



ADDENDUM NO.: ONE DATE: 10 March 2014

PROJECT TITLE: Indoor Practice Facility Construction
University of South Carolina
Columbia, South Carolina

PROJECT NO.: State #H27-6090-MJ WTS No. 12710

WRITTEN BY: Gene Bell, AIA, LEED-AP

TO: Prospective Bidders / Plan Holders

This addendum is issued pursuant to Article 1.1.1 of the AIA General Conditions of the Contract (A201) in connection with the revision of Bidding Documents which have been previously issued.

Addenda are issued prior to execution of Contract. All instructions contained herein shall be reflected in the Contract Sum and this Addendum will be made a part of the Contract Documents, if, as, and when a Construction Contract is awarded.

This Addendum forms a part of the Contract Documents and modifies the original documents dated February 5, 2014, as noted below. Acknowledge receipt of this Addendum in this space provided on the Bid Form. Failure to do so will subject the Bidder to disqualification.

This Addendum consists of 04 pages and the following attachments:

Pre-Bid Conference Sign-In sheet 06 Pages
SE-330 Lump Sum Bid Form 06 Pages
LEED Project Checklist 02 Pages
SECTION 074213 – METAL COMPOSITE MATERIAL WALL PANELS 09 Pages
SECTION 123530 – CASEWORK 03 Pages
R100 Site Grading 01 Sheet
A-405 Toilet Details 01 Sheet

A. CLARIFICATIONS

- 1. Please note that the documents include the following items, which are Owner Furnished / Owner Installed:
a. Interior Field Turf, including the subgrade. Note that drainage piping is included in the base bid.
b. Exterior Field Turf. Subgrade at exterior only is included in the base bid. See 321823 Synthetic Turf Subsurface and Drainage System.
c. Wall Padding (Included in paragraph 2.1 of section 116620 for information only).
d. Play Clocks/ Scoreboards
e. Exterior Lit signage
f. Exterior light poles *this item is Owner Furnished/ Contractor Installed.
g. Tile flooring and tiled base, final floor prep for tile by Owner’s installer.
h. Rubber Base
i. Toilet Accessories – Sanitary Napkin Disposals
j. Conc. Wheel Stops
k. Sound System – note that conduits, infrastructure are to be in the bid.



- I. Landscaping and Irrigation
 - m. Exterior Chain-link Fencing (found in section 323114)
 1. Note that Recreation Chain-link (found in section 323113.23) and Interior Chain-link fencing (found in section 055600) remain in the project.
2. Note that the contractor is responsible for printing cost of any hard copies of plans and specs that are required for the work. Owner will not supply any hard copies of plans and specs.

B. REVISIONS TO THE PROJECT MANUAL:

1. To the Table of Contents
 - a. Add specification section SECTION 074213 – METAL COMPOSITE MATERIAL WALL PANELS
 - b. Add specification section SECTION 123530 – CASEWORK
2. SE-330 LUMP SUM BID, BID FORM
 - a. Replace the SE-300 with the attached. This modifies the description of Alternate No. 1 to reference the elevation.
3. SECTION 018113 – SUSTAINABLE DESIGN REQUIREMENTS
 - a. Insert the attached LEED Project Checklist at the end of this section. The Checklist is provided for Information only.
4. SECTION 012300 – ALTERNATES
 - a. Delete paragraph 3.1, A, 1 in its entirety and replace it with the following:

“1. Delete translucent wall panels on the west elevation of the facility and substitute with 2” insulated metal wall panel siding as shown in elevations 1 and 8 on A202. All flashing and metal trims remain the same. “
5. SECTION 034500 – PRECAST ARCHITECTURAL CONCRETE
 - a. Add paragraph 1.7, B, 2 as follows:

“2. Or participates in APA’s ‘Plant Certification Program for Production of Architectural Precast Concrete Products’ and is designated an APA-certified plant.”
 - b. Add paragraph 2.1, A, 8 as follows:

“8. Or Equal By PRC Precast”
6. SECTION 042000 – UNIT MASONRY
 - a. Add paragraph 2.10, E, 2, e, as follows:

“e. Or Equal By Keene Building Products: Cav-air-ator”
7. SECTION 072726 – FLUID APPLIED MEMBRANE AIR BARRIER
 - a. Add paragraph 2.1, A, 8, as follows:

“8. Or equal by BASF “Enershield-I”
8. SECTION 08 4113 – ALUMINUM FRAMED ENTRANCES AND STOREFRONTS in paragraph 2.1, A, system should read “406 series for exterior elevations and 402 series for interior elevations.”
9. SECTION 08 4413 – GLAZED ALUMINUM CURTAIN WALLS
 - a. Delete paragraph 1.3, B, 1. There are no sunshades on the project.
 - b. Paragraph 2.1, A, delete the word “5500” and replace with the word “5600.”



10. Delete sections 10 1400 BUILDING SIGNAGE and 10 1426 Post and Panel/Pylon Signage in their entirety. Signage will be by Owner.
11. SECTION 102113 – TOILET COMPARTMENTS
 - a. Add paragraph 2.2, A, 6 and 7 as follows:
 - “6. Or equal by Accurate Partitions
 7. Or equal by Guardian Toilet Compartments”
12. SECTION 133419 – METAL BUILDING SYSTEMS
 - a. Add paragraph 2.1, A, 12, as follows
 - “12. Or Equal by Nucor Building Systems Group”
13. SECTION 334100 – STORM UTILITY DRAINAGE PIPING 2.1.A.1 and 2 – differs from the plans. Standard Class III B wall pipe with standard mastic joints shall be used.

C. REVISIONS TO DRAWINGS:

1. G-001 Cover Sheet: Insert sheet A-405 into the Drawing Index.
2. R100 Site Grading. Replace sheet R100 per the attached R100.
3. S100 General Notes. Add the following clarification note to this sheet:

“The wind load deflection limitations listed on the contract drawings and in the specifications for components and cladding (purlins, girts, etc.) can be made using the code allowed 0.7 factor in accordance with IBC 2009 Table 1604.3 footnote f. The 0.7 factor is to be applied to the components and cladding wind pressures computed using the full design wind speed. The allowable deflection limit for roof purlins for load combinations that include wind loads can be taken as L/180. The wind load deflection limitation for building drift shall be made not including the 0.7 factor.”
4. A-405 TOILET DETAILS Insert sheet A405, attached.

D. QUESTIONS RECEIVED:

1. Spec section 313116 Termite Control - Where is the mesh barrier system installed?
 - a. Mesh is installed in locations recommended by the manufacturer and per paragraphs 3.5, A, 1 and 2.
2. Are the goal posts, interior play clocks and scoreboard in this contract? I thought the goal posts were, I assume they are, are they specified?
 - a. Goal Posts are specified in section 116620 Miscellaneous Equipment. Play clocks and scoreboard by Owner.
3. If Alt 3 is accepted, will the steel behind the perforated panels be painted?
 - a. Yes, Steel behind perf. Panels are to be painted.
4. Detail 7 on sheet SR-601 shows a layer of 4" pervious concrete. Is this intended for the exterior turf only, or both interior and exterior?
 - a. The details on the SR sheets relate to the exterior turf only.



5. Is the temporary fence show on C101 between the outdoor fields and the phase II project limits by phase I or phase II contractor? The phase I plans show the fence also.
 - a. Per sheet C101 coded note 15 the 6' fence is to be installed as part of this project.

END OF ADDENDUM

University of South Carolina

Columbia, South Carolina

Mandatory Pre Bid Meeting

Project Name:
Project Number:
Pre Bid Date & Time:

Indoor Practice Facility Construction
H27-6090-MJ
March 6, 2014 @ 10am

Name	Company Name	Address	Phone #	Email
David McLanahan Ross Oakley	Mashburn Construction	1820 Sumner St. Columbia, SC 29203	803-460- 1000	roakley@mashburn construction.com
Ronnie Chapman	CAROLINA Architectural Products	648 Kannapolis PKWY	704-721 3445	CAPARC@mindspring.com
ZACH DAVIS	NB GUIMARIN	1124 BLUFF IND. BLVD. COLA, SC 29202	803.239. 2311	ZACHARY@NBGUIMARIN.COM
HAL BEMAN JEFF ARINGTON	^{THE} CHRISTMAN CO	2812 HILLCREEK DR. SUITE B, AUGUSTA, GA 30909	706-550 1010	hal.beman@christmanco.com
Nick Willwerth	SportsGraphics	1791 Page Ave Clanton, AL 35025	(712) 560- 0305	nick@sportsgraphicsinc.com
Joel Randolph	Randolph Builders	1010 Culp Rd. TINEVILLE, NC	704-588- 7116	Joel@Randolphbuilders.com
Tony Smith	Nucar Bldg Systems	412 RUNNING TURT RD W COLUMBIA, SC 29223	803/730-9141	tsmith@nbssc.com
CAL CONNER	LOVELESS CONTRACTING, INC	1821 STATE ST. CAYCE, SC 29033	803-796 5551	CAL@LOVELESS CONTRACTING .com
Lewis Frederick	Premier Contracting Network	1720 Ditch 701 Rd # 74 Ballentine, SC 29002	803 553-9362	lewisfrederick@ netzzero.net

University of South Carolina

Columbia, South Carolina

Mandatory Pre Bid Meeting

Project Name:	Indoor Practice Facility Construction
Project Number:	H27-6090-MJ
Pre Bid Date & Time:	March 6, 2014 @ 10am

Name	Company Name	Address	Phone #	Email
Ashton Estridge	Contract Construction Inc.	1125 Bickley Rd. Irmo, SC 29063	803.781.7058 803.457.6219 m	aestridge@contractconstruction.net
MICHAEL COLAVITA	BRANTLEY CONST.	2300 DORCHESTER CHARLESTON, SC	843-552-0150	MICHAEL@BRANTLEYCONSTRUCTION.CO CHRISTINA@BRANTLEYCONSTRUCTION.CO
LEONARD GRABIA	GULF STATES	101 AIRPORT RD STARKVILLE MS	770 309 0578	LEONARD.GRABIA@ GULFSTATESMANUFACTURERS.COM
BEN TAYLOR	METCON	425 HAMPTON ST. COLUMBIA, SC 29204	704-564-8116	RPARTEN@metconus.com BTAYLOR@metconus.com
Melissa Ferguson	Mellowl Blamey Construction	55 Commerce Ctr Greenville SC 29605	864 627 0302 627 0804 (F)	Melissa.ferguson@ mellowl.com
Mike Hill	Edison Found	3900 Rose Lake Dr Charlotte NC 28217	704-329-8000	mhill@edisonfound.com
SKYLAR ASHBY	PALMETTO CONSTRUCTION GROUP	2265 CLEMENS FERRY RD. CHAS. SC 29492	843-971-7156 (O) 843-971-3775 (F)	BID@PCG.LLC.NET
FRED FRANK	BCT	1240 BLUFF RD COLUMBIA SC 29201	799-5898	FREDFRANK@BCTUP.COM
Matt Trail	Coastal Concrete	1701 Peoples St Columbia SC	803.413.3342	mtrail@coastalconcrete.com

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Columbia, South Carolina

Mandatory Pre Bid Meeting

Project Name:	Indoor Practice Facility Construction
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Pre Bid Date & Time:	March 6, 2014 @ 10am

Name	Company Name	Address	Phone #	Email
Wes Howard	SCM, Inc	4505 S. Hwy 150 hexington NC 27295	336-499-0775	wes.howard@scminc.net
Danny Mullis	KBR Building Grp	5605 Carnegie Blvd Charlotte, NC 28209	704-363-9591	danny.mullis@kbr.com
Brian Hamm	Powrmatic	2001 Himalaya Way Apex, NC 27502	704-236-0528	brianh@powrmatic.com
Greg Jolly	Premire Constructors Electrial Division	682 Diyama Rd west Columbia - 29072	1-803-360-4869 1-803-227-0946	GJolly@PremireConstructors.net
Rodney Taylor	C&R Builders & Columbia, LLC	6236 St. Andrews Rd Columbia, SC 29212	803-386-7303	landrbuilder@gmail.com
Jeremy Smith	Sossaman Construction Company, Inc	PO Box 26 Gaffney SC 29342	864-489-7570	Jeremys@sossamanconstruction.com
Charles Stuart	Hood Construction	1050 Shore Rd. Columbia, SC 29401	803-765-2940	CHARLESSTUART@HOODCONSTRUCTION.COM
Barry Jones	Musco Sports Lighti	497 Kings Grant Dr Columbia, SC 29209	803-782-5251 803-260-1148 cell	Barry.Jones@musco.com

University of South Carolina

Columbia, South Carolina

Mandatory Pre Bid Meeting

Project Name: Indoor Practice Facility Construction
Project Number: H27-6090-MJ
Pre Bid Date & Time: March 6, 2014 @ 10am

Name	Company Name	Address	Phone #	Email
NEILL COSTELLO	Harrell Construction	119 Summerwalk Rd Simpsonville, SC	404-475-8331	ncostello@harrell-construction.com
Josh Edwards	Edcon, Inc.	Po Box 100 Peak, SC 29122	(803)345-3791	josh@edconinc.com
Peyton Howell	Y YEAHGIN POTTER Shackelford Construction	121 EDINBURGH CT GREENVILLE SC 29607	864-678-5411	estimating@ypsconst.com
THOMAS SCRUGGS	HOBAN CONSTRUCTION GROUP	127 KIDWA LANE Piedmont, SC 29623	803-730-3314	tscruggs@hoganconstructiongroup.com
Doug Price	China Construction America of SC	700 Satwin Pkwy Columbia SC 29212	803-771-2777 F803 771-2377	price_doug@chinaconstruction.us
ED Harrison	America United Structures of	820 Buschlong Ave Houston Texas	803-667 6080	ed.harrison@usabldg.com
Eric King	Band B Crane Service	2932 BlackCreek Rd Florence, SC 29550	843-269-4605	EKing1271@gmail.com
Todd Penley	Medallion Athletic Products	150 River Park Rd. Mooresville NC	(704) 0#660-3000 c#(704)200-8770	Todd@medallionathletics.com
DARREN HOLCOMBE	Cox + Dinkins	724 BECTUNE BOVD CORA SC 29205	8032540518	DHOLCOMBE@COXANDINKINS.COM

University of South Carolina

Columbia, South Carolina

Mandatory Pre Bid Meeting

Project Name:	Indoor Practice Facility Construction
Project Number:	H27-6090-MJ
Pre Bid Date & Time:	March 6, 2014 @ 10am

Name	Company Name	Address	Phone #	Email
Whitney Williams	ACE GLASS	COLA	(803) 754 2911	WWilliams@aceglasssc.com
Andy Sherman	Sherman Construction	1380 Piedmont Hwy Piedmont, SC 29673	(803) 277-0060	andy@shermanconstruction.com
Rob Major	"	"	"	rob@shermanconstruction.com
JEFF DAVIS	ATHLETICS	1304 Hayward ST.	803-777-0459	jeffd@mailbox.sc.edu
MARGARET JORDAN	OSE	1201 MAIN ST #600 COLA, SC 29201	803-737-0773	MJORDAN@KIMO.SC.GOV
Juquana Brooks	USC	743 Greene St COLA, SC 29208	803.777.3596	jbrookin@fmc.sc.edu
Ann Devuel	USC	" "	803 777.5811	aderrick@fmc.sc.edu

Revised: ADDENDUM NO. 1 Reissued: 3/10/2014
SE-330 – LUMP SUM BID
BID FORM

2011 Edition
Rev. 9/21/2011

Bidders shall submit bids on only Bid Form SE-330.

BID SUBMITTED BY: _____
(Bidder's Name)

BID SUBMITTED TO: University of South Carolina
(Owner's Name)

FOR PROJECT: PROJECT NAME Indoor Practice Facility Construction
PROJECT NUMBER H27-6090-MJ

OFFER

§ 1. In response to the Invitation for Construction Bids and in compliance with the Instructions to Bidders for the above-named Project, the undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with the Owner on the terms included in the Bidding Documents, and to perform all Work as specified or indicated in the Bidding Documents, for the prices and within the time frames indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

§ 2. Pursuant to Section 11-32-3030(1) of the SC Code of Laws, as amended, Bidder has submitted Bid Security as follows in the amount and form required by the Bidding Documents:

- Bid Bond with Power of Attorney Electronic Bid Bond Cashier's Check

(Bidder check one)

§ 3. Bidder acknowledges the receipt of the following Addenda to the Bidding Documents and has incorporated the effects of said Addenda into this Bid:

ADDENDUM No: _____

§ 4. Bidder accepts all terms and conditions of the Invitation for Bids, including, without limitation, those dealing with the disposition of Bid Security. Bidder agrees that this Bid, including all Bid Alternates, if any, may not be revoked or withdrawn after the opening of bids, and shall remain open for acceptance for a period of 60 Days following the Bid Date, or for such longer period of time that Bidder may agree to in writing upon request of the Owner.

§ 5. Bidder herewith offers to provide all labor, materials, equipment, tools of trades and labor, accessories, appliances, warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessary to complete the following items of construction work:

§ 6.1 BASE BID WORK *(as indicated in the Bidding Documents and generally described as follows):* The work will include constructing a 111,061 square foot metal building large enough to contain a regulation size football field and tall enough to accommodate field goal kicking with support facilities including restrooms, storage and training rooms and parking. Primary exterior materials are metal, translucent sandwich panels and masonry. The facility will be constructed to LEED Silver certification.

_____, which sum is hereafter called the Base Bid.

(Bidder - insert Base Bid Amount on line above)

Revised: ADDENDUM NO. 1 Reissued: 3/10/2014
SE-330 – LUMP SUM BID
BID FORM

2011 Edition
Rev. 9/21/2011

§ 6.2 **BID ALTERNATES** - as indicated in the Bidding Documents and generally described as follows:

ALTERNATE # 1 *(Brief Description):* Delete translucent wall panels on the west elevation of the facility and substitute with 2” insulated metal wall panel siding as shown in elevations 1 and 8 on A202. All flashing and metal trims remain the same

ADD TO or **DEDUCT FROM BASE BID:** _____

(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)

ALTERNATE # 2 *(Brief Description):* Contractor to provide and install all structural steel, steel grating, steel supports, railing system, and trims as required to complete the catwalks on both the east and west corners of the facility from column line #7 on the east and west to column line E and N respectively (refer to drawings for exact extent).

ADD TO or **DEDUCT FROM BASE BID:** _____

(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)

ALTERNATE # 3 *(Brief Description):* Provide all materials, labor and equipment required to install the specified perforated metal wall panels and associated painted trim at corners, edges and around all openings in lieu of fully painted structural steel framing and interior side of metal wall panels.

ADD TO or **DEDUCT FROM BASE BID:** _____

(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)

BID FORM

§ 7. LISTING OF PROPOSED SUBCONTRACTORS PURSUANT TO SECTION 3020(b)(i), CHAPTER 35, TITLE 11 OF THE SOUTH CAROLINA CODE OF LAWS, AS AMENDED – (See Instructions on the following page BF-2A)

Bidder shall use the below-listed Subcontractors in the performance of the Subcontractor Specialty work listed:

SUBCONTRACTOR SPECIALTY By License Classification and/or Subclassification (Completed by Owner)	SUBCONTRACTOR'S PRIME CONTRACTOR'S NAME (Must be completed by Bidder) BASE BID	SUBCONTRACTOR'S PRIME CONTRACTOR'S SC LICENSE NUMBER
Mechanical (AC)		
Electrical (EL)		
ALTERNATE 1		
No Subcontractor Listing Required		
ALTERNATE 2		
No Subcontractor Listing Required		
ALTERNATE 3		
No Subcontractor Listing Required		

If a Bid Alternate is accepted, Subcontractors listed for the Bid Alternate shall be used for the work of both the Alternate and the Base Bid work.

INSTRUCTIONS FOR SUBCONTRACTOR LISTING

- 1.** Section 7 of the Bid Form sets forth a list of subcontractor specialties for which bidder is required to identify by name the subcontractor(s) Bidder will use to perform the work of each listed specialty. Bidder must identify only the subcontractor(s) who will perform the work and no others.
- 2.** For purposes of subcontractor listing, a Subcontractor is an entity who will perform work or render service to the prime contractor to or about the construction site. Material suppliers, manufacturers, and fabricators that will not perform physical work at the site of the project but will only supply materials or equipment to the bidder or proposed subcontractor(s) are not subcontractors and Bidder should not insert their names in the spaces provided on the bid form. Likewise, Bidder should not insert the names of sub-subcontractors in the spaces provided on the bid form but only the names of those entities with which bidder will contract directly.
- 3.** Bidder must only insert the names of subcontractors who are qualified to perform the work of the listed specialties as specified in the Bidding Documents and South Carolina Licensing Laws.
- 4.** If under the terms of the Bidding Documents, Bidder is qualified to perform the work of a specialty listed and Bidder does not intend to subcontract such work but to use Bidder's own employees to perform such work, the Bidder must insert its own name in the space provided for that specialty.
- 5.** If Bidder intends to use multiple subcontractors to perform the work of a single specialty listing, Bidder must insert the name of each subcontractor Bidder will use, preferably separating the name of each by the word **“and”**. If Bidder intends to use both his own employees to perform a part of the work of a single specialty listing and to use one or more subcontractors to perform the remaining work for that specialty listing, bidder must insert his own name and the name of each subcontractor, preferably separating the name of each with the word **“and”**.
- 6.** Bidder may not list subcontractors in the alternative nor in a form that may be reasonably construed at the time of bid opening as a listing in the alternative. A listing that requires subsequent explanation to determine whether or not it is a listing in the alternative is non-responsive. If bidder intends to use multiple entities to perform the work for a single specialty listing, bidder must clearly set forth on the bid form such intent. Bidder may accomplish this by simply inserting the word **“and”** between the name of each entity listed for that specialty. Owner will reject as non-responsive a listing that contains the names of multiple subcontractors separated by a blank space, the word **“or”**, a virgule (that is a /), or any separator that the Owner may reasonably interpret as a listing in the alternative.
- 7.** If Bidder is awarded the contract, bidder must, except with the approval of the owner for good cause shown, use the listed entities to perform the work for which they are listed.
- 8.** If bidder is awarded the contract, bidder will not be allowed to substitute another entity as subcontractor in place of a subcontractor listed in Section 7 of the Bid except for one or more of the reasons allowed by the SC Code of Laws.
- 9.** Bidder's failure to insert a name for each listed specialty subcontractor will render the Bid non-responsive.

BID FORM

§ 8. LIST OF MANUFACTURERS, MATERIAL SUPPLIERS, AND SUBCONTRACTORS OTHER THAN SUBCONTRACTORS LISTED IN SECTION 7 ABOVE (FOR INFORMATION ONLY):

Pursuant to instructions in the Invitation for Bids, if any, Bidder will provide to Owner upon the Owner’s request and within 24 hours of such request, a listing of manufacturers, material suppliers, and subcontractors, other than those listed in Section 7 above, that Bidder intends to use on the project. Bidder acknowledges and agrees that this list is provided for purposes of determining responsibility and not pursuant to the subcontractor listing requirements of SC Code Ann § 11-35-3020(b)(i).

§ 9. TIME OF CONTRACT PERFORMANCE AND LIQUIDATED DAMAGES

a. **CONTRACT TIME:** Bidder agrees that the Date of Commencement of the Work shall be established in a Notice to Proceed to be issued by the Owner. Bidder agrees to substantially complete the Work within **365** calendar days from the Date of Commencement, subject to adjustments as provided in the Contract Documents.

b. **LIQUIDATED DAMAGES:** Bidder further agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the sum of **\$250.00** for each calendar day the actual construction time required to achieve Substantial Completion exceeds the specified or adjusted time for Substantial Completion as provided in the Contract Documents. This sum is intended by the parties as the predetermined measure of compensation for actual damages, not as a penalty for nonperformance.

§ 10. AGREEMENTS

- a. Bidder agrees that this bid is subject to the requirements of the law of the State of South Carolina.
- b. Bidder agrees that at any time prior to the issuance of the Notice to Proceed for this Project, this Project may be canceled for the convenience of, and without cost to, the State.
- c. Bidder agrees that neither the State of South Carolina nor any of its agencies, employees or agents shall be responsible for any bid preparation costs, or any costs or charges of any type, should all bids be rejected or the Project canceled for any reason prior to the issuance of the Notice to Proceed.

§ 11. ELECTRONIC BID BOND

By signing below, the Principal is affirming that the identified electronic bid bond has been executed and that the Principal and Surety are firmly bound unto the State of South Carolina under the terms and conditions of the AIA Document A310, Bid Bond, included in the Bidding Documents.

Electronic Bid Bond Number: _____

Signature and Title: _____

BID FORM

BIDDER'S TAXPAYER IDENTIFICATION

FEDERAL EMPLOYER'S IDENTIFICATION NUMBER: _____

OR

SOCIAL SECURITY NUMBER: _____

CONTRACTOR'S CLASSIFICATIONS AND SUBCLASSIFICATIONS WITH LIMITATIONS

Classification(s) & Limits: _____

Subclassification(s) & Limits: _____

SC Contractor's License Number(s): _____

BY SIGNING THIS BID, THE PERSON SIGNING REAFFIRMS ALL REPRESENTATIONS AND CERTIFICATIONS MADE BY BOTH THE PERSON SIGNING AND THE BIDDER, INCLUDING WITHOUT LIMITATION, THOSE APPEARING IN ARTICLE 2 OF THE INSTRUCTIONS TO BIDDER. THE INVITATION FOR BIDS, AS DEFINED IN THE INSTRUCTIONS TO BIDDERS, IS EXPRESSLY INCORPORATE BY REFERENCE.

SIGNATURE

BIDDER'S LEGAL NAME: _____

ADDRESS: _____

BY: _____
(Signature)

DATE: _____

TITLE: _____

TELEPHONE: _____

EMAIL: _____

LEED 2009 for New Construction and Major Renovation Project Scorecard

Project: University of South Carolina Indoor Football Practice Facility
State Proj. No. H27-6090-MJ WTS#12710

Updated 2/14/2014

Yes	?	No		Points	Comments
7	0	19	SUSTAINABLE SITES	26	
Y			Prereq 1 Construction Activity Pollution Prevention	Required	
1			Credit 1 Site Selection	1	
		5	Credit 2 Development Density and Community Connectivity	5	
		1	Credit 3 Brownfield Redevelopment	1	
		6	Credit 4.1 Alternative Transportation - Public Transportation Access	6	
		1	Credit 4.2 Alternative Transportation - Bicycle Storage and Changing Rooms	1	
3			Credit 4.3 Alternative Transportation - Low-Emitting and Fuel-Efficient Vehicles	3	
2			Credit 4.4 Alternative Transportation - Parking Capacity	2	
		1	Credit 5.1 Site Development - Protect or Restore Habitat	1	
		1	Credit 5.2 Site Development - Maximize Open Space	1	
		1	Credit 6.1 Stormwater Design - Quantity Control	1	
		1	Credit 6.2 Stormwater Design - Quality Control	1	
		1	Credit 7.1 Heat Island Effect - Nonroof	1	
1			Credit 7.2 Heat Island Effect - Roof	1	
		1	Credit 8 Light Pollution Reduction	1	
4	0	6	WATER EFFICIENCY	10	
Y			Prereq 1 Water Use Reduction	Required	
		4	Credit 1 Water Efficient Landscaping	2 to 4	
		2	Reduce by 50%	2	
		0	No Potable Water Use or Irrigation	4	
		2	Credit 2 Innovative Wastewater Technologies	2	
4			Credit 3 Water Use Reduction	2 to 4	
			Reduce by 30%	2	
			Reduce by 35%	3	
		4	Reduce by 40%	4	
16	0	13	ENERGY & ATMOSPHERE	35	
Y			Prereq 1 Fundamental Commissioning of Building Energy Systems	Required	
Y			Prereq 2 Minimum Energy Performance	Required	
Y			Prereq 3 Fundamental Refrigerant Management	Required	
7		12	Credit 1 Optimize Energy Performance	1 to 19	
			Improve by 12% for New Buildings or 8% for Existing Building Renovation	1	
			Improve by 14% for New Buildings or 10% for Existing Building Renovation	2	
			Improve by 16% for New Buildings or 12% for Existing Building Renovation	3	
			Improve by 18% for New Buildings or 14% for Existing Building Renovation	4	
			Improve by 20% for New Buildings or 16% for Existing Building Renovation	5	
			Improve by 22% for New Buildings or 18% for Existing Building Renovation	6	
		7	Improve by 24% for New Buildings or 20% for Existing Building Renovation	7	
			Improve by 26% for New Buildings or 22% for Existing Building Renovation	8	
			Improve by 28% for New Buildings or 24% for Existing Building Renovation	9	
			Improve by 30% for New Buildings or 26% for Existing Building Renovation	10	
			Improve by 32% for New Buildings or 28% for Existing Building Renovation	11	
			Improve by 34% for New Buildings or 30% for Existing Building Renovation	12	
			Improve by 36% for New Buildings or 32% for Existing Building Renovation	13	
			Improve by 38% for New Buildings or 34% for Existing Building Renovation	14	
			Improve by 40% for New Buildings or 36% for Existing Building Renovation	15	
			Improve by 42% for New Buildings or 38% for Existing Building Renovation	16	
			Improve by 44% for New Buildings or 40% for Existing Building Renovation	17	
			Improve by 46% for New Buildings or 42% for Existing Building Renovation	18	
			Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovation	19	
		1	Credit 2 On-Site Renewable Energy	1 to 7	
			1% Renewable Energy	1	
			3% Renewable Energy	2	
			5% Renewable Energy	3	
			7% Renewable Energy	4	
			9% Renewable Energy	5	
			11% Renewable Energy	6	

			13% Renewable Energy	7	
2			Credit 3 Enhanced Commissioning	2	
2			Credit 4 Enhanced Refrigerant Management	2	
3			Credit 5 Measurement and Verification	3	
2			Credit 6 Green Power	2	
7	0	7	MATERIALS & RESOURCES	14	
Y			Prereq 1 Storage and Collection of Recyclables	Required	
		3	Credit 1.1 Building Reuse - Maintain Existing Walls, Floors and Roof	1 to 3	
			Reuse 55%	1	
			Reuse 75%	2	
			Reuse 95%	3	
		1	Credit 1.2 Building Reuse - Maintain Interior Nonstructural Elements	1	
2			Credit 2 Construction Waste Management	1 to 2	
			50% Recycled or Salvaged	1	
		2	75% Recycled or Salvaged	2	
		2	Credit 3 Materials Reuse	1 to 2	
			Reuse 5%	1	
			Reuse 10%	2	
2			Credit 4 Recycled Content	1 to 2	
			10% of Content	1	
		2	20% of Content	2	
2			Credit 5 Regional Materials	1 to 2	
			10% of Materials	1	
		2	20% of Materials	2	
		1	Credit 6 Rapidly Renewable Materials	1	
1			Credit 7 Certified Wood	1	
10	0	5	INDOOR ENVIRONMENTAL QUALITY	15	
Y			Prereq 1 Minimum Indoor Air Quality Performance	Required	
Y			Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required	
		1	Credit 1 Outdoor Air Delivery Monitoring	1	
		1	Credit 2 Increased Ventilation	1	
1			Credit 3.1 Construction Indoor Air Quality Management Plan - During Construction	1	
		1	Credit 3.2 Construction Indoor Air Quality Management Plan - Before Occupancy	1	
1			Credit 4.1 Low-Emitting Materials - Adhesives and Sealants	1	
1			Credit 4.2 Low-Emitting Materials - Paints and Coatings	1	
1			Credit 4.3 Low-Emitting Materials - Flooring Systems	1	
1			Credit 4.4 Low-Emitting Materials - Composite Wood and Agrifiber Products	1	
		1	Credit 5 Indoor Chemical and Pollutant Source Control	1	
1			Credit 6.1 Controllability of Systems - Lighting	1	
1			Credit 6.2 Controllability of Systems - Thermal Comfort	1	
1			Credit 7.1 Thermal Comfort - Design	1	
1			Credit 7.2 Thermal Comfort - Verification	1	
1			Credit 8.1 Daylight and Views - Daylight	1	
		1	Credit 8.2 Daylight and Views - Views	1	
6	1	0	INNOVATION IN DESIGN	6	
5	1		Credit 1 Innovation in Design	1 to 5	
			1 Innovation or Exemplary Performance	1	exemplary performance of MR credits 4 and 5
			1 Innovation or Exemplary Performance	1	Green Cleaning
			1 Innovation or Exemplary Performance	1	Green Education
			1 Innovation	1	Green Power
			1 Innovation	1	Methane Mitigation
1			Credit 2 LEED® Accredited Professional	1	
2	2	0	REGIONAL PRIORITY	4	
2	2		Credit 1 Regional Priority	1 to 4	
1			1 Regionally Defined Credit Achieved - IE C7.1	1	
		1	1 Regionally Defined Credit Achieved - SS C6.1	1	See comment above
		1	1 Regionally Defined Credit Achieved - EA C1 30%,	1	
1			1 Regionally Defined Credit Achieved - WE C3 40%	1	
Yes	?	No			
52	3	50	PROJECT TOTALS (Certification Estimates)		

Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80+ points

SECTION 074213 – METAL COMPOSITE MATERIAL WALL PANELS

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 metal composite material wall panel rain-screen system.
- B. Section includes perforated metal wall panels (Alternate #3).

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.
- B. Shop Drawings:
 - 1. Include fabrication and installation layouts of metal composite material panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment assembly, trim, flashings, closures, and accessories; and special details.
 - 2. Accessories: Include details of the flashing, trim and anchorage, at a scale of not less than 1-1/2 inches per 12 inches.
 - 3. **For metal support framing provided by manufacturer for column wrap and wall/soffit installation to comply with design loads indicated in documents and for field conditions indicated, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation, licensed in the State of South Carolina.**
- C. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
 - 1. Metal Composite Material Panels: 12 inches long by actual panel width. Include fasteners, closures, and other metal composite material panel accessories.
 - 2. **Perforated Metal Wall Panels: 12-inch square panel. Include fasteners and trim accessories.**

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each product, tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For metal composite material panels to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Engineering Responsibility: Preparation of Shop Drawings, design calculations, and other structural data by a qualified professional engineer.
- C. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of cold-formed metal framing that will be required for installation indicated for this Project in material, design, and extent.
- D. 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 metal composite material panel assembly 4' square, including corner, soffits, supports, attachments, and accessories.
 - 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.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, metal composite material panels, and other manufactured items so as not to be damaged or deformed. Package metal composite material panels for protection during transportation and handling.
- B. Unload, store, and erect metal composite material panels in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack metal composite material panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal composite material panels to ensure dryness, with positive slope for drainage of water. Do not store metal composite material panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Retain strippable protective covering on metal composite material panels during installation.

1.8 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal composite material panels to be performed according to manufacturers' written instructions and warranty requirements.

1.9 COORDINATION

- A. Coordinate metal composite material panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.10 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1. Meet with Owner, Architect, Owner's insurer if applicable, metal composite material panel Installer, structural-support Installer, and installers whose work interfaces with or affects metal composite material panels, including installers of doors, windows, and louvers.
2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
3. Review methods and procedures related to metal composite material panel installation, including manufacturer's written instructions.
4. Examine support conditions for compliance with requirements, including alignment between and attachment to structural members.
5. Review flashings, special siding details, wall penetrations, openings, and condition of other construction that affect metal composite material panels.
6. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
7. Review temporary protection requirements for metal composite material panel assembly during and after installation.
8. Review procedures for repair of panels damaged after installation.
9. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.11 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal composite material panel systems that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Structural failures including rupturing, cracking, or puncturing.
 - b. Deterioration of metals and other materials beyond normal weathering.
 2. Warranty Period: Two years from date of Substantial Completion.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal composite material panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 1. Exposed Panel Finish: 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. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide metal composite material panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E 330:
 1. Wind Loads: As indicated on Drawings.
 2. Other Design Loads: As indicated on Drawings.
 3. Deflection Limits: For wind loads, no greater than 1/240 of the span.
 4. Seismic Loads: As indicated on Drawings.

- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
- C. Fire-Resistance Ratings: Comply with ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.2 METAL COMPOSITE MATERIAL WALL PANELS

- A. Metal Composite Material Wall Panel Systems: Provide factory-formed and -assembled, metal composite material wall panels fabricated from two metal facings that are bonded to a solid, extruded thermoplastic core; formed into profile for installation method indicated. Include attachment assembly components, and accessories required for system.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. 3A Composites USA, Inc.; Alucobond.
 - b. Alcoa Inc.; Reynobond ACM FR.
 - c. CENTRIA Architectural Systems; Formabond Wall System.
 - d. Firestone Metal Products, LLC; UNA-FAB Series 1500.
 - e. **Or equal by Alucoil**
- B. Aluminum-Faced Composite Wall Panels: Formed with a minimum of 0.020-inch- thick, coil-coated aluminum sheet facings.
 - 1. Panel Thickness: 0.197 inch minimum.
 - 2. Panel System Depth: Refer to Drawings.
 - 3. Reveal Joint Width: 3/4 inch.
 - 4. Core: `Standard.
 - 5. Exterior Finish: Three-coat fluoropolymer.
 - a. Color: As selected by Architect from manufacturer's full range.
- C. Attachment Assembly Components: Formed from extruded aluminum.
- D. Attachment Assembly Support: Z and C cold-formed metal framing designed to support metal panel system completely, with tie-back to structural building system.

2.3 PERFORATED METAL WALL PANELS (ALTERNATE #3)

- A. Metal Material, manufactured with perforations: Provide factory-formed metal wall panels with perforations already in sheet product, fabricated to shape/profile indicated. Provide all accessories to make a complete system installation.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ALPRO Acoustical Systems, Gordon Inc.
 - b. CENTRIA Architectural Systems; Profile Series, EcoScreen.
 - c. Fry Reglet Architectural Metals, Acoustical Metal Wall Panels.

2. Design Style: Basis of Design is ALPRO Pattern-C.
3. Material: Steel, 22 gauge / Aluminum, .032-inch.
4. Panel Size: Can Vary based on manufacturer and metal, typical 42-inch wide by 144-inches long.
5. Finish: Basis of Design - ALPRO High Performance Powder Coat, or better.
6. Color: To be selected from manufacturers full line of colors.
7. Fasteners: Self-tapping Stainless Steel screws with color matching heads to panel color.

2.4 MISCELLANEOUS MATERIALS

- A. Miscellaneous Metal Subframing and Furring: ASTM C 645, cold-formed, metallic-coated steel sheet ASTM A 653/A 653M, G90 coating designation or ASTM A 792/A 792M, Class AZ50 aluminum-zinc-alloy coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal composite material panel system.
- B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal composite material panels unless otherwise indicated.
- C. Flashing and Trim: Provide flashing and trim formed from same material as metal composite material panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, endwalls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal composite material panels.
- D. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal composite material panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners.
- E. Panel Sealants: ASTM C 920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal composite material panels and remain weathertight; and as recommended in writing by metal composite material panel manufacturer.

2.5 FABRICATION

- A. General: Fabricate and finish metal composite material panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.
- B. Fabricate metal composite material panel joints with factory-installed captive gaskets or separator strips that provide a seal and prevent metal-to-metal contact, and that minimize noise from movements.
- C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.
 1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
 2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
 3. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
 4. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.

5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.
 - a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal wall panel manufacturer for application but not less than thickness of metal being secured.

2.6 FINISHES

- A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Aluminum Composite Panels and Accessories:
 1. Three-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- D. Metal/Aluminum Perforated Panels and Accessories:
 1. 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. **OR**
 2. Two-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal composite material panel supports, and other conditions affecting performance of the Work.
 1. Examine wall framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal composite material wall panel manufacturer.
 2. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal composite material wall panel manufacturer.
 - a. Verify that air- and water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

- B. Examine roughing-in for components and assemblies penetrating metal composite material panels to verify actual locations of penetrations relative to seam locations of metal composite material panels before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Miscellaneous Supports: Install sub-framing, furring, and other miscellaneous panel support members and anchorages according to ASTM C 754 and metal composite material panel manufacturer's written recommendations.

3.3 METAL COMPOSITE MATERIAL PANEL INSTALLATION

- A. General: Install metal composite material panels according to manufacturer's written instructions in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to supports unless otherwise indicated. Anchor metal composite material panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Shim or otherwise plumb substrates receiving metal composite material panels.
 - 2. Flash and seal metal composite material panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal composite material panels are installed.
 - 3. Install screw fasteners in predrilled holes.
 - 4. Locate and space fastenings in uniform vertical and horizontal alignment.
 - 5. Install flashing and trim as metal composite material panel work proceeds.
 - 6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
 - 7. Align bottoms of metal composite material panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
 - 8. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.
- B. Fasteners:
 - 1. Aluminum Panels: Use stainless-steel fasteners.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal composite material panel manufacturer.
- D. Attachment Assembly, General: Install attachment assembly required to support metal composite material wall panels and to provide a complete weathertight wall system, including subgirts, perimeter extrusions, tracks, drainage channels, panel clips, and anchor channels.
 - 1. Include attachment to supports, panel-to-panel joinery, panel-to-dissimilar-material joinery, and panel-system joint seals.
- E. Installation: Attach metal composite material wall panels to supports at locations, spacings, and with fasteners recommended by manufacturer to achieve performance requirements specified.
 - 1. Rainscreen Systems: Do not apply sealants to joints unless otherwise indicated.
- F. Track-Support Installation: Install support assembly at locations, spacings, and with fasteners recommended by manufacturer. Use manufacturer's standard horizontal tracks and vertical drain channels that provide support and secondary drainage assembly, draining to the exterior at horizontal

joints through drain tube. Attach metal composite material wall panels to tracks by interlocking panel edges with manufacturer's standard "T" clips.

1. Attach routed-and-returned flanges of wall panels to perimeter extrusions with manufacturer's standard fasteners.
2. Attach flush wall panels to perimeter extrusions by engaging panel edges and by attaching with manufacturer's standard structural silicone adhesive.
3. Install wall panels to allow individual panels to "free float" and be installed and removed without disturbing adjacent panels.
4. Do not apply sealants to joints unless otherwise indicated.

G. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal composite material panel assembly including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal composite material panel manufacturer; or, if not indicated, provide types recommended in writing by metal composite material panel manufacturer.

H. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that are permanently watertight.

1. Install exposed flashing and trim that is without buckling and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof performance.
2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

3.4 PERFORATED METAL PANEL INSTALLATION

A. General: Install perforated metal panels according to manufacturer's written instructions in the vertical orientation, sizes, and locations required on Drawings. Install panels perpendicular to supports unless otherwise indicated.

1. Shim or otherwise plumb substrates receiving perforated metal panels so as not to warp panel shape.
2. Install screw fasteners in predrilled holes.
3. Locate and space fastenings in uniform vertical and horizontal alignment.
4. Install flashing and trim as perforated metal panel work proceeds.
5. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
6. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.

B. Fasteners:

1. Steel and/or Aluminum Panels: Use stainless-steel fasteners with matching colored heads.

- C. **Metal Protection:** Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal composite material panel manufacturer
- D. **Accessory Installation:** Install accessory trim metals to clean up exposed ends and for attaching sides of panels to structural framing system as necessary. Standard accessory trim is either U-shaped closure or F-shaped receiver for fastening to substrate.
 - 1. Install components as required for a complete perforated metal panel assembly including trim, corners, seam covers, fillers, closure strips, and similar items. Provide accessories as recommended by manufacturer.

3.5 ERECTION TOLERANCES

- A. **Installation Tolerances:** Shim and align metal composite material wall panel units within installed tolerance of 1/4 inch in 20 feet, non-accumulative, on level, plumb, and location lines as indicated, and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.6 FIELD QUALITY CONTROL

- A. **Manufacturer's Field Service:** Engage a factory-authorized service representative to test and inspect completed metal composite material wall panel installation, including accessories.
- B. Metal composite material wall panels will be considered defective if they do not pass inspections.
- C. Additional inspections, at Contractor's expense, are performed to determine compliance of replaced or additional work with specified requirements.
- D. Prepare inspection reports.

3.7 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as metal composite material panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal composite material panel installation, clean finished surfaces as recommended by metal composite material panel manufacturer. Maintain in a clean condition during construction.
- B. After metal composite material panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.
- C. Replace metal composite material panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 074213

SECTION 123530 - CASEWORK

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:
 - 1. Solid Surface countertops.

1.3 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Solid Surface material
- B. Shop Drawings: For cabinets and countertops. Include plans, elevations, details, and attachments to other work. Show materials, finishes, filler panels, hardware, edge and backsplash profiles, methods of joining countertops, and cutouts for plumbing fixtures.
- C. Samples for Initial Selection: For each type of material exposed to view.

1.4 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet work is complete and dry, and temporary HVAC system is operating and maintaining temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Coordinate construction to ensure that actual dimensions correspond to established dimensions. Provide fillers and scribes to allow for trimming and fitting.
- C. Field Measurements for Countertops: Verify actual dimensions of countertops by field measurements after base cabinets are installed but before countertop fabrication is complete.

1.5 COORDINATION

- A. Coordinate layout and installation of blocking and reinforcement in partitions for support of casework.
- B. Coordinate locations of utilities that will penetrate countertops or backsplashes.

PART 2 - PRODUCTS

2.1 CABINETS

- A. Wood Work Fabricators: Subject to compliance with requirements, provide woodwork by one of the following or approved equal prior to bid (no exceptions):
 - 1. Specialty Woodworks, Lexington SC
 - 2. PCI Cabinetworks, Harleyville SC
 - 3. Low Country Case and Millwork, Ladson SC
- B. Factory Finishing: Finish cabinets at factory. Defer only final touchup until after installation.
- C. Concealed Materials: Solid wood or plywood, of any hardwood or softwood species, with no defects affecting strength or utility; particleboard; medium-density fiberboard; or hardboard.

2.2 SOLID SURFACE COUNTERTOPS

- A. Solid-Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.Solid-Surfacing-Material Thickness: 1/2 inch
 - 1. Colors, Patterns, and Finishes: As selected from manufacturer's full range
 - 2. Fabricate tops in one piece with loose backsplashes for field application. Comply with solid-surfacing-material manufacturer's written recommendations for adhesives, sealers, fabrication, and finishing.
- B. Substrate: Particleboard not less than 3/4 inch thick.
 - 1. For countertops at sinks and lavatories, use Grade M-2-Exterior-Glue particleboard or exterior-grade plywood.
 - 2. Build up countertop thickness to 1-1/2 inches at front, back, and ends with additional layers of particleboard laminated to top.

2.3 COUNTERTOP MATERIALS

- A. Solid Surface Material
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. Formica Corp.
 - b. Pionite Decorative Surfaces.
 - c. Wilsonart International.
2. Colors, Textures, and Patterns: As selected by Architect from countertop manufacturer's full range.
- a. Basis of Design Color/Texture: Wilsonart "Garnet Glitz 9109CS" or approved equal. Submit full range for final selection.
- C. Particleboard: ANSI A208.1,
- D. Plywood: Exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.

PART 3 - EXECUTION

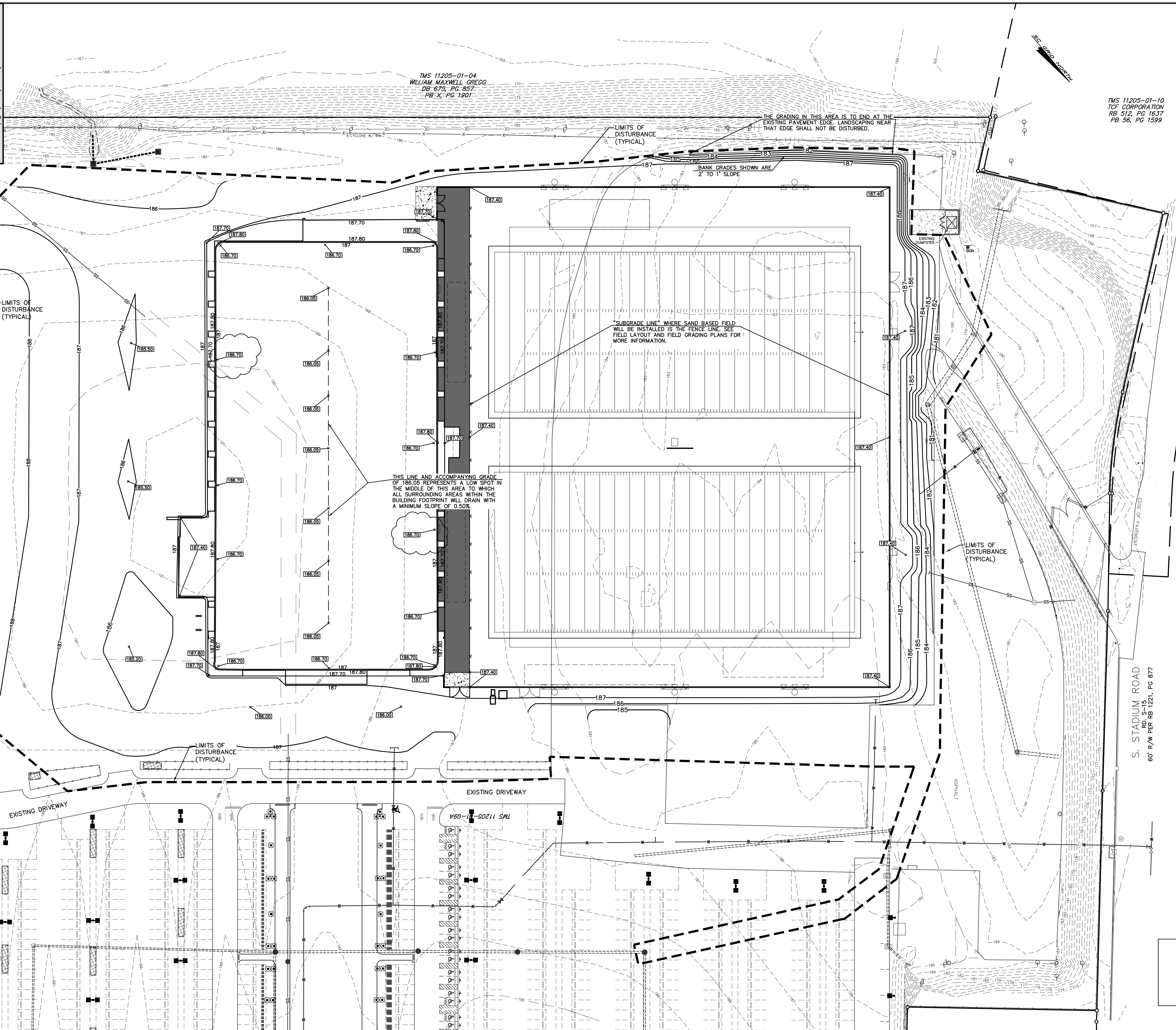
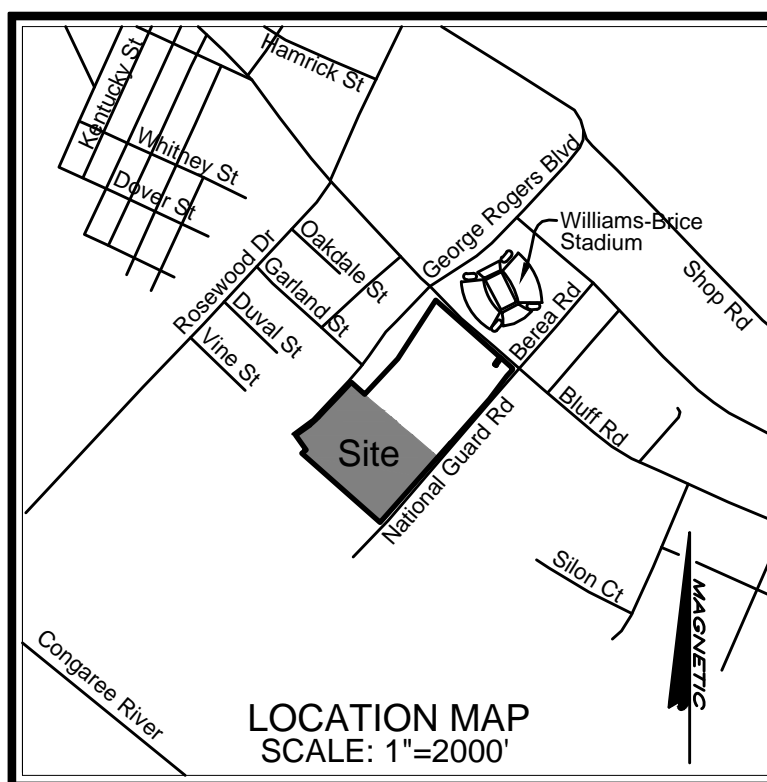
3.1 INSTALLATION

- A. Install countertop level and plumb to a tolerance of 1/8 inch in 8 feet.
- B. Fasten countertops by screwing through corner blocks of base units into underside of countertop. Form seams using splines to align adjacent surfaces, and secure with glue and concealed clamping devices designed for this purpose.
 - 1. Provide cutouts for sinks and lavatories, including holes for faucets and accessories.
 - 2. Seal edges of cutouts by saturating with varnish.

3.2 ADJUSTING AND CLEANING

- A. Clean casework on exposed and semiexposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

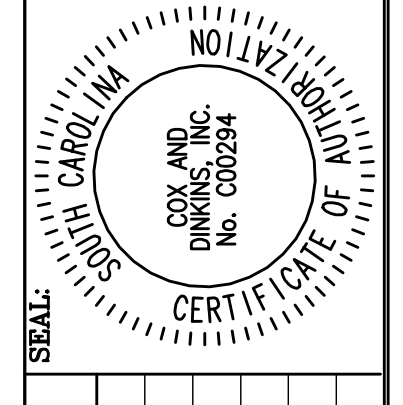
END OF SECTION 123530



COX AND DINKINS
ENGINEERS - SURVEYORS
COX AND DINKINS, INC.
724 BELTLINE BLVD.
COLUMBIA, SC 29205
803-254-0518
Fax: 803-765-0993
Email: cdinc@coxanddinkins.com
C&D PROJECT# 1664

TMS 11205-01-10
TCF CORPORATION
RB 512, PG 1637
PB 56, PG 1599

REGISTERED PROFESSIONAL ENGINEER
NO. 14887



CHECKED BY: MTA/DKH
DRAWN BY: [blank]
ORIG. BY: [blank]
DATE: 03/10/2014

DLH/MTA DATE: 03/10/2014

DRAWING: 1/13/2014
DATE: 1/13/2014
DESCRIPTION: modify to spot grades in IPFF area
BUILDING: N/A
REV. 1 Addendum no. 1 - modify to spot grades in IPFF area

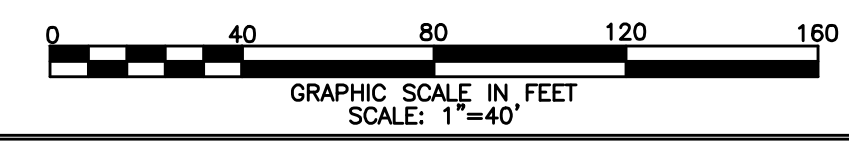
PROJECT TITLE: OUTDOOR FOOTBALL PRACTICE FIELDS - CONSTRUCTION
STATE PROJECT #427-6096-MJ
LOCATED IN CITY OF COLUMBIA, RICHLAND COUNTY, SC

UNIVERSITY OF SOUTH CAROLINA
SHEET: GRADING PLAN
C2.0 OF 8
SHEET IN SET: N/A

The Palmetto Utility Protection Service, Inc.
South Carolina 811
CALL 811 Before You Dig
3 DAYS BEFORE DIGGING IN SOUTH CAROLINA
CONTRACTOR SHALL CONTACT THE UNDERGROUND LOCATORS EVERY 10 DAYS FOR AN UPDATE TO UTILITY LOCATIONS.

NOTE:
INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES WAS OBTAINED FROM LOCAL UTILITY COMPANIES AND AVAILABLE DRAWINGS SUPPLIED BY THE OWNER AND IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. HOWEVER, COX AND DINKINS, INC. HAS NO NOTICE OR KNOWLEDGE OF ANY FACTS THAT WOULD LEAD US TO CONCLUDE THAT THE INFORMATION IS NOT ACCURATE. IF UTILITY AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED, THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS, HIS AGENTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT COX AND DINKINS, INC. IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THE UNDERGROUND INFORMATION, INFORMATION WITH RESPECT TO ABOVE GROUND MONUMENTS OF SUCH UTILITIES IS BASED UPON ACTUAL FIELD MEASUREMENTS AND OBSERVATIONS, AND IS SHOWN HEREON.

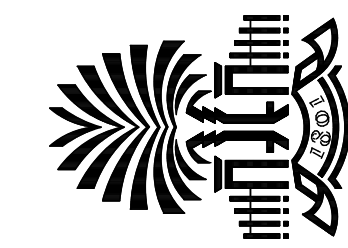
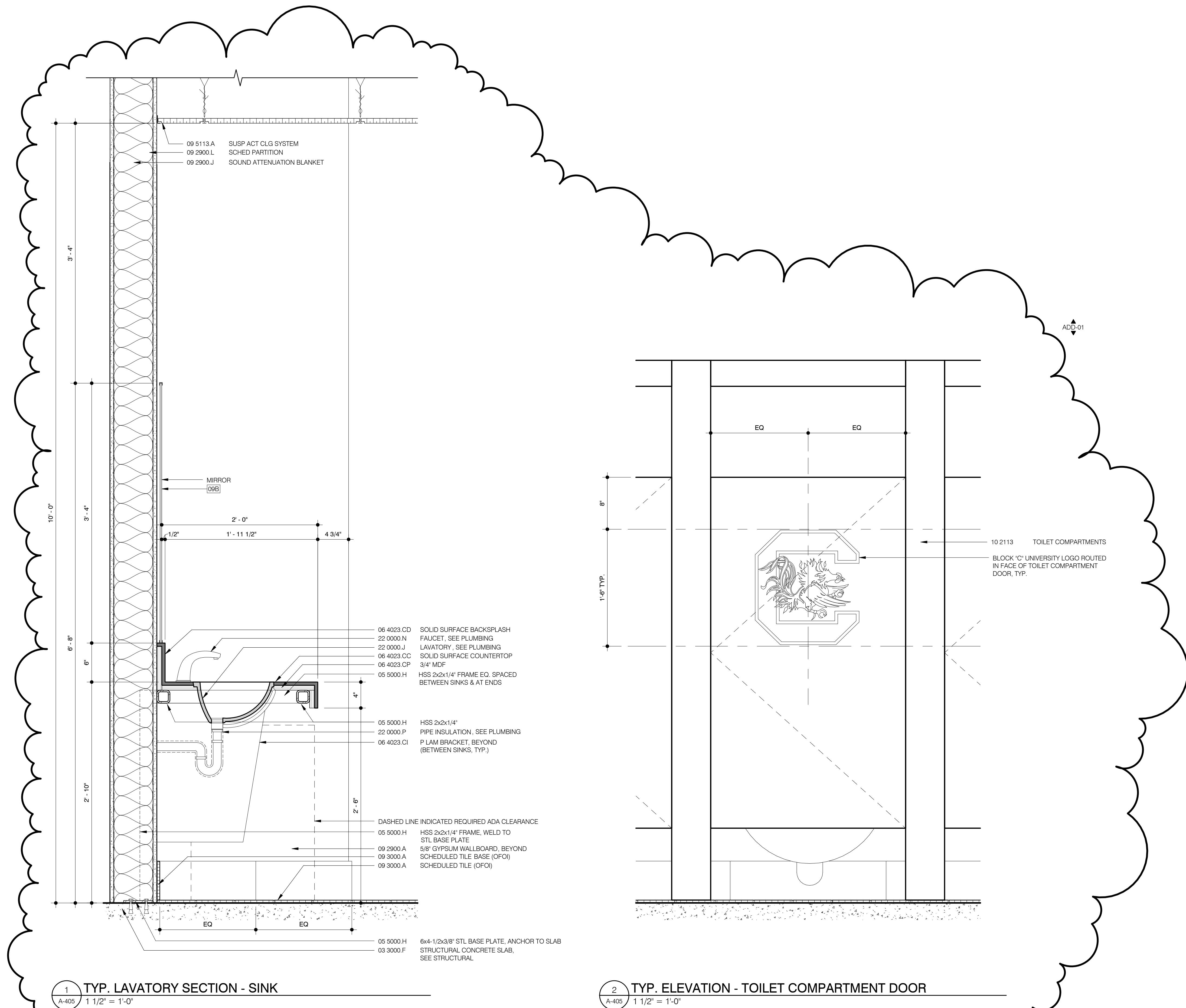
THIS PLAN IS INCLUDED IN THE CONTRACT DOCUMENTS FOR REFERENCE. SEE NOTES ON SHEET C201.



REFERENCES:
1) PLAT PREPARED FOR UNIVERSITY OF SOUTH CAROLINA, BY COX AND DINKINS, INC., DATED JANUARY 14, 2009.
2) A PLAT OF BOUNDARY SURVEY AND TOPOGRAPHIC MAP OF RICHLAND COUNTY TAX PARCELS R11205-01-09A, R11205-01-05 & R11205-01-06, PREPARED FOR THE UNIVERSITY OF SOUTH CAROLINA, BY WILBUR SMITH ASSOCIATES, DATED NOVEMBER 26, 2008; REVISED DECEMBER 11, 2008.
NOTES:
1) THE LOCATIONS OF OTHER UNDERGROUND UTILITIES ARE UNKNOWN.
2) THE CONTOUR INTERVAL = ONE (1') FOOT.
3) ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4) VERTICAL DATA SHOWN HEREON IS BASED ON PUBLISHED VALUES FOR RICHLAND COUNTY CONTROL MONUMENT RC979711AZ, HAVING A PUBLISHED ELEVATION OF 187.50, BASED ON NAVD 88 DATUM.

These drawings are the property of Watson Tate Savory, Inc. and may not be used in whole or in part without written consent of the architect and any infringement is subject to legal action.

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Project Number: 12710
Date: FEBRUARY 5, 2014

Revisions:		
NO.	ISSUED FOR	DATE
1	ADD-01	2014 0306

TOILET DETAILS

A-405