



City of Monroe – Public Safety & Municipal Court Complex Renovation

Post Bid Addendum No. 1

December 5, 2019

SG Project No. 19160MONRpo

OWNER: City of Monroe
215, North Broad Street
Monroe, Georgia 30655
Telephone: (770) 267-3429

FROM: SIZEMORE GROUP
342 Marietta Street, NW
Unit 3
Atlanta, Georgia 30313
Telephone: (404) 605-0690
Facsimile: (404) 605-0890

RE: Bid Contract Documents Q&A

DATE: December 5, 2019



City of Monroe

1. Does the City of Monroe prefer key FOBS or HID Cards? If HID Cards are required, will the City of Monroe require a Badge Printing and Identification System, with Photo and ID Printing capability?
A: HANDLED SEPARATELY FROM THIS BID, WIRING IS THE ONLY CONCERN
2. What is the contact info for the Roofer for the building?
A: BLAKE MCCLENDON 678-332-6169
3. What are the badging requirements for this project like background checks?
A: THE GENERAL CONTRACTOR MUST BE E-VERIFIED.
4. Can we VE the lighting package?
A: YES, AS AN ALTERNATE TO THE BASE BID
5. Is there any abatement /remediation needed? Who is responsible for abatement?
A: THE BUILDING WAS ERECTED IN THE MID 1990'S SO THIS SHOULD NOT BE AN ISSUE, HOWEVER IF ABATEMENT IS NEEDED THE RESPONSIBILITY WOULD FALL TO THE CONTRACTOR AT THE ADDITIONAL EXPENSE OF THE CITY.
6. In TOC under Division 27 it mentions communication not used. Although there is voice and data on E drawings. Is there a requirement for a v/d proposal for this project or is this being done by preferred vendors or the owner?
A: JUST WIRING, ADDITIONAL WILL BE PROVIDED BY ANOTHER VENDOR AND OWNER.
7. In the Overhead door specification, basis of design is Wayne Dalton Commercial Door: Model 800 ADV/800C ADV. The 800 is non-insulated and 800C is insulated, but there is no indication of insulated slats in the spec. Does the owner want a standard rolling door with chain hoist operation?
A: YES.
8. Shall the strip lighting throughout the store be returned to the owner?
A: NO...CONTRACTOR CAN DISPOSE OF OR KEEP.
9. Exterior Utilities- will the City of Monroe be connecting to the Contractor supplied sewer and water lines stubbed approximately 2' out of the building by the General Contractor?
A: YES.
10. Exterior Utilities- Will the city Of Monroe be and installing all water and sewer valves / structures / boxes at their cost?
A: EXTERIOR YES, INTERIOR NO.



11. Exterior Utilities- what Excavations / Site / Pavement Repairs will the city Of Monroe be performing at their cost?

A: CONNECTION POINTS, EXTERIOR VALVES, PAVING WE'LL HANDLE ON THE EXTERIOR.

Architectural:

1. Sheet A-300: several rooms call for "existing" flooring, demo plan indicates to remove flooring throughout, which note is to take precedent?

A: REFER TO THE FINISH PLAN FOR AREAS TO REMAIN EXISTING RATHER THAN THE DEMO PLAN.

2. Sheet A-001: wall type G1 calls for 5/8" metal mesh for the security wall, we are having trouble finding 5/8", It may have to be 1/2" or 3/4" if this is acceptable.

A: METAL MESH BASIS OF DESIGN FOR PARTITION G1 BE McNICHOLS EXPANDED METAL, FLATTENED, STAINLESS STEEL, TYPE 304, 3/4" #9 FLATTENED, 66% OPEN AREA

3. Sheet A-600: Window type #4 (2 ea.) in interview room # 143 and 144 calls for storefront framing and One Way Mirror Glass, what is the finish for the storefront framing? Does glass have to hold any rating for bullet resistance and if so what would that rating be?

A: FINISH FOR THE STOREFRONT FACING SHALL BE DARK BRONZE AND NO RATING REQUIRED

4. Sheet A-600: Window type # 1, #2, #3 and #5 for Evidence processing #151, reception #101 and court clerk # 105. Plans call for an aluminum storefront frame with Bullet proof glass.

a. In order to quote this properly we need to know what type of Bullet resistant glass they are looking for, what type of bullet they are looking to stop (what Caliber) this will let us know what type of glass we need to provide for these windows.

A: PLEASE SEE SPEC SECTION 13 5100 IN THE APPENDIX AS APART OF THE ADDENDUM #1

b. If you are going to use a Bullet Resistant glass then you will also have to have a bullet resistant window frame also, details show an aluminum storefront frame, do they have a specific frame they are looking for, or should we recommend one based on the caliber of bullet they are wanting to stop?

A: PLEASE SEE SPEC SECTION 13 5100 IN THE APPENDIX AS APART OF THE ADDENDUM #1

c. Need a finish selection for the window frames.

A: FINISH SELECTION SHALL BE DARK BRONZE



5. Sheet A-600: View Glass for doors types #2 and #4:
 - a. Do we have a glass type for these doors?

A: FOR NON-RATED DOORS PROVIDE WIRED GLASS: ASTM C 1036, TYPE II (PATTERNED AND WIRED FLAT GLASS), CLASS 1 (CLEAR), QUALITY-Q-6; AND OF FORM AND MESH PATTERN SPECIFIED.
 - b. Doors #s 151B , 152 , 162B , 163A , 163B , 163C , 163D, 163E , 166A , 166B are 20 min fire rated, do we need rated glass in these doors if so do they have a particular type?

A: FOR FIRE RATED DOORS PROVIDE GLASS IN ONE-HOUR WALL
BASIS OF DESIGN: PILKINGTON PYROSTOP : LAMINATED LOW IRON FLOAT GLASS.
 - c. Any bullet resistant glass required in any of these doors?

A: NO
6. Sheet A-400: Vanity mirrors in bathrooms - do they want a safety backing on these mirrors so if they break they will not fall down? Also do they want any anti-graffiti film on surface, or any other kind of specialty mirror?

A: YES, PLEASE PROVIDE SAFETY BACKING.
7. The demolition plan indicates removal of existing flooring throughout the old sales area, but the finish plan indicates many areas to retain existing flooring, please clarify.

A: REFER TO THE FINISH PLAN FOR AREAS TO REMAIN EXISTING RATHER THAN THE DEMO PLAN.
8. Alternate # 2- What are the specifications / extents / location(s) / dimensions of the dog kennel fencing?

A: KENNEL FENCING SHALL BE TYPICAL CHAIN LINK FENCE AT 8'- 0" HEIGHT AT 14'-0" x 25'-0".
9. Alt. # 5- Sally Port - Is all of the fencing shown on sheet A100.1- Detail 13 part of the Sally port Alternate?

A: YES.
10. Wire Security Enclosure System - What is the height of the security enclosures at rooms 124,154,155

A: 10'-0" A.F.F.
11. Acoustic Ceiling Tiles- Type A1- Which Armstrong Ceiling Tile is used as the basis of design?

A: ARMSTRONG, FINE FISSURED HIGH NRC, 2X2, ANGLED TEGULAR



12. In the specifications, 092116.3.2.04, Acoustic Gypsum Plaster Board – VoglFuge, VOGL Ceiling Systems is called out at Reception Ceiling. Is this ceiling system required at any areas?

A: PROVIDE FINISHED CEILING A1 PER SHEET A200 IN THE RECEPTION AREA

13. Is the existing to remain VCT flooring to be stripped, cleaned and re-waxed?

A: YES

14. Is the existing to remain concrete flooring to be labelled as existing at Rooms / Areas Gym 134 and corridor 154 to be cleaned and sealed?

A: YES

15. Toilet Partitions – Sheet A400 - Symbol O calls out the toilet partitions to be PLAM. Are we to include the specified Solid HPDE partitions in our base proposal and provide deductive alt. # 2 for PLAM partitions?

A: CORRECT, HPDE IS BASE AND PLAM IS DEDUCTIVE.

16. Shower Bench- Sheet A400 appears to show fixed benches labelled R in each shower room. Specification 10.2800.4.-2.3.B calls out folding shower benches in each shower. Are we to provide both?

A: NO FOLDING SHOWER BENCHES ARE TO BE PROVIDED ONLY FIXED BENCHES

17. If we are to provide fixed benches at the shower rooms, what are the bench specifications?

A: PROVIDE SHOWER ROOM BENCH AS FOLLOWS
1. BENCH TOP: MAPLE WITH ONE COAT OF CLEAR SEALER ON ALL SURFACES.
2. PEDESTALS: FIXED WITH PREDRILLED HOLES FOR ATTACHMENT.
A. TUBULAR STEEL 1-1/4INCH DIAMETER.
B. ATTACHMENT WITH EXPOSED FASTENERS.

18. Are there any Gun Drop Boxes / Safes in the General Contractors Scope?

A: NO

19. Will the General Contractor need to provide and install a knox box on the building?

A: NO

20. Cutting and patching floor for new floor boxes – By others or should we include this in our SOW?

A: INCLUDE THIS LINE ITEM WITHIN CONTRACTOR PRICING.



21. Painting specifications call for dry erase paint but not on the drawings. Is there any dry erase paint on this project?

A: PROVIDE DRY ERASE COATING OVER MAGNETIC PAINT AS SPECIFIED ON SHEET A300.

Electrical:

1. Lighting Fixtures "D4" & "F2E" are not on the lighting schedule. Could we get the specs on these fixtures?

**A: TYPE D4: LITHONIA #EVO4SH 35/20 DFR SMO 120 EZ10/EZ1;
TYPE F2E: SAME AS TYPE F2 WITH BATTERY BACKUP.**

2. Will temporary lighting and GFCI receptacles for construction use need to be installed?

a. If so, may a portion of the existing strip lighting be used as temporary construction lighting?

A: EXISTING STRIP LIGHTS MAY BE USED FOR TEMPORARY LIGHTING FOR CONSTRUCTION. REFER TO PROJECT CONSTRUCTION MANUAL, OSHA, ETC., FOR ADDITIONAL REQUIREMENTS.

3. Will conduits leaving the generator need to be underground?

A: YES.

4. Will disconnecting means need to be installed on exterior wall at generator location or will generator be supplied with the 2 overcurrent protection devices as needed?

A: DISTRIBUTION BREAKERS WITHIN GENERATOR ENCLOSURE.

5. Generator:

a. What is the location for the owner supplied generator?

A: GENERATOR BY OWNER, NOT SPECIFIED BY SBE. ELECTRICAL/CODE REQUIREMENTS ONLY PROVIDED.

b. What is the location of the generator controller/annunciator?

A: GENERATOR BY OWNER, NOT SPECIFIED BY SBE. ELECTRICAL/CODE REQUIREMENTS ONLY PROVIDED.

c. Can the manufacture's installation manual specifications be obtained?

A: GENERATOR BY OWNER, NOT SPECIFIED BY SBE. ELECTRICAL/CODE REQUIREMENTS ONLY PROVIDED.



6. D3E – Will this fixture be dimmed 0-10v via switch?
A: NO, PROVIDE LOW VOLTAGE SWITCH AND RELAY PACK/PANEL AS REQUIRED FOR CONTRACTOR-SELECTED CONTROLS.
7. D3- Will this fixture be dimmed 0-10v via switch?
A: NO, PROVIDE LOW VOLTAGE SWITCH AND RELAY PACK/PANEL.
8. \$LV – Does this switch control relay at lighting control panel with 120v coil or 24v coil?
A: CONTRACTOR SELECT.
9. \$LV – Is the line voltage for this switch 24v and does it have 0-10v dimming capability?
A: NO
10. \$LV – Will this switch obtain its power source from lighting relay panel 24v to control designated relay or will it be 120v?
A: CONTRACTOR SELECT.
11. Should there be a D1E fixture?
A: PROVIDE LIFE-SAFETY POWER VIA LIGHTING CONTROL PANEL (IE: CIRCUIT LRP-9), STANDARD LIFE-SAFETY LIGHTING REQUIREMENTS APPLY SO NO BATTERY BACKUP IS REQUIRED FOR THIS SPECIFIC LOCATION.
12. Will the lighting fixture (TYPE MARK) designated with upper case E have backup ballast/driver?
A: YES, EVEN IF CONNECTED TO LIFE-SAFETY. THERE SHALL BE NO ALLOWABLE “TRANSFER TIME” TO FIXTURES WITH “E” DESIGNATION ON LIFE-SAFETY CIRCUITS.
13. Will there be any fixtures designated as night / emergency egress lighting?
A: YES
14. Will \$os obtain 0-10v dimming capability at all locations?
A: YES
15. The generator fed circuits for lighting in rooms with only one switch; will these fixtures be night lights?
A: NO, SWITCH WITH NORMAL LIGHTING.
16. All fixtures in rooms with switches noted on the symbol legend 0-10v dimming, will they be dimmed?
A: YES, FOR FIXTURES SPECIFIED WITH 0-10V DRIVERS.
17. Will the drug evidence room (153) have 2 fixtures only or 4 fixtures?



- A: 2
18. Will evidence storage room (152) have 35 total count or 37 total count on light fixtures?
A: 35
19. Will storage room (102) have 9 total count or 7 total count on light fixtures?
A: 7
20. Will there be generator fed circuits to light fixtures without designated E in TYPE MARK?
A: IN SOME CASES WHERE LIGHTING REQUIREMENTS DEMAND NO TRANSFER TIME, AND EXTENDED RUN-TIME
21. Will training classroom (121) have 10 total count or 14 total count on light fixtures?
A: 10
22. What is the mounting height for fixture A1 and A1E?
A: 9'-0" AFF, AT PRESENT. (CONFIRM PRIOR TO ORDERING.)
23. The manufacturer suggests that all four corners be pendent mount on type A1 and A1E fixtures. May this mounting be omitted due to the level of difficulty being that the barjoist is sloped?
A: IF APPROVED BY APPROVED MANUFACTURER. MOUNTING ALTERNATIVES MAY BE REVIEWED IN FUTURE VE.
24. Can A1 and A1E fixtures be mounted with aircraft cable?
A: NOT WITHOUT OWNER APPROVAL.
25. Can D3 and D3E fixtures be mounted with aircraft cable?
A: NOT WITHOUT OWNER APPROVAL.
26. Will the D1 fixtures be ceiling mount, or pendent mount?
A: RECESSED, CEILING.
27. If D1 fixtures are using pendent mount will fixture pendent have to be ordered for wet locations?
A: SEE ABOVE.
28. What is the mounting height for F1 fixtures?
A: 9'-0" AFF, AT PRESENT. (CONFIRM PRIOR TO ORDERING.)
29. In evidence room 154 and 155 there is no switch shown, is this correct?
A: CORRECT. CONNECT TO ROOM #152 CONTROLS. (THESE ARE FENCED-OFF AREAS OF #152)



30. PIU1 units schedule showing factory supplied disconnecting means, but mechanical equipment and connection schedule shows disconnects by EC, which one takes precedence?
A: **WHERE MECHANICAL EQUIPMENT IS SPECIFIED AND DELIVERED WITH INTEGRAL DISCONNECT, EXTERNAL DISCONNECT MAY BY DELETED FROM SCOPE.**
31. A1E, will EL146 nomenclature be added to part number for emergency battery pack?
A: **YES, PROVIDE BATTERY BACKUP AND CONNECTION TO UNSWITCHED HOT CONDUCTOR OF LIGHTING CIRCUIT SERVING THAT AREA.**
32. A1 and A1E; if aircraft cable is not allowed which type of pendent is to be used, SQ or 1B?
A: **CONTRACTOR SELECT.**
33. D3, "EL" nomenclature listed in part #, is this correct?
A: **YES, NO TRANSFER TIME ALLOWABLE.**
34. D3 and D3E, can these fixtures be installed using air craft cable along with rubber cord up to junction box?
A: **PENDANT MOUNT AND TERMINATE CORD PER MANUFACTURER INSTRUCTIONS AND NEC.**
35. Will the transfer switches be purchased by owner? If not will they need to be obtained from the generator provider?
A: **TRANSFER SWITCHES PROVIDED UNDER THIS CONTRACT. WHERE REQUIRED TO BE OF SAME MANUFACTURER BY THAT OF GENERATOR PROVIDED BY OWNER, PROVIDE THAT TRANSFER SWITCH.**
36. What is the information needed to purchase transfer switches from generator provider?
A: **GENERATOR BY OWNER, NOT SPECIFIED BY SBE. ELECTRICAL/CODE REQUIREMENTS ONLY PROVIDED. COORDINATE WITH GENERATOR SPECIFIED AND PROVIDED BY OWNER.**
37. Are the 120V Duplex Receptacles in Gym (134) and Vehicle Processing (136) required to be Flush Mount, or will Surface Mount on Concrete Masonry Unit (CMU) wall be sufficient?
A: **FLUSH MOUNT OUTLETS IN VEHICLE PROCESSING.**
38. Genset Area – What will be needed? Cut & patch, surface mounted conduit?
A: **CONSIDER WORST CASE IN LIEU OF SPECIFICS BY OWNER AT THIS TIME.**



39. Will MC homeruns be allowed? We're carrying EMT homeruns, but MC homeruns will be more cost effective.

A: NOT AT THIS TIME, BUT MAY BE REVIEWED IN FUTURE.

40. Lighting controls – What is currently installed and are we just tying into existing system?

A: EXISTING CONTROL TO BE REMOVED, NEW CONTROLS TO BE PROVIDED.

41. Fixture D4 in men and women shower is not on the fixture schedule. What type of fixture is it? Is the GC responsible for furnishing and installing them?

A: PROVIDE TYPE D4: PROVIDE SIMILAR TO LITHONIA #EVO4SH 35/20 DFR SMO 120 EZ10/EZ1 (4" LENSED, 2000LM, LED DOWNLIGHT)

42. The one-line diagram on "E002" states that a back-up generator is, "provided by owner, installed under this contract"

1st: should we assume it was meant to say, "provided by owner"?

A: YES

2nd: Where will it be located?

A: REAR OF BUILDING (SHEET NORTH). NO OTHER LOCATION SPECIFIED.

3rd: What is the full scope of work, and who is responsible for the pad and placement, controls & annunciators, fuel, testing, start-up, and turnover?

A: CONSIDER PRICING/ALLOWANCES FOR WORK INDICATED ON ONE-LINE DIAGRAM AND FLOOR PLANS. ASSUME MINIMAL DISTANCES AND QUANTIFY INCLUSIONS/EXCLUSIONS. CONSIDER EXCLUDING OF SETTING OF GENERATOR, EARTHWORKS, CONTROLS, FUEL , STARTUP, ETC PENDING GENERATOR INFORMATION FROM OWNER.

43. Some of the lighting fixture counts on "E201" are obscured by stray markings, especially the "A1's" in storage, the "A2's" in the training classroom, and the "D3's" in the courtroom, and may throw the counts off - any suggestions?

A: ASSUME SIMILAR FIXTURES WITHIN THE SAME ROOM.

Low Voltage:

1. Will: Notifier® by Honeywell, Honeywell Access®, and Honeywell Intrusion for Duress System (ADEMCO®) be included as Turn-Key solution for Low-Voltage Systems?

A: PROVIDE ROUGH-IN ONLY.



2. Will Plenum-Rated structured cabling be allowed for routing of cable in open areas for the above-mentioned systems except for stub-ups for devices located in walls?
A: PROVIDE ROUGH-IN ONLY.
3. Will DATA / Communications systems including, but not limited to DATA Rack, Patch Panels, Structured Cabling, DATA Jacks, and cable testing be done by the City of Monroe consultants as is with the Video Monitoring System since specifications are vague? If so, is the Electrical Contractor (EC) only to provide stub-ups and raceways where as appropriate?
A: PROVIDE ROUGH-IN ONLY
4. Will the following be included as Turn-Key solution for Low-Voltage Systems?
 - a. Notifier® by Honeywell
 - b. Honeywell Access®
 - c. Honeywell Intrusion for Duress System (ADEMCO®)**A: PROVIDE ROUGH-IN ONLY**
5. Will Plenum-Rated structured cabling be allowed for routing of cable in open areas for the above-mentioned systems?
A: (YES) PROVIDE ROUGH-IN ONLY.
 - a. Except for stub-ups for devices located in walls?
A: PROVIDE ROUGH-IN ONLY.
6. Will DATA / Communications systems including, but not limited to DATA Rack, Patch Panels, Structured Cabling, DATA Jacks, and cable testing be done by the City of Monroe consultants as is with the Video Monitoring System since specifications are vague?
A: YES, PROVIDE ROUGH-IN ONLY.
7. If so, is the Electrical Contractor (EC) only to provide stub-ups and raceways where as appropriate?
A: YES, PROVIDE ROUGH-IN ONLY.
8. I reviewed the specifications for the bid and noticed Division 27 (low voltage) is not included. Can you tell me if that will be bid separately, or if there is another reason?
A: LV BY OWNER. PROVIDE ROUGH-IN ONLY.
9. Please clarify the items and systems that are to be supplied by the city; the security camera system was mentioned, but is it the complete system or just the cameras? Will the city also provide the access control system and card readers? Does this include intrusion detection, etc?
A: (SEE BELOW)



10. LV Systems – Open wire Low Voltage systems with J hooks in hallways etc. acceptable? Conduit stub ups only?

A: (SEE BELOW)

LOW-VOLTAGE SYSTEMS PROVIDED BY OWNER. CONTRACTOR TO PROVIDE ROUGH-INS AND 120V POWER CONNECTIONS TO FIELD POWER SUPPLIES AS REQUIRED FROM JUNCTION BOXES SHOWN ON POWER PLAN. CABLING, SUPPORTS, CONNECTIONS, EQUIPMENT BY OWNER'S VENDOR.

Fire Alarm:

1. Will the Building Automation System (BAS) control and monitor all Fans (Intake & Exhaust), Dampers, and HVAC Shut-Down, thus requiring only one input from the Fire Alarm System to the BAS for emergency override?

A: YES

2. No Manual Pull Stations are indicated on drawings. Are Manual Pull Stations to be added as portion of the design from specialty sub-contractor and located as per NFPA101 and NFPA72, respectively?

A: YES, PROVIDE (8) PULL STATIONS.

3. What is the location of the Remote Fire Alarm Annunciator (FAA)?

A: PROVIDE FAA IN CONTROL ROOM #141.

Security/Access Controls:

1. Are all Door Hardware components, including but not limited to:

- Power Transfer Hinges
- Automatic Openers
- Electric Locks
- Mag Locks
- Electric Strikes
- Panic Release Devices (Crash Bars, Push to Release, etc.)

To be provided by Door Hardware Contractors, such that the Access Control System will interface accordingly and provide a Means of Egress in conjunction with input from the Fire Alarm System?

A: DOORS AND HARDWARE AS SCHEDULED BY ARCHITECT. ACCESS CONTROL BY OWNER'S VENDOR, AND THE REQUIRED INTERFACE WITH FACP IS UNDER THIS CONTRACT. PROVIDE REQUIRED ROUGH-INS OF CONTROLLED DOORS, DURESS PUSHBUTTONS, WALL-MOUNTED CAMERAS, ETC. SHOWN ON E-SHEETS.



Plumbing

1. Is the underground piping plan to be all new piping, or is this existing or partially existing? This also relates to the question above regarding the existing flooring.

A: YES. ALL UNDERGROUND PIPING SHOWN IS NEW. THERE IS EXISTING UNDERGROUND PIPING, BUT WE DON'T KNOW THE EXTENTS, DEPTHS, CONDITION, SIZE, ETC.

HVAC

1. What Hvac equipment is the City of Monroe providing?

A: THE OWNER IS NOT PROVIDING HVAC EQUIPMENT. ALL EQUIPMENT IS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR.

2. Need clarity on HVAC Disconnects (see note M500)

A: ELECTRICAL DISCONNECTS ARE CLEARLY DESIGNATED BETWEEN "FACTORY SUPPLIED" AND "DIVISION 26 SUPPLIED" ON SHEET M500 UNDER "REMARKS" FOR EACH EQUIPMENT TYPE.

Request for Substitutions

1. May we include / substitute WireCrafters as a supplier for the wire security partitions?

A: WIRECRAFTERS IS SPECIFIED AS THE BASIS OF DESIGN FOR THE WIRE MESH PARTITIONS: SECTION 102213 WIRE MESH PARTITIONS

2. CHICAGO BULLET PROOF

Chicagobulletproof.com

2595 Bond St. University Park, IL. 60484

Ph. 708-534-9102 Fax 708-534-9132

Established in 1912

UL 752 listed and labeled **products** accept nothing less

Transaction windows – Vision windows

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Available in levels 1 thru 8

beni@chicagobulletproof.com

Beni Stohr President

www.chicagobulletproof.com

A: APPROVED

3. Hiny Hiders in place of Scranton products

A: HINY HINDER IS A SCRANTON PRODUCT

ALTERNATES:

*** ALL CONTRACTORS ARE TO PROVIDE AN ALTERNATE COST FOR THE LINEAR LIGHT FIXTURE, "LUX LUMINAIRE" PROVIDED IN THE APPENDIX FOR EXPOSED CEILING AREAS IDENTIFIED AS A1***



APPENDIX



SECTION 13 5100

BULLET RESISTANT HOLLOW METAL FIXED WINDOWS

PART 1 - GENERAL

1.1 REFERENCES:

- A. The publications listed below forms a part of this specification.
 - 1. Underwriters Laboratory, UL 752 9th Edition dated Jan. 27, 1995 Standard for Bullet Resistant Equipment
 - 2. American Welding Society.

1.2 DESIGN:

- A. Through design, manufacturing technique and material application, frames shall be of the "non-ricochet type". This design is intended to permit the encapture and retention of an attacking projectile lessening the potential of a random injury or lateral penetration.
 - 1. Protection level shall be UL Level 3.
 - 2. Frames shall be of a protection level equal to or greater than the glazing.
 - 3. Units shall be manufactured in accord with the specifications, design and details. No field alterations to the construction of the units fabricated under the acceptable standards shall be allowed unless approved by manufacturer and architect.
 - 4. Welds shall be in accord with requirements and standard practices of the American Welding Society. Exposed welds shall be ground flush and finished smooth.
 - 5. Standard manufacturing tolerances shall be +/- 1/16" for frame opening, diagonal dimensions of frame, overall frame width, height, depth, etc.

1.3 SUBMITTALS:

- A. Product data: Submit catalog cuts, brochures, specifications, UL Listing Verification, and printed data in sufficient detail to indicate compliance with the contract documents and manufacturer's instructions for the installation of Bullet Resistant Fiberglass.
- B. Furnish verification of compliance with ASTM E119-14, ONE HOUR FIRE RATING from a recognized testing laboratory.

1.4 WARRANTY:

- A. Materials and workmanship shall be warranted against defects for a period of one (1) year beginning on date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Acceptable manufacturers of bullet resistant frames and glazing assembly:
 - 1. Basis of design: Safeguard Security Services, Ltd.,
- B. Acceptable manufacturers of encapturing barrier:
 - 1. Basis of design: Safeguard Security Services Ltd., Armortex

2.2 MATERIALS:

- A. Frames:
 - 1. Frames shall be a protection level equal to or greater than the glazing. Frame modules shall be of a "non ricochet type" design, constructed of brake formed commercial grade cold rolled 16 ga. steel lined with UL LISTED BULLET RESISTANT ARMORTEX® FIBERGLASS.
 - 2. Steel shall be free of scale, pitting, coil breaks and finish work shall be neat and free of defects. Corners shall be continuously welded the full length of the intersection.
 - 3. Frame modules shall be capable of being joined with other frame modules to form a continuous hardline.
 - 4. Replacement of glazing shall be from secure side of window or wall unit and shall not require removal of frame from the opening.
- B. Glazing: Glazing shall be UL Listed Level 3 laminated glass, polycarbonate, glass clad polycarbonate or other types-specify type of glazing material desired.
 - 1. Provide "natural voice" communication.
- C. Finish:
 - 1. Cold rolled steel shall be factory prime painted gray.
 - 2. Field paint and finish in accord with and as directed in painting and Coating section.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Set frames and glaze in accord with manufacturer's product data. Repair damaged units prior to completion and acceptance of project or replace with new units as directed by Architect.

3.2 PROTECTION:

- A. Touch-up scratches or disfigurement caused by shipping and handling of product. Protect frames and glazing material from damage before and after installation.

3.3 CLEANING:

- A. Upon completion, clean exposed surfaces of frames and glazing products in accord with manufacturer's product data. Remove mastic smears and other unsightly marks.

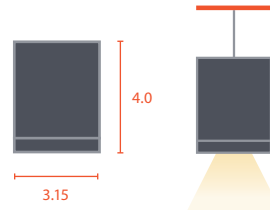
End of Section



UP TO 105 lm/W PERFORMANCE	
DIRECT LIGHT	SYSTEM WATTS
375 lm/ft	13.6
500 lm/ft	19.1
750 lm/ft	29.2
1000 lm/ft	39.7
1250 lm/ft	52.2

Performance based on 4-foot luminaire at 4,000K @ 25-degrees C

LIGHT LOSS FACTOR		
CCT	CRI	%
4000K	84+	100%
3500K	84+	97.1%
3000K	84+	95.7%
2700K	84+	94.1%
4000K	92+	88.9%
3500K	92+	85.5%
3000K	92+	83.8%
2700K	92+	82.4%



STANDARD FINISHES
Black, White & Silver

ORDER GUIDE

EOS 3.0-P-D											
A	B	C	D	E	F	G	H	I	J	K	

EXAMPLE:

EOS 3.0-P-D	1000	8	40K	9	2	UNV	S1	W	15C	24
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OPTIONS

L	M	N	

VDO	EB	QS10	
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A. MODEL	B. DIRECT DISTRIBUTION	C. LENGTH	D. COLOR TEMPERATURE	E. CRI
<p>Q EOS 3.0 Pendant Direct</p> <p>EOS 3.0-P-D</p>	<p>Q 375 375 lm/ft</p> <p>Q 500 500 lm/ft</p> <p>Q 750 750 lm/ft</p> <p>Q 1000 1000 lm/ft</p>	<p>Q 3 3 FT. (36 in.)</p> <p>Q 4 4 FT. (48 in.)</p> <p>Q 5 5 FT. (60 in.)</p> <p>Q 6 6 FT. (72 in.)</p> <p>Q 7 7 FT. (84 in.)</p> <p>Q 8 8 FT. (96 in.)</p> <p>Q XXX System Run</p> <p>PAT#x#SH Pattern</p>	<p>Q 27K 2700K</p> <p>Q 30K 3000K</p> <p>Q 35K 3500K</p> <p>Q 40K 4000K</p> <p>WCT White Color Tuning</p> <p>2700K - 6500K</p>	<p>Q 8 80+ CRI</p> <p>Q 9 90+ CRI</p>

NOTES:

Consult factory for outputs between min and max.	Refer to Pattern configuration guide for nomenclature.	WCT - max lm/f is 1000 based on 80 CRI and 4000K.	90 CRI option has an R9 value greater than 60.
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F. CIRCUIT	G. VOLTAGE	H. DRIVER	(DRIVER CONT.)	I. FINISH	J. MOUNTING	K. SUSPENSION LENGTHS
<p>Q 1 1 Circuit</p> <p>Q 2 2 Circuit</p>	<p>Q UNV 120-277v</p> <p>Q 347 347v</p>	<p>Q S1 1% Dimming (0-10v)</p> <p>LDE1 Lutron Hi-Lume 1% Fade to Black</p> <p>LDE5 Lutron 5 Series</p> <p>ELO 0.1% EldoLED</p> <p>Q DXL 1% Dexas</p>	<p>DXL2 Dexas 2-Channel</p> <p>DALI DALI 2.0 Compatible</p> <p>PSQ Lutron T-Series</p> <p>LTE Lutron Hi-Lume 2-Wire LED driver</p>	<p>Q W White</p> <p>Q B Black</p> <p>Q S Silver</p> <p>CC Custom Colors</p>	<p>Q 9C 9/16 in. Tee Clip</p> <p>Q 15C 15/16 in. Tee Clip</p> <p>Q SC Screw Slot Tee Clip</p> <p>Q HC Hard Ceiling</p>	<p>Q 24 24 in. Adjustable</p> <p>Q 42 42 in. Adjustable</p> <p>Q 150 150 in. Adjustable</p>

NOTES:

347 may not be available in all configurations.	VDO, VRF, SPD, & CLM options supplied with DXL driver standard.	Consult factory for custom colors. Power feeds & canopies are standard white. For black or silver, please indicate color under Factory Options.	For grid applications, please specify mounting.
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OPTIONS:

L. CONTROLS	(CONTROLS CONT.)	M. FACTORY OPTIONS	(FACT. OPTIONS CONT.)	N. QUICKSHIP
<p>Q None BLANK</p> <p>Q VDO Lutron Vive (RF/Daylight/Occ)</p> <p>Q VRF Lutron Vive RF Fixture Control</p> <p>SPD Osram SensiLUM Daylight/Harvest/Occ</p>	<p>CLM Osram Connecting Lighting Module (CLM)</p> <p>DAY Wattstopper Daylight Sensor (FD-301)</p> <p>OCC Wattstopper Occ Sensor (FS-205v2)</p> <p>DOC Enlighted Daylight/Harvesting/Occ (SU-5E-01)</p>	<p>Q None BLANK</p> <p>Q EB Emergency Battery (10-Watt)</p> <p>Q EC Emergency Circuit</p> <p>NL Night Light Circuit</p> <p>DL Drop Lens 0.50 in. (Individual Units Only)</p> <p>Q BAT Batwing Distribution</p>	<p>Q BF Black Power Feed</p> <p>Q BC Black Canopy</p> <p>Q SF Silver Power Feed</p> <p>Q SC Silver Canopy</p>	<p>Q QS10 QuickShip 10-Day (Depletion Policy. Subject to Availability)</p>

NOTES:

VDO, VRF, SPD, & CLM options supplied with DXL driver standard.	EB option only available for lengths 4ft. or greater.	Please see note on p.2 for further detail regarding QuickShip.
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PATTERN GUIDE

A. PATTERN

Pattern **PAT**

B. TOTAL FEET OF PATTERN

Enter length of each segment in pattern separated by an "x" **AxB**
AxBxC

C. PATTERN CODE

L Pattern **L**
Square or Rectangle Pattern **S**
T Pattern **T**
U Pattern **U**
X Pattern **X**
Z Pattern **Z**
Custom Pattern **C**
- Sketch or Drawing Required

D. PATTERN ORIENTATION

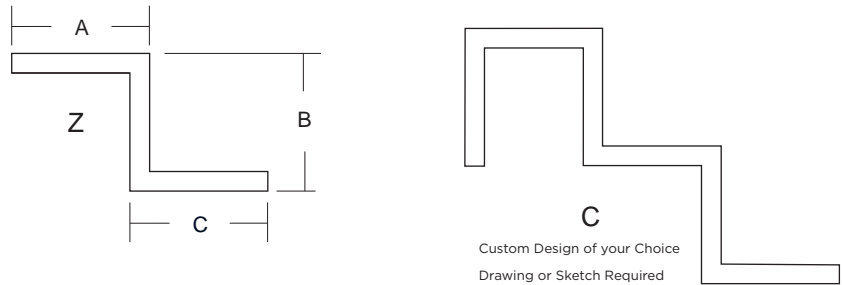
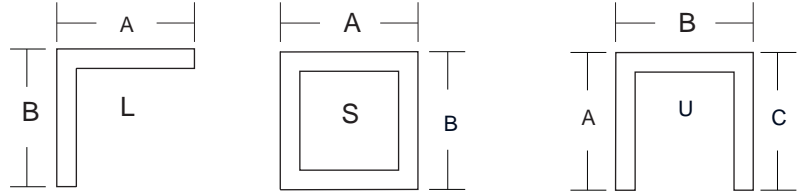
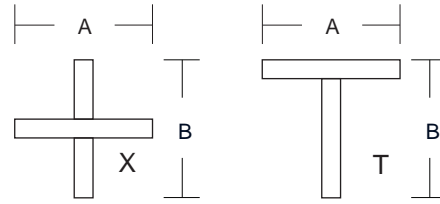
Horizontal **H**
Vertical **V**
Custom **C**
- Sketch or Drawing Required

NOTES:

Dimensions for Patterns are based on outside dimensions of the pattern.

Patterns in all cases will require a signed-off submittal prior to release of an order.

Partial foot dimensions must be shown in decimal format.
e.g. 12' - 9" would be coded as 12.75



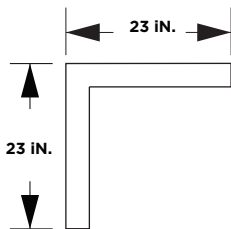
PAT	12X24	L	H
A	B	C	D

Above code gets entered in LENGTH field of ordering key

PAT##@H

PAT = Pattern
AxBxC = Length of each segment in Pattern separated by an "x"
@ = Pattern Code (See reference examples)
H = Pattern Orientation

FULLY ILLUMINATED CORNERS



QUICKSHIP



Indicates QuickShip option 10-day lead times.

Up to 750 linear feet or 150 individual fixtures. Consult Factory for larger projects.

PLEASE NOTE:

- 10-day lead times do not include weekends or holidays.
- A clean order must be received by 12:00 PM EST. All orders received after 12:00 PM EST will be entered the following day.
- Changing orders of any kind will require a new ESD.
- All QuickShip items must be on a separate PO.

EXAMPLE ORDERING CODE

EOS 3.0-P-D	500	PAT12X24xLH	40K	8	2	UNV	S1	W	OCC-EB
		PAT12X18xSH							
		PAT8X10xUH							
		PAT8X12xZH							



Suitable for Damp Location