



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

ADDENDUM NO. 1

August 28, 2014

RE: NCDOT Ferry Division – Swan Quarter Ferry Facility, Swan Quarter, NC
SCO ID No. 11-09078-01A

PREPARED BY: Facilities Design, NCDOT

The following clarifications, changes, additions and/or deducts shall be made to the Working Drawings and Specifications of the above-referenced project. These changes shall be included in the Contract Amount for the Construction Work as indicated below:

General:

<u>Item</u>	<u>Page No.</u>	<u>Description:</u>
1.		A list of approved MBE vendors may be obtained from the following website: https://www.ips.state.nc.us/vendor/searchvendor.aspx?t=h .
2.		See Attachment 'A' for the Pre-bid Meeting attendance sheet.

Drawings:

<u>Item</u>	<u>Sheet No.</u>	<u>Description:</u>
1.	A3.1, A3.2, A3.3	Refer to Drawings A3.1, A3.2, and A3.3. In various wall sections and details, delete references to "Liquid Applied Bituminous Waterproofing" in their entirety. Provide "Water-Resistive Barrier/Vapor Retarder" full height of exterior wall sheathing, i.e. from finish floor to underside of roof deck per Specification Section 07 2500.
2.	A3.3	Refer to Detail 4/A3.3. Delete reference to "Liquid-Applied Bituminous Waterproofing". Provide bituminous paint on steel column full height.
3.	E2.1, E5.0	Refer to Exhaust Fan EF-4 in Room 109 on Drawing E2.1.

Change reference to circuit "P1A-15" to read "P1C-15". Panel Schedule "P1C" on Drawing E5.0 shows circuit "P1C-15" correctly.

4. E5.0 Refer to Electrical Panelboard "P1B" on Drawing E5.0. Provide circuits for electric hand dryers in Rooms 109 and 110. Each branch circuit shall be 2#12, 1#12 G, 3/4" C from circuit P1B-32 for Room 109, and 2#12, 1#12 G, 3/4" C from circuit P1B-34 for Room 110. Make final connection to hand dryers and coordinate rough-in requirements with actual unit provided. See Attachment 'B'.

Specifications:

Item Page No.

Description:

1. SCG-1 Refer to Specification Section "Supplementary Instructions to Bidders and General Conditions of the Contract", Article 23 – "Time of Completion, Delays, Extensions of Time". The construction period shall be 300 calendar days instead of 270 calendar days.
2. 04 7200 Refer to Specification Section 04-7200 – "Cast Stone Masonry" Paragraph 2.01 "Manufacturers". Subject to all other requirements of this specification, the following is an acceptable manufacturer:
MarcStone, LLC
P.O. Box 52, Hampton, MN 55031
Telephone: 651-437-7972
Fax: 651-437-4821
www.marcstone.com
3. 07 1400 Refer to Specification Section 07 1400 – "Fluid-Applied Waterproofing". Delete this specification section in its entirety. Instead, a water-resistive barrier/vapor retarder shall be provided for the full wall height per Specification Section 07 2500.
4. 08 4313 Refer to Specification Section 08 4313 – "Aluminum-Framed Storefronts". Replace this specification section in its entirety with Attachment 'C' Section 08 4313 -"Aluminum-Framed Storefronts".
5. 08 4413 Refer to specification Section 08 4413 – "Glazed Aluminum Curtain Walls". Delete this specification in its entirety.
6. 10 2800 Refer to Specification Section 10 2800 – "Toilet, Bath, and Laundry Accessories" Paragraph 2.04 Toilet Room Accessories. American Dryer Model CPC9-SS is an acceptable product for use in this project.
7. 26 0533 Refer to Specification Section 26 0533 – "Raceway and Boxes for Electrical Systems" Paragraph 3.01B. Wherever EMT (electrical metal tubing) is required by this specification, the

contractor shall provide EMT in accordance with this specification and requirements of the State Construction Office. MC cable is not permitted.

END ADDENDUM NO. 1

APPROVED BY: Mark D. Gibson AIA, Facilities Design

A handwritten signature in black ink, appearing to read "Mark D. Gibson", with a long horizontal flourish extending to the right.

cc: Email to all Bidders, Plan Rooms, SCO;
Priscilla T. Williams, PE, Director Facilities Management Division, NCDOT;
Amber Farrelly, PE, B & F Consulting;
Kim Reitterer PE, Elm Engineering, Inc.

**RECORD
OF
ATTENDANCE**



**FACILITIES MANAGEMENT DIVISION -
FACILITIES DESIGN UNIT**

1525 Mail Services Center
RALEIGH, NC 27699-1525

(919) 707-4540

1 S. WILMINGTON STREET
RALEIGH, NC 27601

FAX (919) 715-0399

DATE: August 21, 2014

TIME: 10:00 AM

PROJECT: NCDOT Ferry Division Swan Quarter Ferry Facility
SUBJECT: Mandatory Pre-Bid Conference

NAME:	Company	Phone/Email
1. <u>Mark Gibson</u> AIA	NCDOT Facilities Design	919-707-4550 mdgibson1@ncdot.gov
2. <u>Daron Blount</u>	NCDOT Facilities Design	919-707-4542 dblount@ncdot.gov
3. <u>Bonnie Simmons</u>	NCDOT Facilities Management	919-707-4549 btsimmons@ncdot.gov
4. <u>Anthony Roper</u>	NCDOT Highways Division 1	252-482-1850 awroper@ncdot.gov
5. <u>Sterling Baker</u>	NCDOT Highways Div 1 Maint Engr	252-482-1850 sbaker@ncdot.gov
6. <u>(P) Greg Theodorakis</u>	Group III Mgt Inc.	252-527-3333 gstheo1960@yahoo.com
7. <u>Steven Faircloth</u>	Suburban Electric Inc.	252-305-5334 steve@suburbanelectricobx.com
8. <u>(P) David Thomas</u>	TCC Enterprises Inc.	252-473-3434 davidthomas.tcc@gmail.com
9. <u>(P) Peter Kauffman</u>	Ocean Builders	252-449-9300 pkauffman@oceanbldrs.com
10. <u>Dannyell Mitchell</u>	CMS	919-431-9411 dmitchell@commech.com
11. <u>Catherine Peele</u>	NCDOT - Ferry Division	252-305-7288 cdpeele@ncdot.gov
12. <u>Ed Goodwin</u>	NCDOT - Ferry Division	252-343-2617 egoodwin1@ncdot.gov
13. <u>Jairo Gomez</u>	Dynamic Clean LLC	407-902-9357 dynamiccleanllc@gmail.com
14. <u>Allan Miller</u>	Innovative Builders	910-279-7162 allanm@ibllc.net
15. <u>Lewis Cuthrell</u>	Sawyers Land Developing	252-945-5392 lewis@sawyers.biz
16. <u>Anthony Russ</u>	Coastal Electric Contracting Co.	252-926-8251 coastalelectric@hotmail.com
17. <u>(P) Stanley Dixon</u>	A. R. Chesson	252-809-3414 stanley@archesson.com
18. <u>(P) Ronald Rogers</u>	D. A. Everett Const.	919-697-1985 rrogers@daeverettgroup.com
19. <u>(P) Henry Everett</u>	D. A. Everett Const.	252-723-2595 henry@daeverettgroup.com
20. <u>Randy Bragg</u>	Cadet Construction	919-803-0304 estimatingcadetcc.com

(P) – Prime Contractors

ATTACHMENT 'A'

PANELBOARD "P1B"
 VOLTAGE : 208 Y / 120V 3PH 4W
 LOCATION: ELECT. ROOM 121
 MOUNTING: SURFACE
 100 A MAIN BUS RATING
 MAIN LUGS ONLY

CKT	LOAD DESCRIPTION	BRANCH CIRCUIT										CKT						
		LOAD (KVA)					WIRE SIZE	C (IN)	TRIP/POLE	PHASE	LOAD (KVA)							
		LTG	REC	MTR	H/C	OTH					KIT		LTG	REC	MTR	H/C	OTH	KIT
1	OFFICES		1.26				2#12,1#12G	3/4	20/1							0.72	REFRIGERATOR	2
3	OFFICES		1.26				2#12,1#12G	3/4	20/1							0.72	REFRIGERATOR	4
5	OFFICES		1.26				2#12,1#12G	3/4	20/1							0.72	REFRIGERATOR	6
7	OFFICES		0.18				2#12,1#12G	3/4	20/1					1.08			LR	8
9	OFFICES		0.72				2#12,1#12G	3/4	20/1							0.72	REFRIGERATOR	10
11	TR REC		0.54				2#12,1#12G	3/4	20/1					0.36			KIT	12
13	COPIER		0.90				2#12,1#12G	3/4	20/1					0.72			KIT	14
15	OFFICES		0.36				2#12,1#12G	3/4	20/1					1.08			KIT	16
17	OFFICES		0.72				2#12,1#12G	3/4	20/1					1.26			KIT	18
19	ELECT./MECH. ROOM RECEPT.		0.90				2#12,1#12G	3/4	20/1					1.26			RECEPTACLE	20
21	SPARE								50/2							4.00	RM 135 - RANGE	22
23																4.00		24
25	FACP (LOD)		0.50				2#12,1#12G	3/4	20/1					0.36			BATHROOM	26
27	FACP (LOD)		0.50				2#12,1#12G	3/4	20/1					1.26			RECEPTACLE	28
29	TELECOM		0.54				2#12,1#12G	3/4	20/1					0.72			OUTDOOR RECEPT.	30
31	TELECOM		0.72				2#12,1#12G	3/4	20/1						1.20		HAND DRYER	32
33	TELECOM		0.54				2#12,1#12G	3/4	20/1						1.20		HAND DRYER	34
35	TELECOM		0.18				2#12,1#12G	3/4	20/1								SPARE	36
37	EF-5						2#12,1#12G	3/4	20/1								SPARE	38
39	SPARE								20/1								SPARE	40
41	SPARE								20/1								SPARE	42

CONNECTED LOAD KVA AMPS 35,000 AMPS MIN. INTERRUPTING CAPACITY (RMS SYM. AMPS)

PHASE A	10.3	86
PHASE B	12.9	107
PHASE C	10.8	90
TOTAL	34.0	94

CONNECTED (KVA)	DEMAND (KVA)
LIGHTING/CONTINUOUS	0.0
RECEPTACLES	19.2
MOTORS	0.0
HVAC	1.5
OTHER	2.4
KITCHEN	10.9
TOTAL DEMAND LOAD	25.6 KVA
DEMAND AMPS	71 AMPS

NOTES:
 A. DOOR IN DOOR CONSTRUCTION
 B. COPPER BUSES.
 C. WIRE SIZES ARE MINIMUM, INCREASE FOR VOLTAGE DROP.

KEYED NOTES:
 (LC) VIA LIGHTING CONTACTOR
 LOD = LOCK ON DEVICE

ATTACHMENT 'B'

SECTION 08 4313

ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Insulated aluminum-framed storefront, with vision glass.
- B. Insulated aluminum doors and frames.
- C. Weatherstripping.

1.02 RELATED REQUIREMENTS

- A. Section 07 9005 - Joint Sealers: Perimeter sealant and back-up materials.
- B. Section 08 7100 - Door Hardware: Hardware items other than specified in this section.
- C. Section 08 8000 - Glazing: Glass and glazing accessories.
- D. Section 08 4413 - Glazed Aluminum Curtain Walls.

1.03 REFERENCE STANDARDS

- A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; American Architectural Manufacturers Association; 2012.
- B. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; American Architectural Manufacturers Association; 2012.
- C. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels; 2010.
- D. ASCE 7 - Minimum Design Loads for Buildings and Other Structures; American Society of Civil Engineers; 2011.
- E. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2010.
- F. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2012.
- G. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2012.
- H. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004 (Reapproved 2012).
- I. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2002 (Reapproved 2010).
- J. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2009).

1.04 PERFORMANCE REQUIREMENTS

- A. Design and size components to withstand the following load requirements without damage or permanent set, when tested in accordance with ASTM E 330, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
 - 1. Design Wind Loads: Comply with requirements of ASCE 7-05 and the North Carolina State Building code, for 130 mph wind.

2. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
- B. Movement: Accommodate movement between storefront and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.
- C. Air Infiltration: Limit air infiltration through assembly to 0.06 cu ft/min/sq ft of wall area, measured at a reference differential pressure across assembly of 1.57 psf as measured in accordance with ASTM E 283.
- D. Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of 2.86 lbf/sq ft.
- E. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
- F. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, door hardware, internal drainage details.
- C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work, expansion and contraction joint location and details, and field welding required.
 1. **Shop Drawings shall be prepared by and submitted by the manufacturer.**
- D. Samples: Submit two samples 12x12 inches in size illustrating finished aluminum surface, glass, glazing materials.
- E. Warranty: Submit manufacturer warranty and ensure forms have been completed in NC DOT's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Manufacturer and Installer Qualifications: Company specializing in manufacturing aluminum glazing systems with minimum three years of experience.

1.07 FIELD CONDITIONS

- A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

1.08 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a ten year period after Date of Final Acceptance.
- C. Provide ten year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
- D. Provide ten year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: United States Aluminum Corp, Division of C.R. Laurence: www.usalum.com.; Hurricane Resistant Storefronts Thermal Series IT-600
- B. Other Acceptable Manufacturers:
 - 1. Kawneer North America: www.kawneer.com.
 - 2. YKK AP America: www.ykkap.com
 - 3. Oldcastle BuildingEnvelope: www.oldcastlebe.com.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 STOREFRONT

- A. Aluminum-Framed Storefront: Factory fabricated, factory finished thermally broken aluminum framing members with infill, and related flashings, anchorage and attachment devices.
 - 1. Glazing Rabbet: For 1 inch insulating glazing.
 - 2. Glazing Position: Front-set.
 - 3. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep.
 - 4. Water Leakage Test Pressure Differential: 2.86 lbf/sq ft.
 - 5. Air Infiltration Test Pressure Differential: 1.57 psf.
 - 6. Finish: High performance organic coating.
 - 7. Color: Bronze.

2.03 COMPONENTS

- A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
 - 1. Glazing stops: Flush.
- B. Doors: Glazed aluminum.
 - 1. Thickness: 1-3/4 inches.
 - 2. Top Rail: medium stile model.
 - 3. Vertical Stiles: medium stile model.
 - 4. Top Rail: 4 inches wide.
 - 5. Bottom Rail: 10 inches wide.
 - 6. Glazing Stops: Square.
- C. Finishes:
 - 1. Class I natural anodized.
 - a. Factory finish all surfaces exposed in completed assemblies.
 - b. Coat concealed surfaces to be in contact with cementitious or dissimilar materials with bituminous paint.
- D. Structural performance: Refer to drawing S3 for 'Wind Design Criteria'.

2.04 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M).
- B. Fasteners: Stainless steel.
- C. Perimeter Sealant: General Purpose Exterior Sealant as specified in Section 07 9005.
- D. Glass: Insulated/Tempered.
- E. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.05 HARDWARE

- A. Door Hardware: Storefront manufacturer's standard.
 - 1. Provide electric strike push bar at interior side/ ADA accessible pull handle at exterior side. Coordinate w/Owner's security system requirements.

2.06 FABRICATION

- A. Fabricate components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.
- B. Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.
- C. Prepare components to receive anchor devices. Fabricate anchors.
- D. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.
- E. Arrange fasteners and attachments to conceal from view.
- F. Reinforce components internally for door hardware.
- G. Reinforce framing members for imposed loads.
- H. Finishing: Factory finish at all surfaces that will be exposed in completed assemblies.
 - 1. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify dimensions, tolerances, and method of attachment with other work.
- B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

3.02 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Provide alignment attachments and shims to permanently fasten system to building structure.
- D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
- E. Provide thermal isolation where components penetrate or disrupt building insulation.
- F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.
- G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.
- H. Coordinate attachment and seal of perimeter air and vapor barrier materials.
- I. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- J. Install hardware using templates provided.
- K. Install glass and infill panels in accordance with Section 08 8000, using glazing method required to achieve performance criteria.

- L. Leave on protective plastic coating while handling and installing.
- M. Install perimeter sealant in accordance with Section 07 9005.
- N. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

- A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 1/16 inches per 10 ft, whichever is less.
- B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.04 ADJUSTING

- A. Adjust operating hardware and sash for smooth operation.

END OF SECTION