW</b>	II SNOW IMPORTANCE FACTOR, Is GROUND SNOW LOAD, Pg 30 PSF
<b>WIND</b>	PROCEDURE BASIC WIND SPEED, V 115 MPH ALLOWABLE STRESS DESIGN WIND SPEED, V <sub>sd</sub> 90 MPH WIND EXPOSURE CATEGORY B PROCEDURE: ASCE 7 - 29.3 SOLID FREESTANDING WALLS COMPONENTS & CLADDING - UNFACTORED UNIFORM LOADING APPLIED TO SIGNAGE 25 PSF
<b>SEISMIC</b>	SEISMIC IMPORTANCE FACTOR, I <sub>e</sub> 1.0 MAPPED SPECTRAL RESPONSE, S <sub>s</sub> 16.00% MAPPED SPECTRAL RESPONSE, S <sub>1</sub> 5.90% SITE CLASS D SPECTRAL RESPONSE COEFFICIENT, S <sub>ds</sub> 17.00% SPECTRAL RESPONSE COEFFICIENT, S <sub>d1</sub> 9.50% SEISMIC DESIGN CATEGORY B SEISMIC-FORCE RESISTING SYSTEM GROUND SUPPORTED CANTILEVER WALLS ASCE 7 - CH. 15 TABLE 15.4-2 SEISMIC RESPONSE COEFFICIENT, C <sub>s</sub> 0.02 SEISMIC MODIFICATION FACTOR, R 1.3 DESIGN BASE SHEAR 1.25 KIPS
<b>SOIL</b>	UNIT WEIGHT OF SOIL 110 PCF ALLOWABLE LATERAL BEARING PRESSURE 100 PSF/FT NET ALLOWABLE BEARING PRESSURE 2000 PSF

STRUCTURAL:	
A.	SPECIAL INSPECTIONS ARE REQUIRED BY THE BUILDING CODE. REFER TO PROJECT SPECIFICATIONS AND SCHEDULE OF SPECIAL INSPECTIONS FOR SPECIFIC REQUIREMENTS.
1.	CONTRACTOR SHALL COORDINATE INSPECTIONS WITH A MINIMUM OF 48 HOUR NOTICE TO INSPECTOR.
2.	CONTRACTOR SHALL PROVIDE FULL ACCESS TO ALL ITEMS NECESSARY FOR INSPECTION- IF ITEMS NEED TO BE REMOVED FOR ACCESS, CONTRACTOR SHALL REMOVE AT NO COST TO OWNER.
B.	STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
C.	CONTRACTOR SHALL VERIFY THE REQUIREMENT OF OTHER TRADES FOR SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND ADDITIONAL ITEMS TO BE PLACED OR SET SIMULTANEOUS WITH STRUCTURAL WORK.
D.	DETAILS AND SECTIONS SHOWN ARE TYPICAL AND APPLY TO SIMILAR OR LIKE CONDITIONS.
	WHEN THE WORD 'SIMILAR' (SIM.) OR 'TYPICAL' (TYP.) APPEARS ON THE DRAWINGS, IT HAS A GENERAL MEANING AND MUST NOT BE INTERPRETED AS MEANING IDENTICAL. CONTRACTOR IS RESPONSIBLE FOR REVIEWING DRAWINGS, LOCATING SIMILAR AND TYPICAL CONDITIONS AND WORKING OUT DETAILS IN RELATION TO THEIR LOCATION AND CONNECTION WITH OTHER PARTS OF THE WORK.
E.	DO NOT SCALE DRAWINGS, FOLLOW DIMENSIONS ON PLANS.
F.	DO NOT CHANGE THE SIZE, LENGTH OR SPACING OF STRUCTURAL ELEMENTS WITHOUT APPROVAL OF STRUCTURAL ENGINEER.
G.	DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING AND TEMPORARY SUPPORTS IS THE SOLE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH OSHA SAFETY REGULATIONS.
H.	CONTRACTOR SHALL VERIFY EXISTING CONDITIONS INCLUDING DIMENSIONS TO EXISTING STRUCTURES, GRADES, UTILITIES, FRAMING, FOUNDATIONS AND HIDDEN CONDITIONS AND COORDINATE THESE CONDITIONS WITH THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT AND ENGINEER OF EXISTING CONDITIONS THAT ARE NOT AS SHOWN.

## CONCRETE AND REINFORCEMENT:

### A. GENERAL CONCRETE SHALL BE:

LOCATION	WEIGHT	STRENGTH (PSI)	AIR (%)	SLUMP (IN.)	MAX W/C RATIO	EXPOSURE CATEGORY
FOUNDATIONS	NW	4500	6	5	0.48	F1

FIELD SAMPLING SHALL BE OBTAINED FROM MIDDLE OF BATCH

1. NORMAL WEIGHT (NW) CONCRETE SHALL BE 145-150 PCF
2. SLUMPS ABOVE ARE PRIOR TO ADDITION OF PLASTICIZERS OR MID RANGE WATER REDUCER. MAXIMUM SLUMP AFTER APPROVED ADDITIVES SHALL BE (9) INCHES MAXIMUM.
3. MATERIALS:  
CEMENT: ASTM C 150 TYPE I/I  
FLY ASH: ASTM C618 CLASS C OR F, 20% MAX.  
AGGREGATE: ASTM C33, GRADED 1-1/2 INCH MAXIMUM

4. CONCRETE WORK SHALL BE IN FULL ACCORDANCE WITH:  
AMERICAN CONCRETE INSTITUTE (ACI) 301, 315, AND 318  
CRSI RECOMMENDED PRACTICE OF PLACING REINFORCING BARS  
ACI 117 FOR PLACEMENT TOLERANCES (CONCRETE AND REINFORCEMENT)  
ACI 306 AND ACI 305 COLD/HOT WEATHER CONCRETING  
ACI 308.1 FOR CURING OF CONCRETE  
ACI 309R-05 GUIDE FOR CONSOLIDATION OF CONCRETE  
ACI 347-04 (CHAPTER 5) GUIDE TO FORMWORK FOR CONCRETE  
ACI "MANUAL OF STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES".

### C. REINFORCING:

1. ASTM A615, GRADE 60 FOR DEFORMED BARS
2. DEVELOPMENT LENGTH FOR REINFORCEMENT (db = BAR DIAMETER):

STRENGTH	DEVELOPMENT LENGTH, LD		
	#6 AND SMALLER	#7 AND LARGER	HOOK, LDH
4500 PSI	44 db	55 db	22 db

3. DEVELOPMENT LENGTH MINIMUM OF 12 INCHES. HOOK DEVELOPMENT LENGTH MINIMUM 6 INCHES. DEVELOPMENT LENGTH ADJUSTMENTS:  
TOP BAR REINFORCING: ABOVE MULTIPLIED BY 1.3  
CLASS B TENSION LAPS: ABOVE MULTIPLIED BY 1.3
4. CONCRETE CLEAR COVER SHALL BE (UNLESS NOTED OTHERWISE):  
BELOW GRADE (UNFORMED) 3"  
BELOW GRADE (FORMED) 2"  
EXPOSED TO WEATHER OR WATER 2"

5. CONDUITS, PIPES OR DUCTS (EXCEEDING ONE-THIRD THE FOUNDATION THICKNESS (INCLUDING CROSSINGS)) SHALL NOT BE PLACED WITHIN THE THICKNESS OF THE FOUNDATION UNLESS SPECIFICALLY DETAILED. SEE THE MECHANICAL AND/OR ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS FOR LOCATION OF SLEEVES AND ACCESSORIES. PIPES AND DUCTS SHALL BE LOCATED BETWEEN THE LAYERS OF REINFORCEMENT. DETAIL ALL SUCH PENETRATIONS AND EMBEDDED ITEMS CLEARLY ON THE REINFORCEMENT SUBMITTAL.
6. REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE ACCURATELY PLACED IN THE POSITIONS SHOWN, TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.
7. IF APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO USE, EPOXY GROUTING OF DEFORMED BAR DOWELS OR ANCHOR RODS INTO EXISTING OR HARDENED CONCRETE SHALL BE INSTALLED ACCORDING TO EPOXY MANUFACTURERS RECOMMENDATION TO PROVIDE FULL DEVELOPMENT OF THE BAR OR BOLT FOR THE SPECIFIC CONCRETE STRENGTH AT POINT OF ATTACHMENT.
8. APPLY LOADS ONLY AFTER EPOXY HAS REACHED FULL STRENGTH.
9. ALL PARTS OF ANCHORING SYSTEM (RODS, NUTS, WASHERS, BITS, EPOXY, ETC.) SHALL BE FROM A SINGLE SUPPLIER.
10. WORK MUST BE PERFORMED BY ACI CERTIFIED EPOXY ANCHOR INSTALLER.

## STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH:  
1. ANSI/AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" - ALLOWABLE STRESS DESIGN  
2. AISC 303-10 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"  
3. AWS D1.1 "STRUCTURAL WELDING CODE - STEEL"

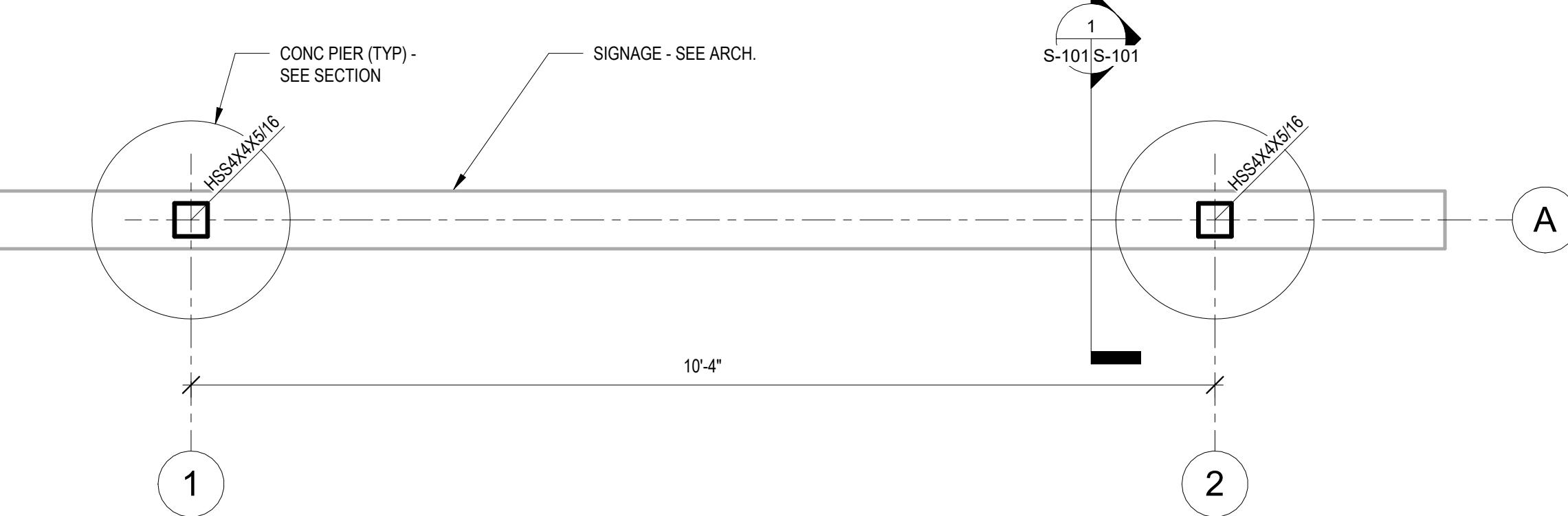
2. MATERIALS SHALL COMPLY WITH:  
1. STRUCTURAL STEEL SHAPES (EXCEPT W & C) ASTM A572 GR 50 or ASTM A992 GR 50  
2. STRUCTURAL STEEL HSS SECTIONS ASTM A500 GRADE C OR ASTM 1085  
3. STRUCTURAL PLATES & BAR ASTM A36 OR ASTM A572 GRADE 50  
4. STRUCTURAL NUTS ASTM A563  
5. STRUCTURAL WASHERS ASTM F436  
6. ANCHOR RODS ASTM F1554 GRADE 36  
7. GROUT ASTM C1107 NON-METALLIC, NON-SHRINK

3. AISC PLATE CERTIFICATION IS NOT A REQUIREMENT.

4. COATINGS:  
1. STRUCTURAL STEEL SHALL BE GALVANIZED PER ASTM A-123.

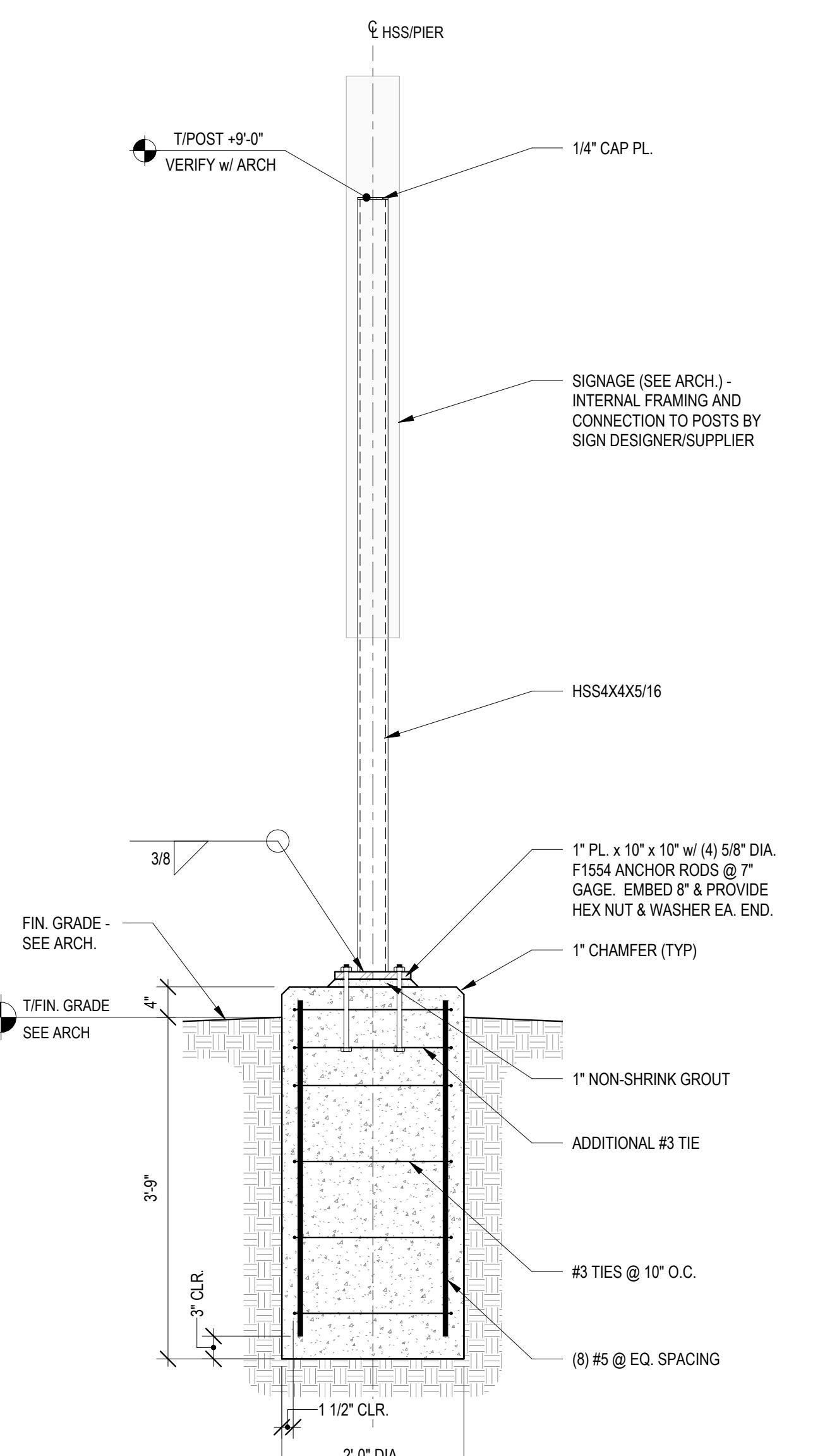
5. WELDING SHALL BE:  
1. PERFORMED BY AWS CERTIFIED WELDERS  
2. ELECTRODES PER TABLE 4.1 OF ANSI/AWS D1.1

6. CONNECTIONS SHALL BE:  
1. IN ACCORDANCE WITH AISC SPECIFICATIONS  
2. SHALL BE IN ACCORDANCE WITH PARTS 9 THROUGH 15 OF THE STEEL CONSTRUCTION MANUAL.  
3. BOLTS SHALL BE INSTALLED SNUG TIGHT UNLESS INDICATED OTHERWISE



## POST FOUNDATION PLAN

SCALE: 3/4" = 1'-0"



## HSS POST BASE

SCALE: 3/4" = 1'-0"

## STRUCTURAL SHEET INDEX

SHEET NUMBER	SHEET NAME
S-101	STRUC. NOTES, FOUNDATION PLAN, & DETAILS
S-102	SPECIAL INSPECTIONS
S-103	SPECIAL INSPECTIONS

**PROSIM**  
ENGINEERING, LLC  
what we do matters

240 SUNCREST ST, SUITE 4, JOHNSON CITY, TN 37615 | 423.477.8314  
108 SOUTH IRON ST, MARION, VA 24364 | 276.783.3777  
www.prosiminc.com

**SHEET**  
**S-101**

PROJECT **HENRY COUNTY PUBLIC SCHOOLS**  
85 Riverside Dr  
Bassett, VA 24065

DRAWING **STRUCT. NOTES, FOUNDATION PLAN, & DETAILS**

DES  
BY  
MARK DATE  
REVISIONS



ALLAN J. LONG

Lic. No. 023840

April 14, 2023

**SPECIAL INSPECTIONS:**

SCHEDULE OF SPECIAL INSPECTION NOTES	
1.	Special Inspections shall comply with the requirements of: 2018 Virginia Construction Code - Chapter 17 2018 International Building Code - Chapter 17
2.	The Inspection and Testing Agent(s) shall be engaged by the Owner or the Owner's Agent and not by the Contractor or Sub-Contractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The Qualifications of the Special Inspector(s) and/or testing agencies must be subject to the approval of the Building Official and/or the Design Professional.
A pre-inspection meeting is to occur between the Special Inspector, Contractor, Owner, Geotechnical Engineer, Architect, Structural Engineer and Civil Engineer (Building Official to be invited). The following shall be reviewed (minimum):	
<p>List of inspectors that will be on site, with discipline and copy of qualifications/certifications for each</p> <p>Contractor anticipated schedule of work for inspectors. This is to be updated monthly.</p> <p>Establish notice time for Contractor to contact Special Inspector to notify of work to be inspected.</p> <p>Contact information within Special Inspection firm for Contractor (primary, backup) and method of contact.</p> <p>Special Inspector shall have a full set of contract documents, specifications along with updates.</p> <p>Contractor shall provide Special Inspector a copy of approved shop drawings that are relevant to inspections.</p> <p>Code Requirements for Special Inspector</p> <p>Review list of required special inspections for Project.</p>	
<p>Special Inspector shall present samples of each checklist to be utilized by inspectors that directly correlates to required IBC inspections. Examples are: Structural Fill Observations, Summary of Field Density, Foundation Excavation Observations, Reinforcement Observations, Concrete Placement Observations, Concrete/Grout Truck Field Log, Structural Masonry CMU, Mortar, Grout and Reinforcement Observations.</p>	
b.	<p>Special Inspection reports to be submitted to Contractor, Owner, Architect, Structural Engineer, Civil Engineer and Building Official no later than:</p> <p>Noted Deficiency that is not immediately addressed and re-inspected: 24 hours</p> <p>Test Reports: 24 hours</p> <p>Inspection / Field Reports: 72 hours</p> <p>Deficiency Log (updated): Once per month</p>
c.	<p>Special Inspector / Report Requirements:</p> <p>Digital photos (12 megapixel sensor size, 3200 image resolution) must be taken of EVERY inspection observed. Key photos and photos of deficiencies are to be contained within report, other photos are to be maintained by Special Inspector sorted by date of inspection, inspection report number and location of inspection. Photos are to be available immediately to team upon request. At closure of project, provide copy of digital photos to Owner.</p> <p>Contained in each field report, a graphical copy of the floor plan (or appropriate portion) shall be highlighted to show where the inspection took place.</p> <p>Report shall clearly indicate project name, date and time of inspection, inspectors name, weather (including temperature), location (see above graphic requirement), items inspected/observed and condition thereof, deficiencies (with resolution if applicable), any areas that could not be inspected, and any areas where work had occurred without notification for inspections</p>
d.	Special Inspector, upon request, shall be on site during Structural or Civil Engineer visits to site.
3.	The list of Special Inspectors may be submitted as a separate document, if noted so above.
4.	Special Inspections as required by IBC Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.1.
5.	Observe on a random basis; operations need not be delayed pending these inspections. Perform these tasks for each welded joint, bolted connection or steel element.
6.	NDT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 306, N6.
7.	RDP shall review fabricator/supplier/producer certificates and/or shop drawings for conformance with appropriate standards of practice, quality assurance and compliance with contract documents
8.	Review records and test results for conformance with requirements and specifications
9.	P - Inspections performed prior to final acceptance of item
10.	PR - Task performed for each bolted connection OB - Observe on a random basis. Operations need not be delayed pending these inspections
<p>Are Requirements for Seismic Resistance included in the Statement of Special Inspections? <input checked="" type="checkbox"/> (No)</p> <p>Are Requirements for Wind Resistance included in the Statement of Special Inspections? <input checked="" type="checkbox"/> (No)</p>	
<p>Registered Design Professional (RDP) in Responsible Charge:</p> <p><u>Allen Long</u> Signature</p>	

04/14/23

Date

2018 IBC SCHEDULE OF SPECIAL INSPECTION SERVICES									
MATERIAL	ITEM	WORK UNDERWAY/INSPECTION	SERVICE	REQ'D	REFERENCE STANDARD	IBC REFERENCE	FREQUENCY		
							CONTINUOUS	PERIODIC	NOTE
Soil	1	Verify materials below shallow foundations are adequate to achieve the design bearing capacity (gravity and lateral bearing load capacity)	Field Inspection	X		1705.6	-	X	-
	2	Verify excavations are extended to proper depth and have reached proper material	Field Inspection	X		1705.6	-	X	-
	3	Perform classification and testing of compacted fill materials	Field Inspection			1705.6	-	X	-
	4	Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	Field Inspection			1705.6	X	-	-
	5	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly	Field Inspection			1705.6	-	X	-

2018 IBC SCHEDULE OF SPECIAL INSPECTION SERVICES									
1705.3 CONCRETE CONSTRUCTION (IBC TABLE 1705.3 - MODIFIED)									
MATERIAL	ITEM	WORK UNDERWAY/INSPECTION	SERVICE	REQ'D	REFERENCE STANDARD	IBC REFERENCE	FREQUENCY		
							CONTINUOUS	PERIODIC	NOTE
Reinf. Steel	1	Inspect reinforcement, including prestressing tendons and verify placement	Shop (4) and Field Inspection	X	ACI 318 CH 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4	-	X	-
	2	Reinforcing bar welding:							
	2a	Verify weldability of reinforcing bars other than ASTM A 706	Shop (4) and Field Inspection		AWS D1.4, ACI 318: 26.6.4		X	-	7
	2b	Inspect single-pass fillet welds, maximum 5/16 in.	Shop (4) and Field Inspection				X	-	7
	2c	Inspect all other welds	Shop (4) and Field Inspection				X	-	7
Anchors	3	Inspect anchors cast in concrete	Shop (4) and Field Inspection	X	ACI 318: 17.8.2		-	X	7
	4	Inspect anchors post-installed in hardened concrete members:							
	4a	Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	Field Inspection		ACI 318: 17.8.2.4	Table 1705.3 Footnote (b)	X	-	7
	4b	Mechanical anchors and adhesive anchors not defined in (4a)	Field Inspection	X	ACI 318: 17.8.2		-	X	7
		Inspection of anchors and reinforcing steel post-installed in hardened concrete: per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, and/or embedment and tightening torque.	Field Inspection	X				Or as required by the research report issued by an approved agency	7
Concrete	5	Verify use of required mix design	Shop (4) and Field Inspection	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3	-	X	7
	6	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of concrete	Shop (4) and Field Inspection	X	ASTM C 172, ASTM C 31, ACI 318: 26.5, 26.12	1908.10	X	-	8
	7	Inspect concrete and shotcrete placement for proper application techniques.	Field Inspection	X	ACI 318: 26.5	1908.6, 1908.7, 1908.8	X	-	-
	8	Verify maintenance of specified curing temperatures and techniques	Field Inspection	X	ACI 318: 26.5.3-26.5.5	1908.9	-	X	8
	9	Inspect prestressed concrete:							
Prestressed	9a	Application of prestressing forces	Field Inspection		ACI 318: 26.10		X	-	7
	9b	Grouting of bonded prestressing tendons	Field Inspection		ACI 318: 26.9		X	-	7
	10	Inspect erection of precast concrete members	Field Inspection		ACI 318: 26.11.2	per construction documents	-	X	-
		Perform inspections of welding and bolting in accordance with Section 1705.2	Field Inspection			1705.2	-	X	-
	11	Verify in-situ concrete strength, prior to stressing tendons in post-tensioned concrete prior to removal of shores and forms from beams and structural slabs	Shop (4) and Field Inspection		ACI 318: 26.11.2		-	X	-
Post Tension	12	Inspect formwork for shape, location and dimensions of the concrete member being formed, shoring and reshoring	Field Inspection		ACI 318: 26.11.2 (b)		-	X	-

DES BY DATE REVISIONS

04/14/23  
PROJECT PE2023037  
DESIGNED AL  
DRAWN AL  
CHECKED

**R R M M**  
ARCHITECTS, PC  
28 Church Ave SW  
Roanoke, Virginia 24011  
(540)344-1212

ALLAN J. LONG  
Lic. No. 023940  
April 14, 2023

BASSETT HIGH SCHOOL FOOTBALL SIGNAGE  
HENRY COUNTY PUBLIC SCHOOLS  
85 Riverside Dr  
Bassett, VA 24065  
DRAWING SPECIAL INSPECTIONS

PROSIM  
ENGINEERING, LLC  
what we do matters  
240 SUNCREST ST, SUITE 4, JOHNSON CITY, TN 37615 423.477.8314  
108 SOUTH IRON ST, MARION, VA 24364 276.783.3777  
www.prosimeng.com

SHEET  
S-102

**SPECIAL INSPECTIONS:**
**2018 IBC SCHEDULE OF SPECIAL INSPECTION SERVICES**
**1705.2 STRUCTURAL STEEL**

MATERIAL	ITEM	WORK UNDERWAY/INSPECTION	SERVICE	REQ'D	REFERENCE STANDARD	REFERENCE	FREQUENCY		
							CONTINUOUS	PERIODIC	NOTE
Structural Steel	1	Fabricator and erector quality control	Submittal Review		N2		-	X	7, 8
	1a	Material identification	Submittal Review		N2, paragraph 1		-	X	7, 8
		Fabricator quality control procedures	Submittal Review		N2, paragraph 2		-	X	7, 8
	1b	Erector quality control procedures	Submittal Review		N2, paragraph 3		-	X	7, 8
		Submittals for steel construction	Submittal Review		N3, paragraph 1		-	X	7, 8
		Available documents for steel construction	Submittal Review		N3, paragraph 2		-	X	7, 8
		Quality control inspector qualifications	Submittal Review		N4, paragraph 1		-	X	7, 8
		Quality assurance inspector qualifications	Submittal Review		N4, paragraph 2		-	X	7, 8
		NDT personnel qualifications	Submittal Review		N4, paragraph 3		-	X	7, 8
	2	Embedments (verify diameter, grade, type, length, embedment)	Field Inspection	X	ACI 318 17.8.2, TMS 602 ART. 2.4 B & 2.4 H		-	X	-
	3	Verify member locations, braces, stiffeners, and application of joint details at each connection complies with construction documents	Field Inspection				-	X	-
Welding	4a	Prior to welding: Perform/observe the QA tasks listed in Table N5.4-1 for each welded joint or member	Shop (4) and Field Inspection	X	TABLE N5.4-1		-	-	5 - Observe or perform as noted
		Welder qualification records and continuity records	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		WPS available (welder procedure specification)	Shop (4) and Field Inspection		TABLE N5.4-1		PR	-	-
		Manufacturer certifications for welding consumables available	Shop (4) and Field Inspection		TABLE N5.4-1		PR	-	-
		Material identification (type/grade)	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Welder identification system	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Fit-up groove welds (including joint geometry) Joint preparations Dimensions (alignment, root opening, root face, bevel) Cleanliness (condition of steel surfaces) Tacking (tack weld quality and location) Backing type and fit (if applicable)	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Fit-up of CJP groove welds of HSS T-, Y- and K-joints without backing (including joint geometry) Joint preparations Dimensions (alignment, root opening, root face, bevel) Cleanliness (condition of steel surfaces) Tacking (tack weld quality and location)	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Configuration and finish of access holes	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Fit-up of fillet welds Dimensions (alignment, gaps at root) Cleanliness (condition of steel surfaces) Tacking (tack weld quality and location)	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
		Check welding equipment	Shop (4) and Field Inspection		TABLE N5.4-1		-	OB	-
	4b	During welding: Perform/observe the QA tasks listed in Table N5.4-2 for each welded joint or member	Shop (4) and Field Inspection	X	TABLE N5.4-2		-	-	5 - Observe
		Control and handling of weldables Packaging Exposure control	Shop (4) and Field Inspection		TABLE N5.4-2		-	OB	-
		No welding over cracked tack welds	Shop (4) and Field Inspection		TABLE N5.4-2		-	OB	-
		Environmental conditions Wind speed within limits Precipitation and temperature	Shop (4) and Field Inspection		TABLE N5.4-2		-	OB	-
		WPS followed Settings on welding equipment Travel speed Selected welding materials Shielding gas type/flow rates Preheat applied Interpass temperature maintained (min./max.) Proper position (F, V, H, OH)	Shop (4) and Field Inspection		TABLE N5.4-2		-	OB	-
		Welding techniques Interpass and final cleaning Each pass within profile limitations Each pass meets quality requirements	Shop (4) and Field Inspection		TABLE N5.4-2		-	OB	-
		Placement and installation of steel headed stud anchors	Shop (4) and Field Inspection		TABLE N5.4-2		PR	-	-
	4c	After welding: Perform/observe the QA tasks listed in Table N5.4-3 for each welded joint or member	Shop (4) and Field Inspection	X	TABLE N5.4-3		-	-	5 - Observe or perform as noted
		Welds cleaned	Shop (4) and Field Inspection	X	TABLE N5.4-3		-	OB	-
		Size, length and location of welds	Shop (4) and Field Inspection	X	TABLE N5.4-3		PR	-	-
		Welds meet visual acceptance criteria Crack prohibition Weld/base-metal fusion Crater cross section Weld profiles Weld size Undercut Porosity	Shop (4) and Field Inspection	X	TABLE N5.4-3		PR	-	-
		Arc strikes	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		k-area	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		Weld access holes in rolled heavy shapes and built-up heavy shapes	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		Backing removed and weld tabs removed (if required)	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		Repair activities	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		Document acceptance or rejection of welded joint or member	Shop (4) and Field Inspection		TABLE N5.4-3		PR	-	-
		No prohibitive welds have been added without approval of EOR	Shop (4) and Field Inspection	X	TABLE N5.4-3		-	OB	-
Non-Destructive Testing	5	Non-Destructive Testing (NDT) of welded joints		X	AWS D1.1 & AISC 360 Commentary		-	-	-
		Complete penetration groove welds 5/16" or greater in Risk Category III or IV	Shop (4) or field ultrasonic testing - 100%		N5, paragraph 5b		-	X	-
		Complete penetration groove welds 5/16" or greater in Risk Category II	Shop (4) or field ultrasonic testing - 10% of welds, min.		N5, paragraph 5b		-	X	-
		Thermally cut surfaces of access holes when material t > 2"	Shop (4) or field magnetic particle or penetrant testing				-	X	-
		Welded joints subject to fatigue when required by AISC 360	Shop (4) or field radiographic or ultrasonic testing		Appendix 3, Table A-3.1		-	X	-
		Fabricators NDT reports when fabricator performs NDT	Verify reports	X			-	-	6 - Each submittal

**2018 IBC SCHEDULE OF SPECIAL INSPECTION SERVICES CONT.**

Bolting	6a	Prior to bolting: Perform/observe the QA tasks listed in Table N5.6-1 for each bolted connection	Shop (4) and Field Inspection	TABLE N5.6-1	-	-	5 - Observe or perform as noted
		Manufacturer's certifications available for fastener materials	Shop (4) and Field Inspection	TABLE N5.6-1	PR	-	-
		Fasteners marked in accordance with ASTM requirements	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
		Correct fasteners selected for the joint detail (grade, type, bolt length, if threads are to be excluded from shear plane)	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
		Correct bolting procedure selected for joint detail	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
		Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
		Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
		Protected storage provided for bolts, nuts, washers and other fastener components	Shop (4) and Field Inspection	TABLE N5.6-1	-	OB	-
6b	6b	During bolting: Perform/observe the QA tasks listed in Table N5.6-2 for each bolted connection	Shop (4) and Field Inspection	TABLE N5.6-2	-	-	5 - Observe
		Fastener assemblies placed in all holes and washers and nuts are positioned as required	Shop (4) and Field Inspection	TABLE N5.6-2	-	OB	-
		Joint brought to the snug-tight condition prior to the pre-tensioning operation	Shop (4) and Field Inspection	TABLE N5.6-2	-	OB	-
		Fastener component not turned by the wrench prevented from rotation	Shop (4) and Field Inspection	TABLE N5.6-2	-	OB	-
		Fasteners are pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward free edges	Shop (4) and Field Inspection	TABLE N5.6-2	-	OB	-
6c	6c	After bolting: Perform/observe the QA tasks listed in Table N5.6-3 for each bolted connection	Shop (4) and Field Inspection	TABLE N5.6-3	-	-	5 - Perform
		Document acceptance or rejection of bolted connections	Shop (4) and Field Inspection	TABLE N5.6-3	PR	-	-
		Pre-Tensioned & Slip-Critical	7	Pre-Tensioned and slip-critical joints	N Para 6	-	-
		Turn-of-nut with matching markings	Shop (4) and Field Inspection	N Para 6	-	X	-
		Direct tension indicator	Shop (4) and Field Inspection	N Para 6	-	X	-
		Twist-off type tension control bolt	Shop (4) and Field Inspection	N Para 6	-	X	-
		Turn-of-nut without matching markings	Shop (4) and Field Inspection	N Para 6	X	-	-
		Calibrated wrench	Shop (4) and Field Inspection	N Para 6	X	-	-
		Snug-tight joints	Shop (4) and Field Inspection	N Para 6	-	X	-

**PROSIM**  
ENGINEERING, LLC  
what we do matters  
240 SUNCREST ST, SUITE 4, JOHNSON CITY, TN 37615 | 423.477.8314  
108 SOUTH IRON ST, MARION, VA 24364 | 276.783.3777  
www.prosimeng.com

**BASSETT HIGH SCHOOL FOOTBALL SIGNAGE**  
**HENRY COUNTY PUBLIC SCHOOLS**  
85 Riverside Dr  
Bassett, VA 24065

**R R M M**  
ARCHITECTS, PC  
28 Church Ave SW  
Roanoke, Virginia 24011  
(540)344-1212

CONSTITUTION  
ALLAN J. LONG  
ALLAN J. LONG  
Lic. No. 023940  
April 14, 2023

ABBREVIATIONS																	
#	NUMBER	CONN	CONNECTION	FND	FEMININE NAPKIN DISPENSER	LLH	LONG LEG HORIZONTAL	QT	QUARRY TILE	TSC	TEACHERS STORAGE CABINET	VTR	VENT THRU ROOF				
& +	AND	CONST	CONSTRUCTION	FOC	FACE OF CONCRETE	LLV	LONG LEG VERTICAL	QTY	QUANTITY	TTD	TOILET TISSUE DISPENSER	VWC	VINYL WALL COVERING				
+/ -	PLUS OR MINUS	CONT	CONTINUOUS	FOM	FACE OF MASONRY	LP	LOW POINT			TV	TELEVISION						
@	AT	CONTR	CONTRACT, CONTRACTOR	FOS	FACE OF STUDS	LTG	LIGHTING	R	RISER, RIDGE	TW	TEACHERS WARDROBE	W	WEST, WIDE, WIDTH				
°	DEGREES	CORR	CORRUGATED	FP	FIREPROOF	LTL	LINTEL	R/W	RIGHT OF WAY	TYP	TYPICAL	W/	WITH				
Ø	DIAMETER	CPT	CARPET	FPL	FIREPLACE	LVR	LOUVER	RA	RETURN AIR	UC	UNDERCUT	W/O	WITHOUT				
Ω	ARC LENGTH	CRS	COURSE, COURSES	FR	FIRE RATED	LW	LIGHTWEIGHT	RAD	RADIUS	UG	UNDER GROUND	WAIN	WAINSOT				
A/C	AIR CONDITIONING	CSWK	CASEWORK	FRM	FRAME, FRAMED	M	METER	RB	RESILIENT BASE	WC	WATER CLOSET						
AB	ANCHOR BOLT	CT	CERAMIC TILE	FRMG	FRAMING	M/S	MOP SINK	RCP	REFLECTED CEILING PLAN	WD	WOOD / WOOD FLOORING						
ABV	ABOVE	CTB	CERAMIC TILE BASE	FRP	FIBERGLASS REINFORCED PLASTIC	MACH	MACHINE	RD	ROOF DRAIN	WON	UNLESS OTHERWISE NOTED	WDB	WOOD BASE				
ACM	ASBESTOS CONTAINING MATERIAL	CU FT	CUBIC FEET	FRT	FIRE RETARDANT TREATED	MAINT	MAINTENANCE	REC	RECEPTACLE	WDW	WINDOW						
ACP	ACOUSTIC CEILING PANEL	CU YD	CUBIC YARD	FT	FOOT, FEET	MANUF	MANUFACTURE, MANUFACTURER	REF	REFERENCE	V	VOLT, VALLEY	WGL	WIRE GLASS				
ACT	ACOUSTIC CEILING TILE	CUH	CABINET UNIT HEATER	FTG	FOOTING	MAR	MARBLE	REFRIG	REFRIGERATOR	VAC	VACUUM	WH	WATER HEATER				
ADDN	ADDITION	CW	COLD WATER	FUM	FUME HOOD	MAS	MASONRY	REINF	REINFORCE, REINFORCED,	VAR	VARNISH	WI	WROUGHT IRON				
ADH	ADHESIVE	CWFP	CEMENTITIOUS WOOD FIBER PANELS	FUR	FURRED, FURRING	MATL	MATERIAL	REINFORCING	VENTED BASE	WMS	WIRE MANAGEMENT SLOT						
ADJ	ADJUSTABLE			FURN	FURNITURE	MAX	MAXIMUM	REM	REMOVE	VCT	VINYL COMPOSITION TILE	WP	WATERPROOFING				
AFF	ABOVE FINISH FLOOR	D	DEEP, DEPTH, DRAIN	FURR	FURRING	MB	MARKERBOARD	REQD	REQUIRED	VEN	VENeer	WPT	WORKING POINT				
AGG	AGGREGATE	DBL	DOUBLE			MBR	MODIFIED BITUMEN ROOF	REQMT	REQUIREMENT	VERT	VERTICAL	WR	WASTE RECEPTACLE				
AHU	AIR HANDLING UNIT	DEMO	DEMOLITION	G	GAS	MECH	MECHANIC, MECHANICAL	RESIL	RESILIENT	VEST	VESTIBULE	WT	WEIGHT				
AL	ALUMINUM	DET / DTL	DETAIL	GA	GAUGE	MED	MEDIUM	RET	RETURN	VR	VAPOR RETARDER	WWF	WELDED WIRE FABRIC				
ALT	ALTERNATE	DF	DRINKING FOUNTAIN	GAL	GALVANIZED	MEMB	MEMBRANE	REV	REVISION, REVISIONS, REVISED	VT	VINYL TILE	WWM	WELDED WIRE MESH				
AMP, A	AMPERE	DH	DOUBLE HUNG	GB	GRAB BAR	MH	MANHOLE	RFG	ROOFING								
ANCH	ANCHOR, ANCHORAGE	DIA	DIAmeter	GC	GENERAL CONTRACT, CONTRACTOR	MIR	MIRROR	RFL	REFLECT, REFLECTED, REFLECTIVE								
ANOD	ANODIZED	DIAG	DIAGONAL	GCMU	GLAZED FIBER REINFORCED CONCRETE	MISC	MISCELLANEOUS	RL	RAIN LEADER								
AP	ACCESS POINT	DIM	DImension	GEN	GENERAL	MLD	MOLDING	RM	ROOM								
APC	ARCHITECTURAL PRECAST CONCRETE	DISP	DISPOSAL	GFRC	GLASS FIBER REINFORCED CONCRETE	MM	MILLIMETER	RO	ROUGH OPENING								
APPROX	APPROXIMATE	DIV	DIvISION	GL	GLASS, GLAZING	MO	MASONRY OPENING	RSHT	RESILIENT SHEET								
AR	ABUSE RESISTANT	DL	DEAD LOAD	GPM	GALLONS PER MINUTE	MOD	MODIFIED	RT	RUBBER TILE / RUBBER TREAD								
ARCH	ARCHITECT, ARCHITECTURAL	DMT	DEMOUNTABLE	GR	GRADE / GROUT	MOV	MOVABLE	RTU	ROOF TOP UNIT								
ASB	ASBESTOS	DN	DOWN	GSU	GLAZED STRUCTURAL UNIT	MR	MAP RAIL	S	SOUTH								
ASPH	ASPHALT	DPG	DAMPPROOFING	GWB	GYPSUM WALLBOARD	MT	MOUNT	S/ S	SOLID CORE, SERVICE SINK								
ATTEN	ATTENUATION	DPR	DISPENSER	GWT	GLAZED WALL TILE	MTD	MOUNTED, MOUNTING	SAB	SOUND ATTENUATION BLANKET								
AUTO	AUTOMATIC	DR	DOOR, DISPLAY RAIL	GYP	GYPSUM	MTL	METAL	SAN	SANITARY SEWER								
AVG	AVERAGE	DS	DOWNSPOUT			MULL	MULLION	SAPC	SUSPENDED ACoustic PANEL CEILING								
AWP	ACOUSTIC WALL PANEL	DWG	DRAWING			MWP	MEMBRANE WATERPROOFING	SC	SOLID CORE, SEALED CONCRETE								
BC	BOTTOM OF CURB	DWR	DRAWER	H	HIGH			SCHED	SCHEDULE								
BD	BOARD	E	EAST	H/C	HANDICAPPED	N	NORTH	SCW	SOLID CORE WOOD								
BEJ	BUILDING EXPANSION JOINT	EA	EACH	HB	HOSE BIB	N/C	NO CHARGE	SD	SOLID CORE WOOD								
BETW	BETWEEN	EF	EXHAUST FAN	HC	HOLLOW CORE	NAT	NATURAL	SEC	SOLID CORE WOOD								
BIT	BITUMINOUS	EFS	EXTERIOR FINISH SYSTEM	HDBD	HARDBOARD	NIC	NOT IN CONTRACT	SF	SOLID CORE WOOD								
BL	BLEACHER FINISH	EIFS	EXTERIOR INSULATION FINISH SYSTEM	HDWD	HARDWOOD	NO	NUMBER	SGL	SOLID CORE WOOD								
BLDG	BUILDING	EJ	EXPANSION JOINT	HDWR	HARDWARE	NOM	NOMINAL	SLR	SOLID CORE WOOD								
BLK	BLOCK	ELAS	ELASTOMERIC	HGT	HEIGHT	NRC	NOISE REDUCTION COEFFICIENT	SN	SOLID CORE WOOD								
BLKG	BLOCKING	ELEC	ELECTRICAL	HM	HOLLOW METAL	NTS	NOT TO SCALE	ST	SOLID CORE WOOD								
BM	BEAM	ELEV	ELEVATION, ELEVATOR	HORIZ	HORIZONTAL			STC	SOLID CORE WOOD								
BO	BOTTOM OF	EM	ENTRANCE MAT	HP	HIGH POINT	OA	OVERALL	STL	SOLID CORE WOOD								
BOT, B	BOTTOM	EMER	EMERGENCY	HR	HOUR	OBS	OBSCURE	STP	SOLID CORE WOOD								
BRG	BEARING	ENCL	ENCLOSE, ENCLOSURE	HTG	HEATING	OC	ON CENTER	STT	SOLID CORE WOOD								
BRK	BRICK	EP	ELECTRICAL PANELBOARD	HVAC	HEATING, VENTILATION AND AIR	OD	OUTSIDE DIAMETER	STL	SOLID CORE WOOD								
BS	BOTH SIDES	EPDM	ETHYLENE PROPYLENE DIENE MONOMER	HW	HOT WATER	OF/CI	OWNER FURNISHED / CONTRACTOR	STR	SOLID CORE WOOD								
BSMT	BASEMENT	BTWN, B/W	BETWEEN	EPS	EXPANDED POLYSTYRENE	OH	OVERHEAD	SOF	SOLID CORE WOOD								
BUR	BUILT-UP ROOFING	EPX	EPOXY	ID	INSIDE DIAMETER	OPNG	OPENING	SPEC	SOLID CORE WOOD								
BVL	BEVELED	EQ	EQUAL	IN	INCH	OPP	OPPOSITE	SPK	SOLID CORE WOOD								
C	CARPET	EST	ESTIMATE	INCL	INCLUDE, INCLUDED, INCLUDING	P	PLATE	ST	SOLID CORE WOOD								
CAB	CABINET	EWC	ELECTRIC WATER COOLER	INFO	INFORMATION	PAR	PARALLEL	STC	SOLID CORE WOOD								
CAP	CAPACITY	EXCA	EXCAVATE	INST	INSTALLATION	PART	PARTIAL	STD	SOLID CORE WOOD								
CB	CHALKBOARD	EXH	EXHAUST	INSUL	INSULATE, INSULATED, INSULATION	PC	PRE-CAST, PIECE	STFT	SOLID CORE WOOD								
CC	CUBICAL CURTAIN	EXIST	EXISTING	INT	INTERIOR	PED	PEDESTAL	STL	SOLID CORE WOOD								
CCTV	CLOSED CIRCUIT TELEVISION	EXP	EXPOSED / EXPANSION	INTRLK	INTERLOCK	PERF	PERFORATE (D)	STOR	SOLID CORE WOOD								
CEM	CEMENT	EXP C	EXPANSION CONSTRUCTION	INV	INVERT	PERM	PERIMETER	STRUC	SOLID CORE WOOD								
CEM TOP	CEMENT TOPPING	EXT	EXTERIOR	JAN	JANITOR	PIP	POURED IN PLACE	SUB	SOLID CORE WOOD								
CER	CERAMIC	FAB	FABRICATE	JB	JUNCTION BOX	PL	PROPERTY LINE / PLASTIC LAMINATE	SUSP	SOLID CORE WOOD								
CF	CUBIC FOOT	FAS	FASTEN, FASTENER	JC	JANITOR CLOSET	PLAM	PLASTIC LAMINATE	SYM	SOLID CORE WOOD								
CFLSHG	COUNTER FLASHING	FB	FACE BR														

## PROJECT SPECIFICATIONS

## SECTION 101423 - PANEL SIGNAGE

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Illuminated panel signs.
  - 2. Related Requirements:

## 1.3 COORDINATION

- A. Furnish templates for placement of sign-anchorage devices embedded in permanent construction by other installers.
- B. Furnish templates for placement of electrical service embedded in permanent construction by other installers.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Sustainable Design Submittals:
- C. Shop Drawings: For panel signs
  - 1. Include fabrication and installation details and attachments to other work.
  - 2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
  - 3. Show message list, typestyles, graphic elements, and layout for each sign at least half size.
  - 4. Show locations of electrical service connections.
  - 5. Include diagrams for power, signal, and control wiring.
  - 6. Provide rendered graphic of proposed sign that includes colors, facing material and proposed graphic material.
- D. Delegated-Design Submittal: For signs indicated in "Performance Requirements" Article.
  - 1. Include structural analysis calculations for signs indicated to comply with design loads; signed and sealed by the qualified professional engineer responsible for their preparation.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and manufacturer.
- B. Sample Warranty: For special warranty.

## 1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For signs to include in maintenance manuals.

## 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer of products.

## 1.8 FIELD CONDITIONS

- A. Field Measurements: Verify locations of anchorage devices and electrical service embedded in permanent construction by other installers by field measurements before fabrication, and indicate measurements on Shop Drawings.

## 1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.

- 1. Failures include, but are not limited to, the following:
  - a. Deterioration of finishes beyond normal weathering.
  - b. Deterioration of embedded graphic image.
  - c. Separation or delamination of sheet materials and components.

- 2. Warranty Period: Five 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 014000 "Quality Requirements," to design sign structure and anchorage of illuminated panel sign type(s) according to structural performance requirements.
- B. Structural Performance: Signs and supporting elements shall withstand the effects of gravity and other loads within limits and under conditions indicated.
  - 1. Uniform Wind Load: As indicated on Drawings.
  - 2. Other Design Load: As indicated on Drawings.
- C. Thermal Movements: For exterior signs, allow for thermal movements from ambient and surface temperature changes.
  - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## 2.2 PANEL SIGNS

- A. Panel Sign: Sign with smooth, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles as indicated on the drawings.
  - 1. Illuminated Panel Sign: Backlit construction with LED lighting including transformers, insulators, and other accessories for operability, with provision for servicing and concealing connections to building electrical system. Use tight or sealed joint construction to prevent unintentional light leakage. Space lamps apart from each other and away from sign surfaces as needed to illuminate evenly.
    - a. Power: As indicated on electrical Drawings .
    - b. Weeps: Provide weep holes to drain water at lowest part of exterior signs. Equip weeps with permanent baffles to block light leakage without inhibiting drainage.
  - 2. Solid-Sheet Sign and Returns, and Back: Aluminum sheet with finish specified in "Surface Finish and Applied Graphics" Subparagraph and as follows:
    - a. Thickness: Manufacturer's standard for size of sign and required to resist structural loads..
    - b. Laminated Polycarbonate-Sheet: Polycarbonate face sheet attached to face of aluminum frame.
    - c. Polycarbonate Sheet Thickness: As required by structural loading
    - d. Surface-Applied, Flat Graphics: Applied vinyl film photo image
    - e. Mounting: Aluminum brackets with countersunk flathead through fasteners.
    - f. Surface Finish and Applied Graphics:
      - a. Photo-Image Graphics: Manufacturer's standard multicolor, image.
    - g. Flatness Tolerance: Sign shall remain flat or uniformly curved under installed conditions as indicated on Drawings and within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner.

## 2.3 PANEL-SIGN MATERIALS

- A. Aluminum Sheet and Plate: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- B. Aluminum Extrusions: ASTM B221, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- C. Acrylic Sheet: ASTM D4802, category as standard with manufacturer for each sign, Type UVF (UV filtering).
- D. Polycarbonate Sheet: ASTM C1349, Appendix X1, Type II (coated, mar-resistant, UV-stabilized polycarbonate), with coating on both sides.
- E. Vinyl Film: UV-resistant vinyl film of nominal thickness indicated, with pressure-sensitive, permanent adhesive on back; die cut to form characters or images as indicated on Drawings and suitable for exterior applications.
- F. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

## 2.4 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:
  - 1. Use concealed fasteners and anchors unless indicated to be exposed.
  - 2. For exterior exposure, furnish hot-dip galvanized devices unless otherwise indicated.
  - 3. Exposed Metal-Fastener Components, General:
    - a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.
    - b. Fastener Heads: For nonstructural connections, use flathead or oval countersunk screws and bolts with tamper-resistant slots unless otherwise indicated.
  - 4. Sign Mounting Fasteners:
    - a. Concealed Studs: Concealed (blind), threaded studs welded or brazed to back of sign material or screwed into back of sign assembly unless otherwise indicated.
    - b. Projecting Studs: Threaded studs with sleeve spacer, welded or brazed to back of sign material or screwed into back of sign assembly, unless otherwise indicated.
    - c. Through Fasteners: Exposed metal fasteners matching sign finish, with type of head indicated, and installed in predrilled holes.
- B. Post-Installed Anchors: Fastener systems with bolts of same basic metal as fastened metal, if visible, unless otherwise indicated; with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01 as appropriate for the substrate.
  - 1. Uses: Securing signs with imposed loads to structure.
- C. Magnetic Tape: Manufacturer's standard magnetic tape with adhesive on one side.
- D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

## 2.5 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
  - 1. Preassemble signs in the shop to greatest extent possible. Disassemble signs and assemblies only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation; apply markings in locations concealed from view after final assembly.
  - 2. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
  - 3. Comply with AWS for recommended practices in welding and brazing. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
  - 4. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.
  - 5. Internally brace signs for stability, to meet structural performance loading without oil-canning or other surface deformation, and for securing fasteners.
  - 6. Provide rabbets, lugs, and tabs necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.
- B. Subsurface-Applied Graphics: Apply graphics to back face of clear face-sheet material to produce precisely formed image. Image shall be free of rough edges.
- C. Shop- and Subsurface-Applied Vinyl: Align vinyl film in final position and apply to surface. Firmly press film from the middle outward to obtain good bond without blisters or mouthshuts.
- D. Brackets: Fabricate brackets, fittings, and hardware for bracket-mounted signs to suit sign construction and mounting conditions indicated. Modify manufacturer's standard brackets as required.
  - 1. Aluminum Brackets: Factory finish brackets with baked-enamel or powder-coat finish to match sign-background color color unless otherwise indicated.

## 2.6 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.7 ALUMINUM FINISHES

- A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.
- B. Baked-Enamel or Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify that sign-support surfaces are within tolerances to accommodate signs without gaps or irregularities between backs of signs and support surfaces unless otherwise indicated.
- C. Verify that anchorage devices embedded in permanent construction are correctly sized and located to accommodate signs.
- D. Verify that electrical service is correctly sized and located to accommodate signs.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
  - 1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
  - 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
  - 3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
  - 4. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

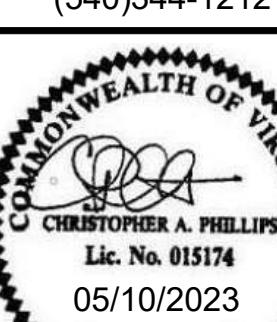
## 3.3 ADJUSTING AND CLEANING

- A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.
- B. Remove temporary protective coverings and strippable films as signs are installed.
- C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions, and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

## END OF SECTION 101423

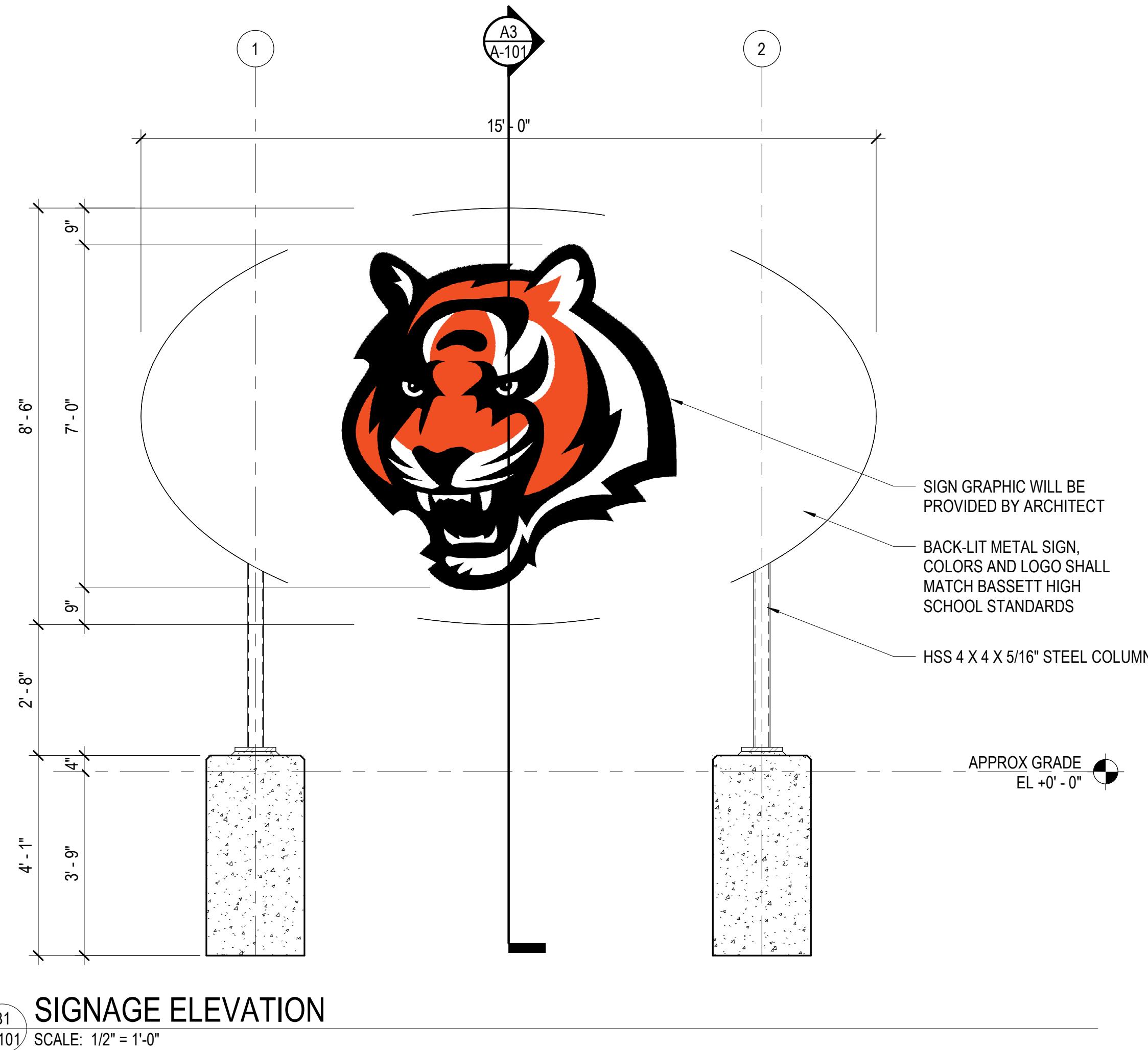
DES  
BY  
DATE  
REVISIONS  
D

DATE 05/10/2023  
PROJECT 2195-08  
DRAWN BLH  
CHECKED ACH



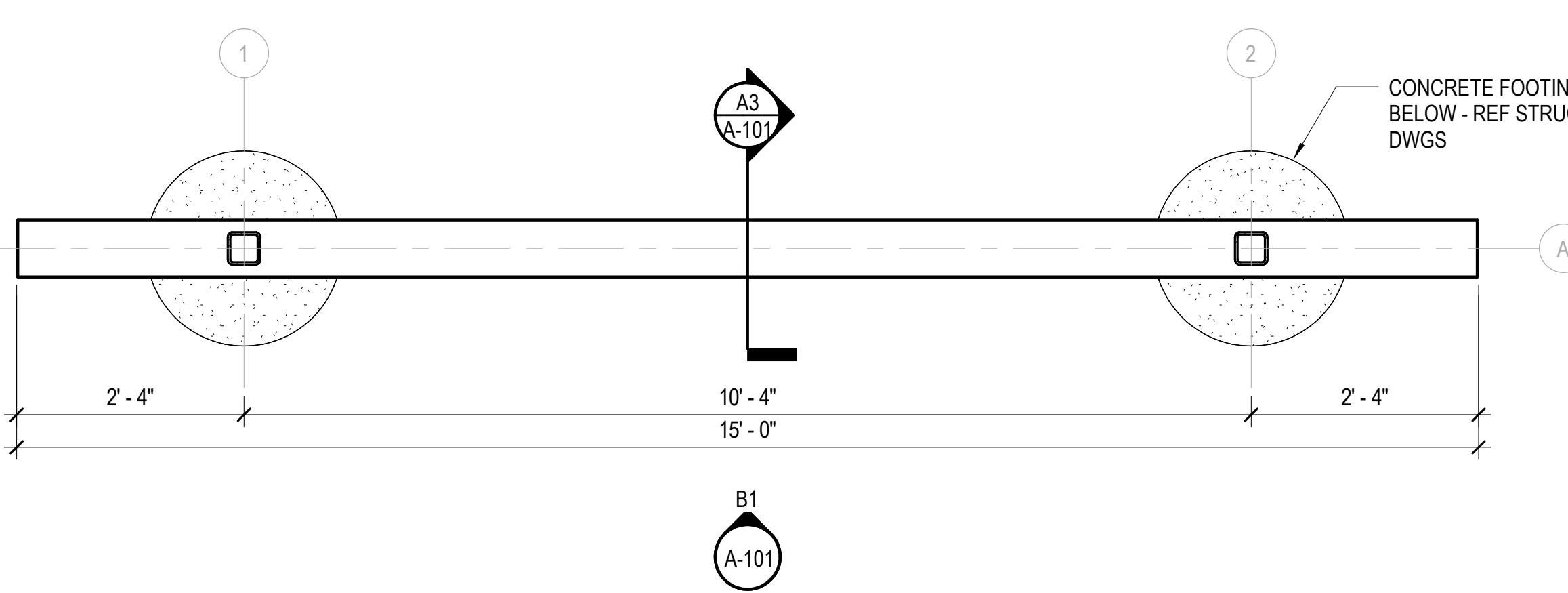
PROJECT BASSETT HIGH SCHOOL FOOTBALL SIGNAGE  
HENRY COUNTY PUBLIC SCHOOLS  
85 Riverside Dr  
Bassett, VA 24055  
DRAWING ARCHITECTURAL SPECIFICATIONS  
SHEET A-002

1/32" = 1'-0" 0" 16" 32" 48" 1/16" = 1'-0" 0" 4" 8" 16" 24" 3/32" = 1'-0" 0" 4" 8" 16" 1/8" = 1'-0" 0" 4" 8" 12" 1/4" = 1'-0" 0" 2" 4" 6" 8" 1/2" = 1'-0" 0" 6" 1" 2" 3" 3/4" = 1'-0" 0" 6" 1" 2" 1" 1/2" = 1'-0" 0" 3" 6" 9" 1" 1.5" 1 1/2" = 1'-0" 0" 3" 6" 9" 1" 1.5" 3" = 1'-0" 0" 1" 2" 3" 4" 5" 6" 6" = 1'-0" 0" 1" 2" 3"



# SIGNAGE ELEVATION

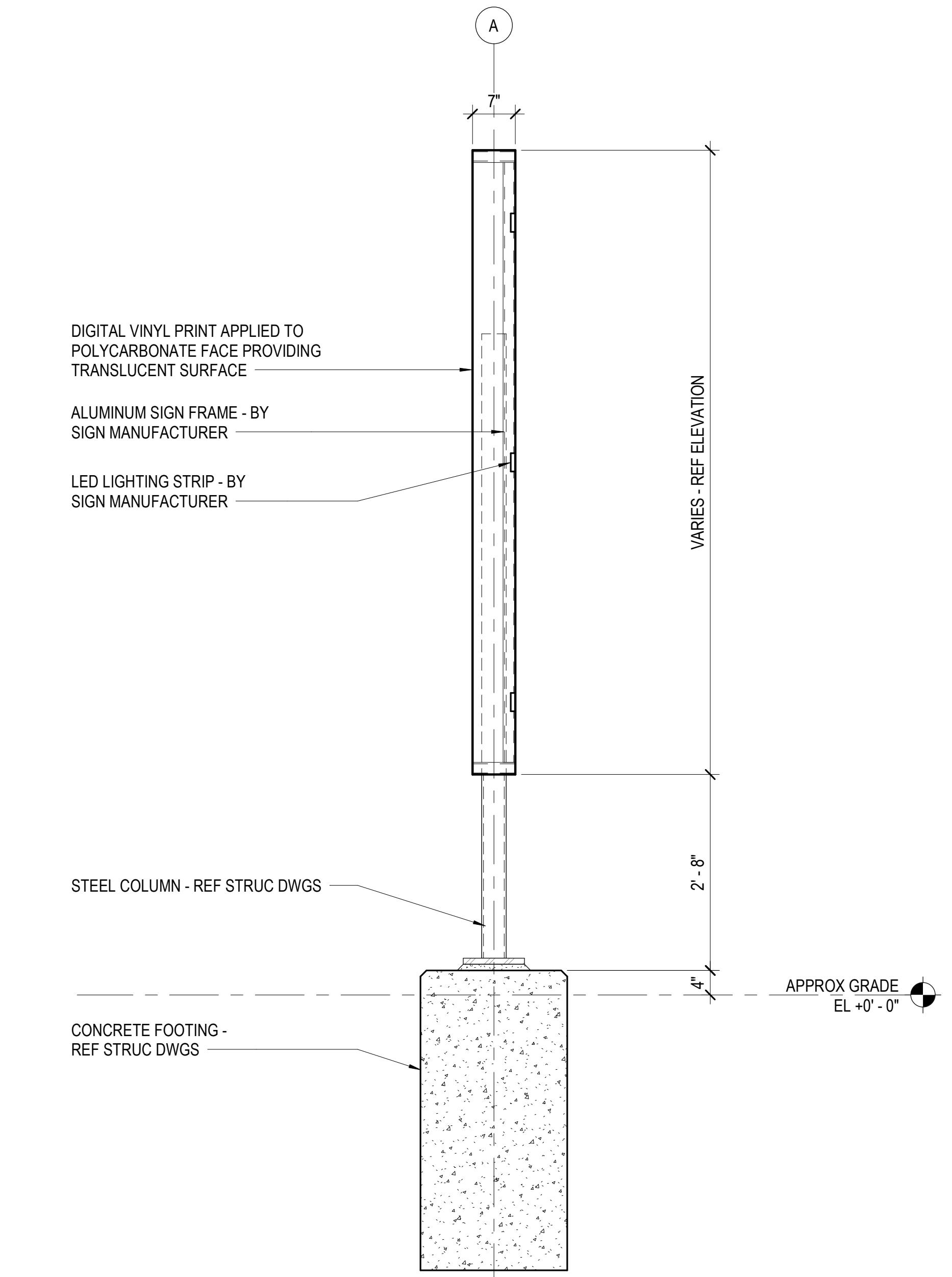
-101) SCALE: 1/2" = 1'-0"



# **SIGNAGE PLAN**

---

SCALE: 3/4" = 1'-0"



A3 SIGNAGE SECTION  
A-161 SCALE: 3/4" = 11' 0"

A-101 SCALE: 3/4" = 1'-0"

# ELECTRICAL NEW WORK NOTES

- A. PROVIDE TWO (2) 120V-1P-20 AMP CIRCUIT BREAKERS OF MATCHING FRAME AND SIZE IN CUTLER-HAMMER CH7BF PANELBOARD MOUNTED DIRECTLY BESIDE INSIDE OF DOOR OF ELECTRICAL BUILDING LOCATED BESIDE THE CONCESSION STAND.
- B. PROVIDE TWO (2) WEATHER RATED MP SWITCHES, AND ONE (1) GFCI WHILE-IN-USE RECEPTACLE AT SIGN. MOUNT MP SWITCHES AND RECEPTACLE ON BACK OF STEEL COLUMN AT BASE OF SIGN. MP SWITCHES SHALL BE USED AS LOCAL MEANS OF DISCONNECT FOR SIGN AND RECEPTACLE.
- C. PROVIDE ONE (1) 1" CONDUIT OUT OF TOP OF PANELBOARD TO TOP OF BLOCK AND EXTEND TO END OF BUILDING FACING HILLSIDE. TURN DOWN IN CORNER AND LB OUT THE BOTTOM OF BUILDING AND LB INTO THE GROUND ON THE EXTERIOR SURFACE OF THE WALL. TRENCH UP TO THE SIGN. PROVIDE ONE (1) CIRCUIT FOR POWER CONNECTION TO SIGN AND ONE (1) CIRCUIT FOR POWER TO GFCI WHILE-IN-USE RECEPTACLE AT SIGN. WIRING SHALL BE 2 SETS OF 2-#10 AND 1-#10 EGC IN 1" CONDUIT. CONCEAL ALL CONDUITS IN CONCRETE, BLOCK, AND STEEL TUBING/FRAMING OF SIGN.
- D. GROUND ALL METAL PARTS OF SIGN WITH #10 GROUND WIRE AND TERMINATE TO 10'-0" GROUND ROD DRIVEN IN GROUND BESIDE BASE.
- E. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2018 VIRGINIA CONSTRUCTION CODE AND 2017 NATIONAL ELECTRIC CODE.
- F. THE ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.

SHEET

A-101

**BASSETT HIGH SCHOOL FOOTBALL SIGNAGE  
HENRY COUNTY PUBLIC SCHOOL**

85 Riverside Dr  
Bassett, VA 24055

**» SIGNAGE PLAN AND ELEVATION**