

- 084113 Paragraph 2.6. – Delete all hardware items that are not going to be installed on this door.
- 084113 Paragraph 2.9 - Delete all finishes that are not going to be used on this door.
- 085113 Paragraph 1.3.A – All windows shall be HC per RFP B2020. Delete reference to AW and C designations.
- 085113 Paragraph 1.4.B.1 – Verify that the stated loads and parameters comply with the requirements of the RFP.
- 085113 Paragraph 1.4.C – Please explain reference to “Alternate 3 to the basic contract.”
- 085113 Paragraph 2.3 – Verify that all referenced standards included in these paragraphs comply with those indicated in the RFP. At least one (I – forced entry protection) deviates from the RFP.
- 085113 Paragraph 2.7.A – Revise this paragraph to comply with RFP B202001 1.1.1 that requires the aluminum windows to be factory finished with an ‘organic coating’, not an ‘anodic finish’.
- 085113 Paragraph 3.1.A.1 – Delete reference to wood frame walls.
- 085113 General – add requirements for interior windows per the RFP.
- 088000 General – Edit this section to eliminate all glass, glazing products, and construction/installation methods that are not to be used on this project.
- 088000 Paragraph 1.5 – Add requirement for submitting a sample of exterior glazing materials in accordance with RFP B20 1.7 SD-04.
- 088000 Paragraphs 1.6 G and H – RFP B202004 1.1.3 requires that wire glass shall be tested in accordance with ASTM E 163, not NFPA 252 or 257 indicated in these paragraphs.
- 088000 Paragraph 2.6.A.3.a – The term “Azurlite” by PPG has been replaced by “Azuria” and is distinctly blue in color. Please correct and explain or eliminate the use of ‘Bronze’ in this paragraph.
- 088300 General – Mirrors are indicated in the RFP in Paragraph C103002, “Toilet and Bath Accessories.” The submitted specification reads as though the mirrors will be supplied by other than a toilet and bath accessory manufacturer. This was not the intent of the RFP, since it is desirable to have all such accessories be products of one manufacturer’s design line, so there is a cohesive appearance. Unless the designers intend to use mirrors in other areas, we suggest that this section be eliminated and that mirrors be included in “Toilet Accessories” section.
- 092900 General – Edit this section to eliminate all gypsum board products and construction/installation methods that are not to be used on this project.

- 092900 General – The RFP requires all gypsum board products used on this project to be a minimum of 5/8” thick. Revise this section to eliminate any reference to gypsum board thinner than 5/8.”
- 092900 Paragraph 2.2 – Include GA and ASTM requirements listed in C301003 of the RFP for all items specified.
- 092900 Paragraphs 2.3 and 3.4 – Delete these paragraphs, as there is no exterior gypsum board used on this project. Exterior soffits are to be metal per RFP B201008 1.1.
- 092900 Paragraph 2.4.C – Revise to indicate the minimum thickness of cementitious backer units to be 5/8” as required by RFP C301003 1.3.
- 092900 Paragraph 2.5.C – Delete this paragraph. Only corrosion resistant steel and plastic accessories are allowed per RFP C301003 1.7.
- 092900 Paragraphs 2.8 and 3.8 – Edit these paragraphs to delete ‘textures’ not included in RFP C301003 1.8. The majority of finishes should be smooth, NOT textured.
- 095123 Paragraph 1.6.D – Maximum flame spread as tested using ASTM E84 as allowed in RFP C303004 1.1 is 50, not 450 as indicated in this paragraph. Revise to comply with RFP.
- 095123 Part 2 – Revise to indicate size, type, edge treatment, NRC and CAC ratings required by RFP C303004.
- 095123 Paragraph 2.3 – Edit to only include the items and materials used on this project.
- 095123 Paragraph 2.4 – This paragraph does not specify anything. Revise to list items included.
- 096816 General – This section describes broadloom carpet. The RFP requires carpet tile. Delete this section in its entirety and provide a specification for carpet tile. Include such information as type/pattern, pile weight, backing (“Manufacturer’s standard material” is not acceptable), yarn density, warranty, static control requirements, and all other requirements listed in the RFP.
- 099123 General – Delete all alkyd products and all products for interior use (except epoxy floor coating) with a VOC rating of E1 (or lower), as these will almost certainly not meet LEED requirements. Delete all products not used in this project – such as wood paneled walls. Revise this specification to comply with the requirements stated in C301005 of the RFP.
- 13125 Paragraph 1.6.J – Correct smoke developed rating to comply with RFP F101001 1.4.2.
- 13125 See C301005 1.5, which refers to B201010 for painting of steel structure.

- 13125 Provide detailed written verification that metal roof system complies with the requirements stated in RFP B30.
- 13125 Metal wall and roof panels are to have a high-performance factory-applied finish complying with the requirements indicated in RFP F101001 1.5.

Fire Protection

Comments

- Basis of Design The write-up included consists of a part of the proposal from Simplex Grinnell. As such, there were numerous references to items not included by Simplex Grinnell. The Contractor is responsible for the entire project and no references to items ‘by others’ should be included, as the Government is not concerned with the breakdown of work items between the Contractor and subcontractors.
- Basis of Design There is a note stating that maximum sprinkler coverage for light hazard is 225 sq ft or listing of sprinkler head. There are numerous sprinklers listed for extended coverage. They are not allowed.
- Basis of Design Ordinary hazard occupancies are noted as “Ordinary Group I & II”. They should be noted as I or II as applicable.
- Basis of Design Under “Engineering Services” it is stated that Simplex Grinnell includes Professional of Record services from a fire protection engineer for the sprinkler system. RFP Part 3, D40 Fire Protection, General System Requirements is very clear that the Contractor must have a contract with a Design Build Fire Protection Engineer (DBFPE). It provides specific requirements for that individual. It also lists numerous duties for that person and specifically says it goes beyond reviewing sprinkler design. Having an engineer stamp sprinkler plans does not meet the intent or verbiage of the RFP. Having the subcontractor provide shop drawings signed by an engineer other than the DBFPE creates the potential for confusion over the role of “engineer of record”. We strongly recommend this be resolved before moving forward.
- Basis of Design Numerous references were made that materials will be “selected by Simplex Grinnell” with no reference to the RFP documents. Review Section D40 of Performance Technical Specifications, UFC 3-600-01, and UFC 3-600-10N for specific requirements. All materials must be per RFP documents and approved by the DBFPE.
- Basis of Design RFP documents require the Design narrative be written by the DBFPE. Could not find any design narrative, or any evidence that a DBFPE has been retained for this project.
- Drawings No fire protection drawings were submitted for review and no utility plans were submitted showing the fire main and PIV. Please provide this for review prior to the 100% Submittal.
- Drawings Provide required fire extinguishers.

Drawings Require painting of pipe in accordance with RFP documents.

Mechanical Drawings

Comments

- General Provide a gas-fired hot water boiler for hydronic heating in accordance with RFP ESR D3020. The submittal basis of design recommends electric heat because of the small heat load required by small zones or offices. No mention is made of the heat load required by the Maintenance/Staging Area, which may have a significant heat load requirement?
- General Provide a constant volume pumping system in accordance with RFP ESR D303001. The submittal basis of design recommends a primary variable volume pumping system. Primary variable volume pumping systems are not typically provided for single chiller applications and the energy savings provided by variable volume for such a small system may be negligible.
- General Only a primary pump is indicated on the plans. Provide a back-up pump in accordance with ESR D304006.G.
- General Provide split systems for all Communication and Server Rooms in accordance with RFP ESR D3203002.A. None are shown.
- General Provide wall hydrants along the building exteriors in accordance with ESR D202002.A.

Electrical Drawings

Comments

- E1.0 Electrical Legend: Identify floor outlets as a combination of duplex receptacles, SIPRNet, and NIPRNet outlets.
- E1.0 Electrical Legend: use symbol legend as indicated in UFC 3-500-10N, Attachment 6 “Electrical Guide Legend Interior”.
- E1.0 Telecommunications Legend: provide 2-port faceplate for 2-port jacks, not 4-port faceplates.
- E1.0 Lighting Fixture Schedule: provide as required by UFC 3-500-10N, Attachment 23 “Lighting Fixture Schedule”.
- E1.0 Lighting Fixture Schedule: provide fixture type “F5A” with wire guard.
- E1.1 Provide panelboard or switchboard as service entrance equipment as required by UFC 3-500-10N, Chapter 2 “Design Requirements”, 2-3.1.1.
- E1.1 Provide a main breaker for each service entrance equipment as required by UFC 3-500-10N, Chapter 2, 2-3.1.
- E1.1 Dry-type transformers should not be larger than 40% of the service transformer as indicated in UFC 3-500-10N, Appendix B “Best Practices”, B-3.2.
- E1.1 Provide One-Line Diagram for the Boat Storage Building.

- E1.1 Provide transient voltage surge suppression for service entrance equipment as required by the National Electrical Code.
- E2.1 Provide building names for the new buildings in the project.
- E2.1 Provide call out for the street name “Lower Gainesville Road”.
- E3.1 Provide room names and numbers.
- E3.1 Cages 105: Coordinate lighting fixtures alignment with revised cage layout.
- E3.1 Armory 107: provide exit sign as required.
- E3.2 Provide exit signs as required.
- E3.2 Provide dedicated electrical room as required by UFC 3-500-10N, Chapter 2, 2-3.1.
- E3.2 Janitor 214: identify fixture type.
- E3.2 North Stairs: verify lighting layout and provide lighting fixtures above stair landing area.
- E3.3 Identify fixture type F14 in the Lighting Fixture Schedule on Drawing E1.0.
- E4.1 Provide retractable reel in accordance with RFP, Part 3, D502001.W.4.
- E4.1 Provide room names and numbers.
- E4.1 Provide a duplex receptacle at each of the columns in accordance with RFP, Part 3, D502001.X.2.
- E4.1 Cages 105: provide a duplex receptacle in each cage in accordance with RFP, Part 3, D502001.BB.
- E4.1 & 4.2 Provide separate floor plans for power and communications devices.
- E4.2 Verify receptacle spacing in the corridors with UFC 3-500-10N.
- E4.3 Indicate mounting height for receptacles as 48” above finished floor in accordance with RFP, Part 3, D502001.X.3.
- E7.1 & E7.2 Photometrics Floor Plan: show lighting fixture locations.
- E7.1 & E7.2 Calculation Summary: average footcandles seem high in some of the spaces. Verify with UFC 3-530-01 for average footcandle recommendations in each space. Provide UFC recommended average footcandles in the calculation summary table for comparison of recommended and calculated average footcandle values.
- E7.2 Calculation Summary: Average/Minimum and Maximum/Minimum values should be 4:1 and 10:1, respectively, in accordance with IES recommendations.
- E7.4 Calculation Summary: verify minimum footcandle values for site lighting with UFC 3-500-10N recommendations.

E7.1 thru E7.4	Photometrics data can be submitted along with the Basis of Design instead of including in the construction drawings.
Basis of Design	Instant start ballasts should only be used as indicated in UFC 3-530-01.
General	Provide graphic scales for all floor plans.
General	Submit calculations in accordance with UFC 1-300-09N, Chapter 10 "Design Submittal Requirements".
General	Submit fire alarm/mass notification, lightning protection, intercommunications, and grounding systems for review.
General	Provide electrical site plan for power.

Electrical Specs

Comments

16010	Provide specifications for dry-type transformer.
16500	Page 3, delete incandescent lamp requirements.
16700	Provide specifications for cable trays, racks, cabinets, and communications backboard.
16700	Telecommunications Cable Plant Material Cut Sheets: Provide center spline cable trays instead of basket type cable trays in accordance with RFP Part 3, D503003.S.
General	Change all Architect and Engineer references to Contracting Officer.
General	Provide UFGS specifications for Electronic Security System as required by RFP Part 4, D503008.1.1.1
General	Provide UFGS specifications for closed circuit television system as required by RFP Part 4, D503008.1.1.2.
General	Provide UFGS specifications for data transmission media as required by RFP Part 4, D503008.1.1.3.
General	Provide UFGS specifications for intrusion detection system as required by RFP Part 4, D503008.1.1.4
General	Provide UFGS specifications for generator as required by RFP Part 4, D509002.1.2.
General	Provide UFGS specifications for automatic transfer switch as required by RFP Part 4, D509002.1.3.
General	Provide UFGS specifications for service transformer as required by RFP Part 4, G401002.
General	Provide specifications for public address, intercom, lightning protection, cable television, and fire alarm/mass notification systems for review.

Electrical Calcs

Comments

- Calculations Electrical Load Analysis: Indicate reference source(s) where diversity values are obtained from.
- Calculations Short Circuit and Voltage Drop Calculations: Indicate the name of the software used for the short circuit and voltage drop calculations.
- Calculations Short Circuit and Voltage Drop Calculations: Indicate reference source where the secondary short circuit amps value is obtained from for transformer "T1".

DESIGN COORDINATION AND REVIEW - COMMENTS

PROJECT MANAGER:
Terry Artrip, NAVFACSE

COMMENTS BY: URS Group, Inc.		CODE:	PHONE: 813-286-1711	DATE: 3 April 2009
PROJECT TITLE AND LOCATION: MILCON P210, SOF RIVERINE & COMBATANT CRAFT OPS FACILITY (SBT-22) STENNIS SPACE CENTER, MS			TYPE OF REVIEW: Early Start Submittal Slab on Grade at Boat Storage Building	
NO.	DWG.NO. or SPEC.SECT.	COMMENTS	A-E RESPONSE	
1	Specification General	Specification section headers and format should be consistent.	Will comply.	
2	Specification General	Are specs being edited in SpecsIntact? If not, you cannot use automatic functions for confirming references, coordinating submittals, generating bracket reports, etc., and will need to do such manually.	Specs are being edited in SpecsIntact.	
3	Specification General	A submittal register and verification of submittal approvals is needed before any construction work can proceed.	Register was initiated 1.7.09 and will be provided.	
4	Specification General	We suggest a proposed specification list be generated and submitted for comment before starting any more sections related to main design.	Current Table of Contents will be forwarded.	
5	Specification General	Please make sure submittal review and approval stamps and signing conventions conform to Navy standards. Several appear in these documents and they are not consistent.	Use of Navy standard stamps is being implemented.	
6	Specification General	Please coordinate construction submittals as to which are for Government, Designer of Record, or CQ Manager review. The submittals for Government approval are those listed in 01332N along with administrative submittals listed elsewhere in the RFP Part 2 sections.	Construction submittals will be coordinated in accordance with RFP.	
7	Section 03 31 00.00 10	This is not the section typically used for Navy projects. Please consider using 03 30 00, Cast-in-Place Concrete.	Will comply.	
8	Section 03 31 00.00 10	With this Spec there are references to other sections that are not included in this submittal.	Other sections will be provided.	
9	Concrete Mix Design	The Designer of Record should review and approve the concrete mix design package and associated backup.	DOR has complied with review and requested backup.	
10	Concrete Mix Design	Water cement ratio is not per page 6 of specification section 03 31 00.00 10.	Mix design is being revised to conform with specification.	
11	Concrete Mix Design	Test records or trial mix results should be included with mix design per paragraph 1.7 of specification section 03 31 00.00 10.	Records or results will be included.	

12	Section 22 00 00	This section does not appear to have been fully edited. There are numerous brackets, blanks, and decision items still within the document.	Response by Mechanical Engineer.
13	Section 22 00 00	This section appears to allow many different materials for various uses. Please edit out items as necessary to specify requirements intended for this job.	Response by Mechanical Engineer.
14	Drawing S2.1	Provide thickness and reinforcing for level landing.	Corrected by designer, detail added on Sht. S2.1.
15	Drawing S2.1	Provide slab control joint location and detail in both directions.	Control joint location and detail added on Sht. S2.1. Note: One direction only.
16	Drawing S2.1	Section 1/S2.1 shows the plan of footing at column please coordinate.	Corrected by designer.
17	Drawing S2.1	Column anchor bolts are not shown. Is metal building manufacturer responsible for the design and location of the anchor bolt? If not please provide the anchor bolt location and detail.	Metal building manufacturer is responsible for location of anchor bolts. Design of anchor bolts has been coordinated between A-E and MBM.
18	Drawing S2.1	Construction joint details and locations are not shown. Please provide construction joint details and locations.	Contractor does not intend to use construction joints at Boat Storage Bldg. 2442.
19	Section 26 00 00.00 20	Edit this section to delete paragraphs not applicable to this project, for example we think 2.7.1.2, 2.10.3, 2.12.2, 2.1.12.6 and 3.1.9.1 should be removed.	Response by Electrical Engineer.
20	Drawing E4.3	Please indicate mounting height for receptacles, we believe it is 48" AFF.	Response by Electrical Engineer.
21	General	A code analysis with accompanying drawings should be prepared for this building prior to construction being allowed to commence.	Code analysis will be provided and is being coordinated by the DOR and DBFPE.
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23			
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29			
30			

Dammon Engineering

From: Dammon Engineering [dammoneng@bellsouth.net]
Sent: Thursday, February 26, 2009 3:31 PM
To: cseals@broadmoorllc.com; Jeff Collins; Joshua Jenkins
Cc: dammoneng@bellsouth.net
Subject: RE: FW: Stennis Riverine - C2.1 Site Drainage Plan

February 26, 2009

Craig,

I am writing to respond to Charlie's questions below, as follows:

1. Drainage calculations have been added to Sht. C2.1.
2. Topo drawings not in the RFP and provided post CDW meeting indicate a low area and natural drainage both toward the project site and toward Endeavor Blvd. Natural drainage onto the project site has been included in the calculations.
3. Swale sections, inverts, and T.O.B. elevations are now on the plans.
4. Bottom of swale inverts are shown on plans. During a 10 year storm event, the swale will not hold any water. Discharge pipe (24" arch pipe), is oversized to achieve full drainage of watershed, post development.
5. The existing ditch along the gravel road is being improved to accomodate existing and new flows.

Robert Wiltse
Chief Architect
Dammon Engineering, Inc.

-----Original Message-----

From: cseals@broadmoorllc.com [mailto:cseals@broadmoorllc.com]
Sent: Tuesday, February 10, 2009 9:45 AM
To: Dammon Engineering
Subject: Fw: FW: Stennis Riverine - C2.1 Site Drainage Plan

Sent from my BlackBerry® smartphone with Nextel Direct Connect

From: cseals@broadmoorllc.com
Date: Tue, 10 Feb 2009 15:07:48 +0000
To: Dammon Engineering<dammoneng@bellsouth.net>
Subject: Fw: FW: Stennis Riverine - C2.1 Site Drainage Plan

Sent from my BlackBerry® smartphone with Nextel Direct Connect

From: "Mullins, Paul A CIV NAVFAC SE"
Date: Tue, 10 Feb 2009 09:54:35 -0500
To: Craig Seals<cseals@broadmoorllc.com>
Subject: FW: FW: Stennis Riverine - C2.1 Site Drainage Plan

Craig, please see the below email regarding the drainage plan and the geotech report. Please send responses to me and I will forward to Charlie.

Thanks,
Paul

-----Original Message-----

From: Charlie_Evans@URSCorp.com [mailto:Charlie_Evans@URSCorp.com]
Sent: Tuesday, February 10, 2009 8:50 AM
To: Mullins, Paul A CIV NAVFAC SE
Cc: Susan_Nute@URSCorp.com; Sherri_Eriksen@URSCorp.com
Subject: Re: FW: Stennis Riverine - C2.1 Site Drainage Plan

Paul,

I need a couple items answered on the drainage plan you just sent to help with a quick review.

1. Are there any drainage calculations available yet to go with this plan?
2. There is existing surface drainage coming across the site from the northeast to southwest which is at elevations lower than anything indicated in this plan. How does the designer plan to accommodate this? I brought this issue up at the concept design workshop.
3. The swale line I see in plan represent what ... bottom or top of swale? What is the typical bottom width and side slope for the swales? Again my concern as discussed at the concept workshop is how deep/wide these swales will be.
4. Are the elevations with arrows pointing to the swales bottom of swale grades? Also, how deep will the water be in the swales for the 10-year storm?
5. There is an existing culvert under the gravel road northwest of the site which presently drains through the site. This plan show this drainage being accommodated by an existing ditch along the road edge. Has the designer confirmed this ditch has adequate grades/size to accommodate this? The original survey did not indicate a ditch this deep along the road.

I appreciate it if these can be answered.

I will look over the geotechnical and get comments to you.

Regards,

-Charlie-

Charlie Evans, P.E.
URS <<graycol.gif>> Group, Inc.
7650 W. Courtney Campbell Cswy
Tampa, Florida 33607-1462
Tel (Main): 813.286.1711
Tel (Direct): 813.636.2453
Fax: 813.636.2400
charlie_evans@urscorp.com

<<ecblank.gif>> This e-mail and any attachments are confidential. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.

DAMIEN W. SERAUSKAS, P.E.
PROFESSIONAL ENGINEERING SERVICES

15 CYPRESS POINT LANE NEW ORLEANS, LA 70131
VOICE: (504)-866-2600 FAX: (504)-218-8480

Stennis Riverine ROF Mechanical Comments Responses
50%-65% Design Submittal Phase

Mechanical comments were received from two reviewing entities, Sam Martindale, P.E. and URS. The following list includes the reviewer's original comment and the response from the design professional / DB contractor team.

Martindale Comments

Dwg P 1.1 Where is the grease interceptor for the trench drain and where is the associated piping? Is this to be shown on the P-drawings or the C-drawings?

The required oil/water separator will be provided, and will be referenced in the P-drawings, however the design and final location will be indicated on the C drawings.

Dwg P 1.2 Does the hallway coffee counter need a sink and disposal?

The River Ops Control Watch Station shall include a sink and residential garbage disposal as outlined in the RFP.

URS Comments

Mechanical Drawings

Comments

General Provide a gas-fired hot water boiler for hydronic heating in accordance with RFP ESR D3020. The submittal basis of design recommends electric heat because of the small heat load required by small zones or offices. No mention is made of the heat load required by the Maintenance/Staging Area, which may have a significant heat load requirement?

The accepted Design Basis documentation and proposal specifically addressed a change from the original RFP Basis of Design. All areas will be heated using electric resistance heaters in lieu of hydronic heating systems due to the relatively small heat load requirements for the various buildings and long-term maintenance and reliability concerns relating to gas-fired hydronic heating systems for this application.

General Provide a constant volume pumping system in accordance with RFP ESR D303001. The submittal basis of design recommends a primary variable volume pumping system. Primary variable

volume pumping systems are not typically provided for single chiller applications and the energy savings provided by variable volume for such a small system may be negligible.

The accepted Design Basis documentation and proposal specifically addressed a change from the original RFP Basis of Design. In order to meet or exceed the efficiency / energy consumption objectives of the project, the use of a variable primary pumping scheme was proposed for use on this project. This system uses significantly less energy, allows for excellent full-load and part-load performance, and extends pump motor life due to the soft-start and coast-down capabilities of the VFD pump controllers.

General Only a primary pump is indicated on the plans. Provide a back-up pump in accordance with ESR D304006.G.

A back-up primary will be provided.

General Provide split systems for all Communication and Server Rooms in accordance with RFP ESR D3203002.A. None are shown.

The User Group identified during the Concept Design workshop that a dedicated split system unit is not required for the Communication and Server Rooms, therefore it was removed from the Scope.

General Provide wall hydrants along the building exteriors in accordance with ESR D202002.A.

Wall hydrants will be provided along the building exteriors.

END OF REVIEW RESPONSES.

Should you have any questions or comments regarding these or other matters, please don't hesitate to call.

Sincerely,

Professional Engineering Services

Damien W. Serauskas, P.E.
Owner / Principal

SCHLAFLY ENGINEERING LLC
121 SOUTH GENOIS STREET, NEW ORLEANS, LA 70119
PHONE: 504-415-3347 FAX: 504-482-7943

Broadmoor Construction
2740 North Arnoult Road
Metairie, LA 70002

March 11, 2009

ATTN: Craig Seals

RE: SOF Riverine
50% review comment response - Everett

Dear Sir:

In response to comments provided by Dave Everett, dated February 12, 2009, we offer the following, with respect to the electrical discipline:

Bldg 2440:

Comment 2: User requests four cameras in Armory (107(are, one directed at entry doors and one in each of the three subdivision/caged areas.

Answer: We will provide cameras as requested.

Comment 9: User requests inclusion of floor outlets (if not already specified by Mr. Herve Lara), central in each of the divisible areas on the Briefing Room (203).

Answer: We will use symbol legend from Attachment 6.

Bldg 2441:

Comment 2: Overhead 110V, Air and Water service connections. Users requests two overhead hose and reel style service stations that can be dropped/pulled down to provide quick turnaround service without trip hazards in the maintenance floor area.

Answer: We will provide 110V cord reels as requested.

Comment 3: 110V, Air and Water service connections throughout the staging area and water hose bibs at six locations (2 per elevation) on the exterior of the building.

Answer: We will coordinate the locations of numerous receptacles already provided inside and outside of the maintenance/staging building.

This completes our responses to all electrical items provided by Dave Everett, dated February 12, 2009. If you have any questions, please feel free to call.

Sincerely,

Schlafly Engineering, L.L.C.



Per: _____
Kimball Schlafly, P.E.

CC: Pat Russo, HTE Contractors
Robert Wiltze, Dammon Engineering

SCHLAFLY ENGINEERING LLC
121 SOUTH GENOIS STREET, NEW ORLEANS, LA 70119
PHONE: 504-415-3347 FAX: 504-482-7943

Broadmoor Construction
2740 North Arnoult Road
Metairie, LA 70002

March 11, 2009

ATTN: Craig Seals

RE: SOF Riverine
50% review comment response - Martindale

Dear Sir:

In response to comments provided by Sam Martindale, P.E., dated November 5, 2009, we offer the following, with respect to the electrical discipline:

Item 24: Nicely done electrical discipline title sheet. Good layout and very comprehensive. Good Job!!!

Answer: Thank you. We will adjust symbol legend and lighting fixture schedule per comments submitted by URS.

Item 25: Recommend adding a double head fixture (a fixture on opposite side of the pole) to the F11A light pole near the pedestrian walkway between the parking lot and the Riverine Compound.

Answer: We will review the layout of pole lights and adjust accordingly to provide enhanced lighting at the pedestrian gate. This may include adding a shorter pole which is more appropriate for walkway lighting.

Item 26: Need to increase the number of outlets in the walls around the perimeter of the SEAL cage room. Need both for now with access from the rear of the cages. Also go for the future in case the room's occupancy is changed. Need a NP outlet in the Armory. Need a NP and SP outlet in the CSS office.

Answer: We will provide additional receptacles along accessible walls in cage area. Installation of receptacles for cages is part of bid option #6. We will provide NP and SP outlets in the armory and CSS office upon receipt of equipment/furniture plans.

Item #27: I don't see any NP or SP outlets on the second floor. Coordinate with the occupant to determine the best placement and provide an adequate number per the RFP and to provide coverage throughout the floor.

Answer: We will provide NP and SP outlets on the second floor upon receipt of equipment/furniture plans.

This completes our responses to all electrical items provided by Sam Martindale, P.E., dated November 5, 2009. If you have any questions, please feel free to call.

Sincerely,

Schlafly Engineering, L.L.C.



Per: _____
Kimball Schlafly, P.E.

CC: Pat Russo, HTE Contractors
Robert Wiltze, Dammon Engineering

SCHLAFLY ENGINEERING LLC
121 SOUTH GENOIS STREET, NEW ORLEANS, LA 70119
PHONE: 504-415-3347 FAX: 504-482-7943

Broadmoor Construction
2740 North Arnoult Road
Metairie, LA 70002

March 11, 2009

ATTN: Craig Seals

RE: SOF Riverine
50% review comment response - URS

Dear Sir:

In response to comments provided by URS, we offer the following, with respect to the electrical discipline:

Item E1.0:

Comment: Electrical Legend: Identify floor outlets as a combination of duplex receptacles, SIPRNet, and NIPRNet outlets.

Answer: Floor boxes shall be combination type with power and telecommunications, with recessed pocket for plugs, and provided with appropriate flange for carpet/tile.

Comment: Electrical Legend: use symbol legend as indicated in UFC 3-500-10N, Attachment 6 "Electrical Guide Legend Interior".

Answer: We will use symbol legend from Attachment 6.

Comment: Telecommunications Legend: provide 2-port faceplate for 2-port jacks, not 4-port faceplates.

Answer: We recommend standardizing on 4-port faceplates to provide ease of upgrade in the future. However, upon receipt of equipment/furniture plans, we will provide faceplates equal to the number of jacks, which will most likely be a combination of 2 and 4-port devices.

Comment: Lighting Fixture Schedule: provide as required by UFC 3-500-10N, Attachment 23 "Lighting Fixture Schedule".

Answer: We will replace the lighting fixture schedule with that provided in attachment 23.

Comment: Lighting Fixture Schedule: provide fixture type "F5A" with wire guard.

Answer: Fixture type F5A will be deleted, and replaced with type F5.

Item E1.1:

Comment: Provide panelboard or switchboard as service entrance equipment as required by UFC 3-500-10N, Chapter 2 “Design Requirements”, 2-3.1.1.

Answer: **The ATS is the service entrance rated piece of equipment, and will contain the neutral-to-ground bond. Panel MDP will not be service-entrance rated. At the request of others during our design meetings, a main breaker will be added to MDP for convenience of maintenance, provided there is no coordination issue between breakers.**

Comment: Provide a main breaker for each service entrance equipment as required by UFC 3-500-10N, Chapter 2, 2-3.1.

Answer: **The ATS has a main breaker. Panel HS (boat storage bldg) has a main breaker. We neglected to show the panelboards (HS and LS) and transformer T3 on drawings E3.3 and 4.3. See note above regarding main breaker in MDP.**

Comment: Dry-type transformers should not be larger than 40% of the service transformer as indicated in UFC 3-500-10N, Appendix B “Best Practices”, B-3.2.

Answer: **Size of transformers T1 and T2 are only estimated at this time. Upon receipt of all mechanical and architectural loads, transformers shall be sized in accordance with requirements of UFC 3-500-10N.**

Comment: Provide One-Line Diagram for the Boat Storage Building.

Answer: **One-line diagram for Boat storage bldg was included in one-line diagram for OPS bldg. We neglected to show the panelboards (HS and LS) and transformer T3 on drawings E3.3 and 4.3. Per discussion at review meeting, one-line diagram for Boat storage bldg will remain a part of the overall one-line diagram.**

Comment: Provide transient voltage surge suppression for service entrance equipment as required by the National Electrical Code.

Answer: **TVSS shall be provided in accordance with UFC 3-500-10N, and installed in accordance with NEC 285.**

Item E2.1:

Comment: Provide building names for the new buildings in the project.

Answer: **Building names shall be identified.**

Comment: Provide call out for the street name “Lower Gainesville Road”.

Answer: **Street names shall be identified.**

Item E3.1:

Comment: Provide room names and numbers.

Answer: **Room names and numbers shall be provided.**

Comment: Cages 105: Coordinate lighting fixtures alignment with revised cage layout.
Answer: In Cages 105, light fixtures have been positioned to provide maximum light into the cages, while still being accessible from the aisle. Corrections to fixture locations at the rear entry door shall be made.

Comment: Armory 107: provide exit sign as required.
Answer: **Exit signs shall be added in Armory 107 and coordinated with life safety egress.**

Item E3.2:
Comment: Provide exit signs as required.
Answer: **Exit signs shall be added and coordinated with life safety egress.**

Comment: Provide dedicated electrical room as required by UFC 3-500-10N, Chapter 2, 2-3.1.
Answer: **A dedicated electrical room shall be provided on the second floor by providing and additional wall and door dividing the space and creating a separate space for mechanical and electrical.**

Comment: Janitor 214: identify fixture type.
Answer: **Janitor 214 will have a type F5 fixture.**

Comment: North Stairs: verify lighting layout and provide lighting fixtures above stair landing area.
Answer: **We will verify lighting levels in North Stair. Landing fixture is shown on E3.1 (type F9, wall-mounted above landing).**

Item E3.3:
Comment: Identify fixture type F14 in the Lighting Fixture Schedule on Drawing E1.0.
Answer: **We will add type F14 to fixture schedule. Cut sheet is attached for your review.**

Item E4.1
Comment: Provide retractable reel in accordance with RFP, Part 3, D502001.W.4.
Answer: **We will provide retractable reel as requested.**

Comment: Provide room names and numbers.
Answer: **Room names and numbers shall be provided.**

Comment: Provide a duplex receptacle at each of the columns in accordance with RFP, Part 3, D502001.X.2.
Answer: **Refer to sheet E4.3. Receptacles have been provided on each side of column. Please note that wire mesh partitions are being installed on the centerlines of the columns. Per meeting discussion, mesh partitions are being deleted, therefore one receptacle shall now be provided at each column.**

Comment: Cages 105: provide a duplex receptacle in each cage in accordance with RFP, Part 3, D502001.BB.

Answer: **RFP, Part 3, D502001.BB is at variance with the rest of the RFP. Reference Part 3, room Requirements, page 17, and Amendment 0001, price item #7 (Option 6). Per request of Mr. Martindale, a change order proposal shall be submitted for adding a receptacle to all cages located on the perimeter of the building. We will assume one circuit for a maximum of eight receptacles, with receptacles install flush in CMU wall. We are presuming that the receptacles will be used for battery chargers, boot dryers, and other such minimal loads. Also per request of Mr. Martindale, a change order proposal shall be submitted for adding a receptacle to all cages located on the interior of the building. We assume the same receptacle loading, and that bracing will be required to attach the receptacle to the cage frame.**

Item E4.1 & E4.2

Comment: Provide separate floor plans for power and communications devices.

Answer: **Separation of floor plans for power and special systems shall occur for the pre-final submission.**

Item E4.2

Comment: Verify receptacle spacing in the corridors with UFC 3-500-10N.

Answer: **We will verify receptacle spacing, and adjust according to any equipment installations as required.**

Item 4.3

Comment: Indicate mounting height for receptacles as 48" above finished floor in accordance with RFP, Part 3, D502001.X.3.

Answer: **Mounting height shall be adjusted to 48" above floor or catwalk as appropriate.**

Item E7.1 & E7.2

Comment: Photometrics Floor Plan: show lighting fixture locations.

Answer: **Light fixtures shall be added to the photometric plan on next submittal.**

Comment: Calculation Summary: average footcandles seem high in some of the spaces. Verify with UFC 3-530-01 for average footcandle recommendations in each space. Provide UFC recommended average footcandles in the calculation summary table for comparison of recommended and calculated average footcandle values.

Answer: **Column for recommended lighting level shall be added. Cage area has a high level to allow for penetration into cages.**

Item E7.2

Comment: Calculation Summary: Average/Minimum and Maximum/Minimum values should be 4:1 and 10:1, respectively, in accordance with IES recommendations.

Answer: **We will review accordingly.**

Item E7.4

Comment: Calculation Summary: verify minimum footcandle values for site lighting with UFC 3-500-10N recommendations.

Answer: We will review and verify per UFC 3-500-10N.

Item E 7.1 thru E7.4

Comment: Photometrics data can be submitted along with the Basis of Design instead of including in the construction drawings.

Answer: **Photometric design plans shall be submitted with basis of design.**

Basis of Design

Comment: Instant start ballasts should only be used as indicated in UFC 3-530-01.

Answer: Use of instant start mode of operation will be in accordance with UFC 3-530-01, paragraph 5-3.4.3.

General

Comment: Provide graphic scales for all floor plans.

Answer: **Graphic scales shall be added for all floor plans.**

Comment: Submit calculations in accordance with UFC 1-300-09N, Chapter 10 "Design Submittal Requirements".

Answer: All information shall be provided as requested, and upon receipt of all load information as needed to generate the calculations.

Comment: Submit fire alarm/mass notification, lightning protection, intercommunications, and grounding systems for review.

Answer: Fire alarm/mass notification, lightning protection, intercommunications, and grounding systems shall be provided on pre-final submittal.

Comment: Provide electrical site plan for power.

Answer: **Site plans showing all power distribution shall be provided on pre-final submittal.**

Electrical specifications:

Comments:

16010 Provide specifications for dry-type transformer.

Answer: **We will use UFGS 26 20 00 specification.**

16500 Page 3, delete incandescent lamp requirements.

Answer: **Concur.**

- 16700 Provide specifications for cable trays, racks, cabinets, and communications backboard.
Answer: Concur. We will use UFGS 27 10 00 specification.
- 16700 Telecommunications Cable Plant Material Cut Sheets: Provide center spline cable trays instead of basket type cable trays in accordance with RFP Part 3, D503003.S.
Answer: Concur. We will coordinate with user.
- General Change all Architect and Engineer references to Contracting Officer.
Answer: We change all references to Contracting Officer.
- General Provide UFGS specifications for Electronic Security System as required by RFP Part 4, D503008.1.1.1.
Answer: Concur. We will use UFGS 28 20 00.00 20 specification.
- General Provide UFGS specifications for closed circuit television system as required by RFP Part 4, D503008.1.1.2.
Answer: Concur. We will use UFGS 28 16 00.00 20 and 28 20 00.00 20 specifications.
- General Provide UFGS specifications for data transmission media as required by RFP Part 4, D503008.1.1.3.
Answer: Concur. We will use UFGS 28 16 00.00 20 and 28 20 00.00 20 specifications.
- General Provide UFGS specifications for intrusion detection system as required by RFP Part 4, D503008.1.1.4
Answer: Concur. We will use UFGS 28 16 00.00 20 and 28 20 00.00 20 specifications.
- General Provide UFGS specifications for generator as required by RFP Part 4, D509002.1.2.
Answer: Concur. We will use UFGS 26 32 13.00 20 specification.
- General Provide UFGS specifications for automatic transfer switch as required by RFP Part 4, D509002.1.3.
Answer: Concur. We will use UFGS 26 36 23.00 20 specification.
- General Provide UFGS specifications for service transformer as required by RFP Part 4, G401002.
Answer: We will use UFGS 26 12 19.10 specification.
- General Provide specifications for public address, intercom, lightning protection, cable television, and fire alarm/mass notification systems for review.

Answer: We will use UFGS 27 21 00.00 20 (Intercommunication), 26 41 00.00 20 (Lightning Protection), 27 54 00.00 20 (Cable TV), 28 31 76 (Fire Alarm/mass notification) specifications.

Calculations Electrical Load Analysis: Indicate reference source(s) where diversity values are obtained from.

Answer: Diversity values are obtained from those used by the local utility, from the NEC 220, and an analysis of the occupancy, functions and types of load.

Calculations Short Circuit and Voltage Drop Calculations: Indicate the name of the software used for the short circuit and voltage drop calculations.

Answer: Fault current and voltage drop calculations during early design are obtained from personal software modeling the formulas provided by Cooper Bussman. Final calculations will be provided by the gear manufacturer. Information on that software package will be provided.


Calculations Short Circuit and Voltage Drop Calculations: Indicate reference source where the secondary short circuit amps value is obtained from for transformer "T1".

Answer: We have presumed an infinite bus on the primary side, and during early design, assigned a nominal value for the transformer impedance. Upon selection of transformer, accurate values for impedance, X/R, etc., will be used by the manufacturer to calculate the available fault current at T1.

This completes our responses to all electrical items provided by URS. If you have any questions, please feel free to call.

Sincerely,

Schlafly Engineering, L.L.C.

Per: 
_____ Kimball Schlafly, P.E.

CC: Pat Russo, HTE Contractors
Robert Wiltze, Dammon Engineering