



genesis engineering group, llc
224 3rd avenue north
franklin, tn 37064
615.628.7270
www.geneng.net

Addendum Number	Issue Date
3	January 29, 2019
Project	Project Number
SBC#373/003-12-2018	Genesis 18-035.03
APSU Dunn Center Lighting Replacement	

The following items reflect modifications made to the Bid Documents for the above referenced project dated 08 January 2019.

All bidders must acknowledge receipt of this information in the appropriate location on the Bid Form at the time and date of the bid.

SPECIFICATIONS:

- 00 01 10 TABLE OF CONTENTS**
INSERT Section 00 35 13 – AVAILABLE INFORMATION ON PRE-BID MEETING ATTENDANCE

- 00 11 16 INVITATION TO BID**
Revised “BIDS RECEIVED AT” paragraph as follows:
 DELETE “January 30, 2019”
 INSERT “February 6, 2019”

- 00 35 13 AVAILABLE INFORMATION ON PRE-BID MEETING ATTENDANCE**
Added section

DRAWINGS:

- E-100 LIGHTING RCP**
Revised drawing to include Addendum #2 revisions

SECTION 00 01 10 - TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>
00 01 01	PROJECT TITLE PAGE
00 01 10	TABLE OF CONTENTS
00 01 15	LIST OF DRAWINGS
00 11 16	INVITATION TO BID
00 21 13	INSTRUCTIONS TO BIDDERS
00 25 13	PRE-BID MEETINGS
00 35 13	AVAILABLE INFORMATION ON PRE-BID MEETING ATTENDANCE
00 41 13	BID FORM
00 45 21	DRUG-FREE WORKPLACE AFFIDAVIT
00 47 13	CONSTRUCTION BID ENVELOPE
00 52 13	AGREEMENT
00 61 13	CONTRACT BOND
00 72 13	GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION
00 73 16	SUPPLEMENTARY CONDITIONS
01 10 00	SUMMARY
01 14 13	ACCESS TO THE SITE
01 22 13	UNIT PRICES
01 22 15	LIST OF UNIT PRICE ITEMS
01 23 00	ADDITIVE ALTERNATES
01 25 13	PRODUCT SUBSTITUTION PROCEDURES
01 25 33	PRODUCT SUBSTITUTION REQUEST FORM
01 26 00	CONTRACT MODIFICATION PROCEDURES
01 26 20	WEATHER DELAYS
01 26 25	WEATHER DELAY REPORT
01 26 40	FORM FOR AMENDMENT, CHANGE ORDER, OR DIRECTIVE
01 26 54	FORM FOR PRICE SUMMARY
01 26 55	FORM FOR PRICE OF WORK
01 26 56	FORM FOR PRICE OF TIME
01 29 54	RETAINAGE ESCROW INITIATION
01 29 73	SCHEDULE OF VALUES
01 29 76	PROGRESS PAYMENT PROCEDURES
01 31 14	FACILITIES COORDINATION
01 31 19	PROJECT MEETINGS
01 31 90	ADMINISTRATIVE LOGS
01 31 93	VISITOR LOG
01 32 00	CONSTRUCTION PROGRESS DOCUMENTATION
01 41 15	BASIC REGULATORY REQUIREMENTS
01 50 00	TEMPORARY FACILITIES AND CONTROLS
01 60 00	PRODUCT REQUIREMENTS
01 73 00	GENERAL EXECUTION, CUTTING, & PATCHING
01 74 00	CLEANING AND WASTE MANAGEMENT
01 77 00.1	FINAL CLEANING
01 77 70	CLOSE-OUT PROCEDURES
01 78 02	CLOSE-OUT SUBMITTALS
01 78 25	DATA BINDER RECEIPT
01 78 88	REPORT OF SUBCONTRACTORS AND SUPPLIERS
01 79 21	DEMONSTRATION AND TRAINING
01 79 25	DEMONSTRATIONS AND TRAINING VERIFICATION
01 81 14	HPBR CONTRACTOR REQUIREMENTS
01 81 14.1	HPBR CHECKLIST
01 81 14.2	HPBR ONE TIME COMPLETION

01 91 13	COMMISSIONING
01 91 23	PERFORMANCE TESTING IDENTIFICATION FORM
01 91 26	PERFORMANCE TESTING PROCEDURES FORM
01 91 29	FUNCTIONAL PERFORMANCE TEST CERTIFICATION
02 41 19	SELECTIVE DEMOLITION
07 84 13	PENETRATION FIRESTOPPING
26 05 11	REQUIREMENTS FOR ELECTRICAL INSTALLATIONS
26 05 19	LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
26 05 26	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
26 05 33	RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS
26 08 00	ELECTRICAL AND LIGHTING SYSTEMS COMMISSIONING
26 08 06	PANELBOARD CHECK SHET
26 08 13	POWER CIRCUIT CHECK SHEET
26 27 26	WIRING DEVICES
26 29 21	ENCLOSED SWITCHES AND CIRCUIT BREAKERS

END OF SECTION

00 11 16 – INVITATION TO BID

PROJECT:

Dunn Center Arena Lighting Upgrade
SBC Number 373/003-12-2018
Austin Peay State University
Clarksville/Montgomery

INVITATION:

The State of Tennessee is inviting General Contractor bids for the Work of this project. Examine documents at the Designer's office or Plan Rooms on or after January 8, 2019.

Bidding Documents in PDF format may be obtained at no cost from the following source.

DRAWINGS AND SPECS WILL BE AVAILABLE FOR VIEWING AT THE APSU UDC OFFICE AND THE DESIGNER'S OFFICE. PLEASE CALL TO ARRANGE A TIME FOR PROJECT VIEWING.

Entities obtaining Bidding Documents become Bidders of Record for notifications. Bidders of Record may purchase hard copies of Bidding Documents from the same source (nonrefundable).

Bidders shall be licensed and qualified per state law. Five percent (5%) Bid Security is required in the form of a Bid Bond or check (certified or cashier's) made payable to State of Tennessee. Non-discrimination policy applies.

BIDS RECEIVED AT:

APSU UNIVERSITY DESIGN AND CONSTRUCTION OFFICE
255 MARION STREET, SUITE 10
CLARKSVILLE, TN 37040
Until 2:00, local time
On FEBRUARY 6, 2019

PRE-BID CONFERENCE AT:

APSU UNIVERSITY DESIGN AND CONSTRUCTION OFFICE
255 MARION STREET, SUITE 10
CLARKSVILLE, TN 37040
At 2:00 PM, local time
On JANUARY 22, 2019

PLAN ROOMS:

ISQFT.COM
TNAGC
BUILDER'S EXCHANGE OF TN
McGRAW HILL CONSTRUCTION DODGE
CONSTRUCTION MARKET DATA

DESIGNER:

00 11 16 – INVITATION TO BID

GENESIS ENGINEERING GROUP
224 THIRD AVENUE NORTH
FRANKLIN, TN 37064
CONTACT: PETER MURPHY, PE
PMURPHY@GENENG.NET
512-942-5878

END OF SECTION

01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 MEETING NOTES

- A. Meeting notes are from the January 22, 2019 Pre-Bid Meeting held at APSU.
- B. Reviewed Project Drawings
- C. Discussed light quantity – 1 for 1 replacement
- D. Discussed types of lights – LED high bay (2 types, depending upon location) for general lighting, and LED strips for emergency lighting. Light fixtures are scheduled on drawings.
- E. Discussed general location of 480/277V panelboards feeding the lights. Lighting is 277V. There is no existing lighting controls – circuit breakers only.
- F. Discussed Summary Of Work
- G. Summary of work specifies days to avoid for various events and floor refinishing
- H. All work will have to be scheduled around days to avoid
- I. Discussed Bid Form
- J. 150 days for contract duration
- K. Funding is from a specific grant so completion time is hard deadline.
- L. There is a potential to use a lift if needed.
- M. Restricted by entry doorway/vestibule to access space.
- N. If lift is used, it will need to be coordinated with APSU
- O. Prior to using lift, APSU must review and approve plan for protecting floor.
- P. Substitute light fixtures are allowed
- Q. Must submit alternates to APSU and GEG for prior approval.
- R. Must submit alternate manufacturer photometric calculations to ensure designed light levels are met (per NCAA light level requirements).
- S. Cut-off for bidder questions is 4:30pm on Friday, 1/25

- T. Questions should be sent directly to Dan Schafran, GEG (dschafran@geneng.net)
- U. There will be one addendum issued to answer all questions from pre-bid meeting and any other questions. Addendum will be issued on Monday, 1/28.
- V. Beam detectors in arena will need to be turned off during construction times. Coordinate turning on/off with APSU. No fire watch is required during times when detectors are turned off.
- W. Basis of design light fixtures were selected with lead-time in mind to fit in project schedule.
- X. There is one bid alternate indicated in contract documents – provide fixtures with integral high-bay occupancy sensors.

1.2 ATTENDEE LIST

- A. Attendee List is Attached.

END OF SECTION

APSU Sign-in Form

Project Number: 373/003-12-2018

Date: 1/22/2019

Project Name: Dunn Center Lighting Replacement

Name	Company	Phone	Email
Philip Zoub	APSU	931-221-6153	zoubp@apsu.edu
Tena Everett	AES	931-552-6596	tena.everett@active-energy-services.com
Tom Hutchins	APSU	931-221-7456	HUTCHINST@APSU.EDU
JESSEE ALMON	WHITEHEAD ELECTRIC	270-220-0280	jessiea@whitehead-electric.com
JEFF SHEPHERD	JEFF SHEPHERD CONST	931-920-5366	JSHEPHERD@ATT.NET
GARRY HARP	" "	931-801-3018	
JEFF WADE	APSU	931-221-7426	wadewj@apsu.edu
DAN SCHAFFAN	GET	615-567-7623	DSCHAFFAN@GENENTK.NET
Tim Cooper	Big Dot Lighting	662-617-3109	trooper@bigdotlighting.com

LUMINAIRE SCHEDULE

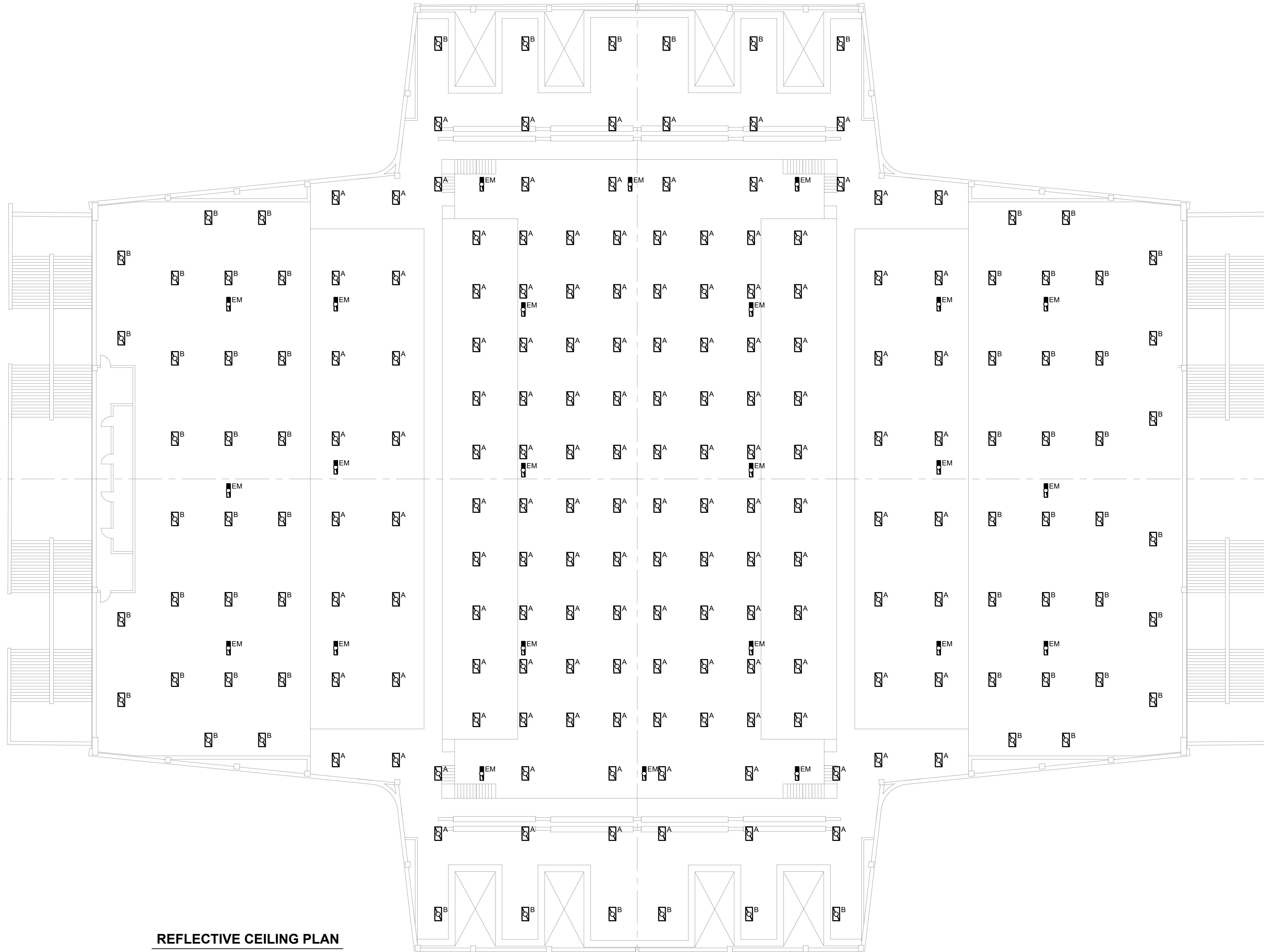
TAG	TYPE	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP	TOTAL WATTS	LUMENS	INSTALLATION	REMARKS
A	LED HIGH BAY	LITHONIA LIGHTING	IBGN 4ft 3000LM SEF FD ACL 40K 80CRI	MVOLT	LED, 40K 80CRI	205	27772	SURFACE	1
B	LED HIGH BAY	LITHONIA LIGHTING	IBGN 4ft 2400LM SEF FD AFL 40K 80CRI	MVOLT	LED, 40K 80CRI	170	21513	SURFACE	1
EM	LED STRIPLIGHT WITH LENS	LITHONIA LIGHTING	ZL1N L48 5000LM FST MVOLT 40K 80CRI	MVOLT	LED, 40K 80CRI	34	5000	SURFACE	

GENERAL NOTES, LUMINAIRE SCHEDULE

1. MODEL IS GIVEN FOR QUALITY ONLY, SUBSTITUTE LIGHT FIXTURES SHALL BE OF EQUAL OR GREATER QUALITY.
2. ALL FIXTURES TO BE PROVIDED WITH LAMPS INSTALLED.
3. ALL FIXTURES TO BE PROVIDED WITH REQUIRED MOUNTING HARDWARE FOR INSTALLATION TYPE SHOWN.

REMARKS, LUMINAIRE SCHEDULE

1. UNDER ALTERNATE #1 ONLY: LUMINAIRE TYPES INDICATED SHALL BE PROVIDED WITH BUILT-IN MOTION SENSOR. COORDINATE SETTINGS WITH OWNER.



REFLECTIVE CEILING PLAN
SCALE: 1/16"=1'-0"

GENERAL NOTES

1. DISCONNECT EXISTING LUMINAIRES IN LOCATIONS SHOWN. OWNER RESERVES THE RIGHT TO RETAIN REMOVED LUMINAIRES. REPLACE WITH NEW AS SHOWN AND RECONNECT TO EXISTING CIRCUITS.
2. EXISTING CIRCUIT WIRING MAY BE REUSED TO THE EXTENT POSSIBLE. WHERE EXISTING FLEXIBLE WHIP IS NOT OF SUFFICIENT LENGTH TO ALLOW FOR NEW FIXTURE INSTALLATION, PROVIDE NEW FLEXIBLE WHIP FROM JUNCTION BOX TO NEW LIGHT FIXTURE.
3. ALTERNATE #1: REMOVE EXISTING AREA OCCUPANCY SENSOR AND PROVIDE EACH LIGHT FIXTURE WITH INTEGRAL HIGH-BAY OCCUPANCY SENSOR SUITABLE FOR INSTALLATION HEIGHT. REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL DETAILS. ALTERNATE #1 SHALL BE DONE ONLY UPON PRIOR AGREEMENT BETWEEN OWNER AND CONTRACTOR. UNDER BASE BID, EXISTING AREA OCCUPANCY SENSOR SHALL REMAIN FOR CONTROL OF LIGHTS.
4. ALL LIGHT FIXTURES SHALL BE INSTALLED IN A NEAT AND WORK-MAN LIKE MANNER. LIGHT FIXTURES SHALL BE INSTALLED PARALLEL TO EACH OTHER AND IN EVEN, LINEAR ROWS. WHERE EMERGENCY LIGHT FIXTURES ARE PROVIDED, INSTALL SUCH THAT LIGHT IS ORIENTED THE SAME AND PARALLEL WITH ADJACENT FIXTURES AND ROWS.
5. FIXTURE REPLACEMENT SHALL INCLUDE REPLACEMENT OF AIRCRAFT CABLES, CHAIN, AND HANGER BRACKET. PROVIDE NEW AIRCRAFT CABLES, CHAIN, AND HANGER BRACKET FOR EACH LIGHT FIXTURE. AIRCRAFT CABLE SHALL BE PRIMARY MEANS OF LIGHT FIXTURE SUSPENSION, AND CHAIN SHALL BE PROVIDED AS A BACK-UP SAFETY SUPPORT. PROVIDE CHAIN TO SUPPORT LIGHT FIXTURE FROM TWO LOCATIONS (ONE AT EITHER END OF FIXTURE) AND CONNECT TO EXISTING BUILDING STRUCTURE INDEPENDENT OF CONDUIT SYSTEM. AIRCRAFT CABLE, CHAIN, AND HANGER SHALL BE APPROVED BY LIGHT FIXTURE MANUFACTURER FOR SUITABLE USE WITH PROVIDED LIGHT FIXTURES.
6. LUMINAIRE INDICATED ON LUMINAIRE SCHEDULE IS PROVIDED AS BASIS FOR DESIGN. SUBSTITUTE LIGHT FIXTURES SHALL BE OF EQUAL OR GREATER QUALITY OF CONSTRUCTION AND LIGHT DISTRIBUTION. SUBSTITUTE FIXTURE WATTAGE SHALL NOT EXCEED BASIS OF DESIGN FIXTURE WATTAGE. SUBSTITUTE LIGHT FIXTURES MUST BE SUBMITTED FOR APPROVAL BY ENGINEER AND OWNER PRIOR TO ALLOWING SUBSTITUTION. SUBMITTAL FOR APPROVAL MUST INCLUDE MANUFACTURER'S LIGHTING CALCULATIONS TO ENSURE SUBSTITUTE LIGHT FIXTURES MEET BASIS OF DESIGN LIGHT LEVELS. BASIS OF DESIGN LIGHT LEVELS ARE TO MEET NCAA REGIONAL BROADCAST REQUIREMENTS FOR BASKETBALL AND VOLLEYBALL. OWNER AND ENGINEER RESERVE THE RIGHT TO REQUEST A SAMPLE OF THE BASIS OF DESIGN LIGHT FIXTURE AND THE SUBSTITUTE LIGHT FIXTURE BE PROVIDED FOR REVIEW AND COMPARISON PRIOR TO SUBSTITUTION APPROVAL.

DEMOLITION GENERAL NOTES

1. CONTRACTOR SHALL REMOVE ALL EXISTING CONSTRUCTIONS AND FINISHES NECESSARY FOR THE COMPLETION OF THE WORK AS DEPICTED ON THE DRAWINGS, INCLUDING BUT NOT LIMITED TO, ITEMS SHOWN ON THE PLANS WITH DASHED LINES. NECESSARY DISCONNECTS AND ALTERATIONS TO EXISTING MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INCLUDED. PATCH AS REQUIRED ALL CONSTRUCTIONS TO REMAIN IN ACCORDANCE WITH THE CONTRACT DRAWINGS. WHERE CONTRACTOR IS DESIGNATED TO MAKE ALL REMOVALS, DEPOSITION OF MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFY WITH OWNER, THE DEPOSITION AND REMOVAL OF ANY COMPONENTS OF SALVAGEABLE VALUE.
2. ALL REMOVALS AND SALVAGE, UNLESS SPECIFICALLY NOTED OR REQUESTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR. VERIFY WITH OWNER, PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED. COORDINATE WITH OWNER AND ARCHITECT PRIOR TO COMMENCEMENT OF DEMOLITION.
4. REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS. PLUG BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES. REFER TO ARCHITECTURAL PLANS FOR PATCHING/DRYWALL REPLACEMENT INSTRUCTIONS.
6. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND OBTAIN CLARIFICATION FROM ARCHITECT/ENGINEER.
7. INTERRUPTION OF SERVICES: CONTRACTOR SHALL COORDINATE SERVICE INTERRUPTION WITH OWNER AND UTILITY COMPANY AND SHALL NOT INTERRUPT POWER WITHOUT OWNER/ARCHITECT'S PERMISSION.
8. CONTRACTOR SHALL REPORT ANY DEVIATIONS, DISCREPANCIES, AND/OR OTHER CONFLICTS TO OWNER AND ARCHITECT.
9. CONTRACTOR SHALL PROPERLY PROTECT EXISTING BUILDING FIRE AND SMOKE DETECTION FROM DAMAGE AND BAG DEVICE AS REQUIRED. CONTRACTOR SHALL COORDINATE WITH FIRE ALARM VENDOR AND OWNER FOR REQUIREMENTS.
10. FOR DEMOLITION OF EXISTING LIGHTING SYSTEMS: CONTRACTOR SHALL REMOVE ALL LIGHTING FIXTURES, SWITCHES, JUNCTION BOXES, CONDUIT, BRANCH CIRCUITS, WIRING, THAT IS NOT NEEDED IN NEW CONSTRUCTION. CONTRACTOR SHALL DETERMINE AND FIELD VERIFY IF EXISTING EQUIPMENT CAN BE RE-USED. CONTRACTOR SHALL VERIFY LIGHTING SYSTEMS OUTSIDE OF PROJECT AREA ARE NOT EFFECTED FROM DEMOLITION. CONTRACTOR SHALL REFER TO ARCHITECTURAL DEMOLITION PLANS FOR EXACT SCOPE. CONTRACTOR SHALL NOT REMOVE EXISTING LIGHTING CONTACTORS, RELAY PANELS, OR PHOTOCELLS. RE-USE FOR NEW CONSTRUCTION.
11. CONTRACTOR SHALL COORDINATE WITH OWNER AND ARCHITECT FOR ALL LOW VOLTAGE DEMOLITION REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND RELOCATIONS OF CEILING MOUNTED LOW VOLTAGE EQUIPMENT.
12. PRIOR TO STARTING ANY NEW WORK, THE ELECTRICAL CONTRACTOR SHALL OPEN ALL PANELS, DISCONNECT SWITCHES, WIREWAYS AND INSPECT THE PORTIONS OF THE ELECTRICAL SERVICE BEING RE-USED AND CONFIRM THE SIZE AND INTEGRITY OF THE EXISTING INSTALLATION.
13. THE ELECTRICAL CONTRACTOR SHALL TEST AND INSPECT ALL EXISTING CIRCUIT BREAKERS TO BE RE-USED.
14. CONTRACTOR SHALL CONFIRM EXISTING PANEL DEMAND AND EXISTING LOAD BEFORE ADDITION OF ANY NEW LOADS.



AUSTIN PEAY STATE UNIVERSITY
DUNN CENTER LIGHTING REPLACEMENT
510 DRANE ST, CLARKSVILLE, TN 37044
373/003-12-2018

NO.	REVISION	DATE
1	ADDENDUM #3	1/29/2019

DATE:	01/08/2019
JOB NUMBER:	18-035.03
FILE NAME:	
DRAWN BY:	GEG
CHECKED BY:	GEG
DRAWING TITLE:	

LIGHTING RCP